सीएसआईआर
CSIR
भारत का नवाचार इंजन
The Innovation Engine of India

CSIR IN THE NEWS

January 2024 – December 2024

Compiled by
Science Communication and Dissemination Directorate (SCDD)
Council of Scientific and Industrial Research (CSIR)
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सत्यमेव जयते

डॉ. (श्रीमती) एन. कलैसेल्वी
सचिव
वैज्ञानिक और औद्योगिक अनुसंधान विभाग तथा
महानिदेशक
Dr. (Mrs.) N. Kalaiselvi
Secretary
Department of Scientific & Industrial Research and
Director General

Azadi Ka Amrit Mahotsav

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
वैज्ञानिक और औद्योगिक अनुसंधान विभाग
Government of India
Ministry of Science and Technology
Council of Scientific & Industrial Research
Department of Scientific & Industrial Research

Preface

It gives me immense pleasure to present this annual compilation of news items that have been published about CSIR and its laboratories over the past year. This compilation is a testament to the vibrancy and dynamism of CSIR's scientific endeavours and its growing resonance in the media.

The Science Communication and Dissemination Directorate (SCDD) has been issuing daily news bulletins almost every single day of the year, culminating in a total of 1277 news items published across about 244 unique sources, primarily in English and Hindi news sources. If one were to include the multiple sources in which a particular news item has appeared, as well as the extensive coverage in other Indian languages, the reach and impact would be manifold, reflecting an even broader engagement with diverse audiences.

This compilation is by no means exhaustive but serves as a strong indication of the extensive media coverage generated by CSIR and its laboratories. It underscores the importance of ensuring that the science we conduct, the technologies we develop, and the events we organize receive the media attention they deserve.

I take this opportunity to congratulate all the Directors, Scientists, and Officers-in-charge of media and dissemination activities across CSIR's laboratories. Your consistent efforts in creating a buzz around CSIR's achievements and getting them into the public domain are truly commendable. These efforts play a crucial role in enhancing CSIR's visibility, fostering public appreciation of science, and inspiring greater confidence in the scientific community.

As we step into a new year, let us continue to work with renewed vigour to highlight the transformative science and technology outcomes of CSIR. Together, we can further strengthen the connection between our scientific work and the broader society.

Wishing you all a Happy New Year and looking forward to another year of impactful contributions and meaningful media engagement.

N. Kalaiselvi

9 January, 2025

(N. Kalaiselvi)

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Content

CSIR Headquarters

State aims to increase dependence on green energy says Industries Minister

The State aims at increasing its dependence on green energy to 75% from 50%, Minister for Industries, Investment Promotion and Commerce T.R.B. Rajaa said here on Thursday. At the inauguration of the two-day energy conference EnVision at the IIT Madras Research Park here, the Minister said, “Tamil Nadu is 50% green, with 40% solar energy and 50% wind energy. We are now pushing ourselves to go up to 75%. Green hydrogen is something that is extremely promising. Pump storage is a key part of the entire green hydrogen initiative that we are taking up in Tamil Nadu,” he explained. The event includes a workshop focusing on **CSIR** labs. The conference will discuss 10 areas such as green buildings; solar manufacturing; electric mobility; energy storage; nuclear energy; climate finance; climate policy; heating and cooling; green hydrogen; waste to energy and motors and controllers.

Source: **The Hindu**

Successive Success Stories in the Recent Times have Elevated India’s Science Esteem: Dr Jitendra Singh

Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said that the successive success stories in recent times have elevated India’s science esteem. Addressing the gathering at the 40th foundation day celebration of the Department of Scientific and Industrial Research (DSIR), the Minister enumerated recent science success stories of India. He said that the Department of Scientific and Industrial Research (DSIR) and **CSIR** brought about the purple revolution, which originated in the North and has now captured the entire Himalayan region. The Department of Biotechnology came out with the first DNA Vaccine and a country like India , which was earlier struggling to provide curative health care, has now become a preventive healthcare leader, he said.

Source: **Pib**

‘Deep tech’ policy to be sent to Cabinet for approval, says scientific adviser

The government will be sending a note, on a new ‘deep tech’ policy for India in the coming weeks to the Union Cabinet for approval, said Prof. Ajay Kumar Sood, Principal Scientific

Advisor at a public event on January 5. The DSIR would in the coming days focus on transferring technology to medium and small scale industries, the CSIR would target industry at large and the National Research and Development Corporation, also a CSIR entity, would focus on startups, said N Kalaiselvi, Director-General, CSIR. “In this way we can do justice to India’s science and technology system,” she added.

Source: The Hindu

Innovations in assistive tech unveiled by CSIR bodies

At the ongoing International Purple Fest in Panaji, various institutes under the **Council of Scientific and Industrial Research (CSIR)** have unveiled a spectrum of cutting-edge innovations in assistive technologies, focusing on empowering individuals with disabilities. A range of innovations, including low-cost prosthetic arms, an electric tricycle, orthotic devices integrated with virtual assistance, and a robotic gait trainer aligned with the ‘Make in India’ mission, are being showcased to entrepreneurs as scientists are actively seeking collaborations with industries in Goa.

Source: Times of India

Call for Nominations announced under Rashtriya Vigyan Puraskar 2024 in the field of Science, Technology, and Innovation

The Government of India has announced the “Rastriya Vigyan Puraskar” in the field of Science, Technology and Innovation. The National Award recognizes outstanding and inspiring scientific, technological and innovation contributions of researchers, technologist and innovators. The nominations for this bouquet of awards are invited on Award Portal of Ministry of Home Affairs (https://awards.gov.in/) from 14th January 2024 to 28th February 2024. The general guidelines and RVP details are available on the awards portal. The awards this year are being coordinated by **Council of Scientific and Industrial Research (CSIR**) under the Ministry of Science and Technology. The awards shall be announced on 11th May 2024 (National Technology Day). The Award Ceremony for all categories of awards will be held on 23rd August 2024 (National Space Day).

Source: Pib

India International Science Festival 2023: Mega Science Event Starts Tomorrow. Know Dates, Venue, And More

India International Science Festival 2023: The mega science event will be held in Faridabad, Haryana, from January 17 to January 20. The festival is back after three years. The India International Science Festival (IISF) is back after three years. The ninth edition of the IISF, called IISF 2023, will begin on Wednesday, January 17, 2024 (tomorrow). The mega science event, being organised by the Department of Science and Technology, Ministry of Earth Sciences, **Council of Scientific and Industrial Research (CSIR),** Department of Biotechnology, Department of Space, and Department of Atomic Energy,

will be held in Faridabad, Haryana, from January 17 to January 20. The IISF was last held in December 2021. The festival has been organised since 2015.

Source: Abplive

India has become a Country to attain Global Repute with the Strength of Science, Technology, and Innovation: Dr. Jitendra Singh, Union Minister of State for S&T

Faridabad, 17 January 2024. "The India International Science Festival 2023 is being celebrated for three key reasons among many others and these three reasons are the successful landing of India's Chanrayaan-3 on the South Pole region of the Moon; Second COVID Vaccine development by India and Third Aroma Mission." Dr. Jitendra Singh, Union Minister of State (Independent Charge) for Science & Technology said this during the inaugural ceremony of the IISF 2023 at the Translational Health Science and Technology Institute (THSTI)-Regional Centre for Biotechnology (RCB) Joint Campus, Faridabad today. He further added that India is the first country to make a successful DNA vaccine in a short period of time. Other dignitaries of the inaugural ceremony were Shri Moolchand Sharma, Cabinet Minister of Higher Education, Transport, Mines and Geology, and Elections, Government of Haryana; Prof. Ajay Kumar Sood, PSA to the Gov. of India; Prof. Abhay Karandikar, Secretary, DST; Dr. M. Ravichandran, Secretary, MoES; Dr. N. Kalaiselvi, Secretary, DSIR & DG, **CSIR**, Dr. Rajesh S. Gokhale, Secretary, DBT; Ms. A. Dhanalakshami, Joint Secretary, DST; Shri Shivkumar Sharma, National Organising Secretary, Vijnana Bharati (VIBHA).

Source: Pib

Green hydrogen, solar tech key to India's energy future, says IIT Madras Research Park President

Shedding light on the evolving dynamics of India's energy sector, Prof. Ashok Jhunjhunwala, President of IIT Madras Research Park, IITM Incubation Cell & RTBI, in his interview with ET Energyworld, emphasized the significant roles of green hydrogen and the latest advancements in solar energy technology. He outlined their critical contributions to shaping the future of India's energy landscape. On the technological front, Jhunjhunwala highlighted ongoing advancements in electrolyser technology as pivotal for making green hydrogen production more efficient and cost-effective. He mentioned the contributions of companies like Ohmium, working on PEM electrolysers, and EH Group's focus on fuel cells. The upcoming Envision 2023 conference is set to feature presentations from **CSIR** labs showcasing key electrolyser technologies being developed in India, reflecting a vibrant research environment.

Source: Economictimes

CSIR-Human Resource Development Centre signs MoUs with four Sector Skill Councils

The **CSIR-Human Resource Development Centre (CSIR-HRDC),** Ghaziabad (UP) signed a collaborative Memorandum of Understanding (MoU) with M/s Agriculture Skill Council of India (ASCI), Capital Goods & Strategic Skill Council (CGSSC), Hydrocarbon Sector Skill Council (HSSC) and Life Sciences Sector Skill Development Council (LSSSDC). The MoU envisages to create an enabling environment for CSIR and Indian industry. CSIR launched a national-level unique Program "**CSIR** Integrated Skill Initiative" in 2016 to equip young minds with the necessary technological skills through exposure to CSIR laboratories and address the critical needs for the technical gap created by the enormous usage of advanced technology.

Source: timesofindia

REPUBLIC DAY CELEBRATION: CSIR Tableau on R-Day depicts purple revolution in J&K

Minister of State for Ministry of Science and Technology, Dr. Jitendra Singh, stood up from his seating position and started clapping with others when **CSIR's (Council of Scientific and Industrial Research's)** Tableau depicting Purple Revolution in Jammu and Kashmir trundled down the Kartavya Path in New Delhi as part of 75th Republic Day Parade. The signs of happiness and pride were evident on the face of Dr. Jitendra Singh. The feelings were emboldened after acknowledgements by nearby colleagues standing in awe and applause to the CSIR Tableau.

Source:Risingkashmir

CSIR showcases purple revolution, electric tractor on Republic Day tableau

The purple revolution unfolding in the lavender fields of Bhaderwah in Jammu and Kashmir found a proud place on the tableau of the **Council of Scientific and Industrial Research (CSIR).**

Source: Economictimes

CSIR's Republic Day Tableau highlights the Purple Revolution through Lavender Cultivation in Jammu & Kashmir

The **Council of Scientific & Industrial Research's** Republic Day Tableau highlighted the unleashing of a Purple Revolution ushered through Lavender cultivation in Jammu & Kashmir. **CSIR's** scientific interventions have led to the phenomenal growth of lavender cultivation and development of lavender products taking lavender from lab-to-market and creating several agri-start-ups in J&K. The Tableau also showcased India's first women friendly, compact, Electric Tractor developed by **CSIR**. The visually enchanting Tableau aligns with the Viksit Bharat theme of the Republic Day Parade 2024. **CSIR** developed an elite variety of lavender suitable for cultivation in temperate regions of J&K and provided free saplings and end-to-end agro-technologies to farmers and also installed distillation units for essential oil extraction in several regions of J&K. The success of Lavender cultivation in J&K earned it the sobriquet, 'Purple Revolution'.

Source: Pib

Union Minister Dr Jitendra Singh launches the theme for National Science Day 'Indigenous Technologies for Viksit Bharat'

Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh today released the theme for the "National Science Day 2024", titled "Indigenous Technologies for Viksit Bharat". The NSD Theme for this year's celebration reflects a strategic focus on promoting public appreciation for Science, Technology and Innovation and accomplishments of Indian scientists to address challenges through home-grown technologies for over-all well-being. Dr Rajesh Gokhale, Secretary, Department of Biotechnology (DBT), **Dr Kalaiselvi, DG-CSIR,** Dr. Rashmi Sharma, Head, NCSTC, DST and other Senior officials of the Ministry of Science and Technology took part in today's event.

Source: Pib

CSIR is implementing Mission Mode project for developing indigenous electrolyzers: Union Power and New & Renewable Energy Minister

The Union Minister for New & Renewable Energy and Power has informed about the steps taken by the Government to provide guidance for developing a vibrant research and development ecosystem which can help commercialization of Green Hydrogen. **Council of Scientific & Industrial Research (CSIR**) is implementing a Mission Mode Project, with an outlay of Rs. 75 crores, to develop different types of indigenous electrolysers, namely Anion Exchange Membrane (AEM) electrolyser, Proton Exchange Membrane (PEM) electrolyser, and Solid Oxide Electrolyser (SOE) electrolysers; Fuel Cells and Hydrogen Storage Cylinders. The emphasis is on making the electrolysers and fuel cells with efficiency comparable to global benchmarks.

Source: Pv-magazine

Union Minister for Science & Technology, Dr Jitendra Singh convenes the monthly joint meeting of different Science Ministries and Departments

Union Minister for Science & Technology, Dr Jitendra Singh today convened the monthly joint meeting of different Science Ministries and Departments, in New Delhi, wherein among other agenda items, he reviewed the Space Hackathon held last month for the students to sharpen their skills and innovation. The 30-hour hackathon on Space related challenges like technical issues related to the Geospatial BHUVAN portal was organised as part of the India International Science Festival - 2023 (IISF-2023) held at the DBT THSTI - RCB Campus in Faridabad, Haryana from 17th to 20th January 2024. The high-level joint meeting of different Science Ministries and Departments included representatives from Science & Technology, Biotechnology, **CSIR,** Earth Sciences, Dept. of Space and Atomic Energy.

Source: Pib

'SWATI' (Science for Women-A Technology & Innovation) Portal launched in New Delhi to create a single online portal representing Indian Women and Girls in STEMM (Science, Technology, Engineering, Mathematics & Medicine)

Principal Scientific Advisor to the Government of India Prof Ajay Kumar Sood today launched “Science for Women-A Technology & Innovation (SWATI)” Portal, aimed at creating a single online portal representing Indian Women and Girls in STEMM (Science, Technology, Engineering, Mathematics & Medicine) The various Sections in the portal include Icons - Awardees (Padma / Shanti Swarup Bhatnagar / Stree Shakti Science Samman) & Directors, Secretaries Academy Presidents; Faculty- Indian Universities, Autonomous organizations including S&T Ministry/ **CSIR**/ DBT/ DST/ **CSIR**/ MHRD/ UGC/ GATI/ KIRAN; Research fellows- Post docs, JRFs, SRFs, technical Staff; Students-PhD Scholars, Research Interns, Graduates, Post graduates, Undergraduates; WiS Entrepreneurs, Startups, Business & Science Administrators; STEMM background professionals in alternate careers(e.g. Science, Journalism etc).So far, 3000 ‘WiS Data Cards’ have been incorporated.
Source: **Pib**

How Purple Revolution is benefiting farmers in India

In recent years, India has witnessed a remarkable transformation in its agricultural sector, largely propelled by technological innovations and shifting paradigms. Among these changes, the emergence of the "Purple Revolution" stands out as a significant development, particularly in its impact on farmers across the country. The revolution has diversified the farming landscape and is offering new avenues of income and sustainability for farmers. This movement is gaining momentum, as scientists from the **Council of Scientific & Industrial Research (CSIR)** explore lavender's medicinal potential, amplifying its significance in agriculture and healthcare sectors.
Source: **Newsbytesapp**

यमुना पुल पर भार की जांच करेगी सीएसआईआर की टीम

औरैया। शेरगढ़ घाट स्थित यमुना नदी पुल पर **30** टन से अधिक भार के वाहनों के आवागमन पर लगी रोक हटना पुल की लोड क्षमता रिपोर्ट पर निर्भर करेगी। इसके लिए विशाखापट्टनम की **सीएसआईआर इंस्टीट्यूट** की टीम को पुल की लोड क्षमता मापने के लिए पीडब्ल्यूडी विभाग की ओर से संपर्क साधा गया है। औरैया-जालौन जिले को जोड़ने वाले यमुना नदी पर बने पुल की जर्जर हालत को **13** लाख रुपये से दुरुस्त कराए जाने के बाद तीन अक्तूबर **2023** से भारी वाहनों के लिए खोल दिया गया था। इसके बाद पीडब्ल्यूडी विभाग के अधिकारियों ने पुल की क्षमता पर सवालिया निशान लगाते हुए जिलाधिकारी को रिपोर्ट सौंपी।
Source: **Amarujala**

India has conducted the first human clinical trial of gene therapy for haemophilia A (FVIII deficiency) at Christian Medical College (CMC) Vellore, says Dr. Jitendra Singh

Union Minister Dr. Jitendra Singh addressing the "National Science Day 2024" programme at Vigyan Bhawan, New Delhi on Wednesday. India has conducted the first human clinical trial of gene therapy for haemophilia A (FVIII deficiency) at Christian Medical College (CMC) Vellore. This was disclosed here today by Union Science & Technology Minister (Independent Charge) Dr. Jitendra Singh while addressing the "National Science Day 2024" programme in Vigyan Bhavan. Addressing the gathering,

Professor Abhay Karandikar, Secretary DST said, “it is clearly evident that our scientific endeavours have the power to shape not only the future of our nation but also contribute significantly towards global advancement”. Dr Rajesh Gokhale, Secretary, Department of Biotechnology (DBT), Dr Kalaiselvi, **DG-CSIR**, Dr. Rashmi Sharma, Head, NCSTC, DST also addressed the function.
Source: Pib

J&K, Himalayan States fountainhead of Aroma StartUps: Dr Jitendra

Jammu & Kashmir and Himalayan States like Himachal Pradesh, Uttarakhand and Arunachal Pradesh are the fountainhead of Aromatic StartUps who have emerged as a new genre after the popular "Purple Revolution" from a small town of Bhaderwah in district Doda. The Union Minister appreciated the work being done by the organisations and said that they provide an opportunity to reach and influence people in the farthest corners of our nation. Speaking about the conducive climate of hill areas for aromatic plants, the Minister said that the Government has started an ‘Aroma Mission' through **CSIR** in the Union Ministry of Science & Technology. Dr Jitendra Singh said that **CSIR** is providing comprehensive handholding from product development to marketing. He said that our youth has made the nation a hub of start-ups in the last 10 years, but we need to expand our vision beyond the IT-enabled services sector and look at the Agri-tech sector for unleashing our untapped potential.
Source: Jammulinksnews

Working silently in their labs, these women scientists are doing city proud

Working silently in laboratories, focused on their research work and discoveries that can help save society and the planet Earth, these city-based scientists have brought international fame to the country in the field of science. Keeping a low profile, these women scientists, working in different **CSIR** and DST scientific institutes in Lucknow, have made a mark globally. On the International Women’s Day TOI features a handful, but powerful women in science: Binita Phartiyal: First Indian women scientist who was part of Indian scientific expeditions to Antarctica (2005-06) and Arctic (2008). With a research experience of over 25 years in Earth Sciences, Binita Phartiyal is a senior scientist at Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow. “Be inclusive, break the glass ceiling, get rid of the sticky floors and sing of the aspirations and achievements of fellow women colleagues, and gender parity will soon be history.
Source: Times of India

Union Minister Dr. Jitendra Singh launched ‘Common Fellowship Portal’-a single interface between applicants and various fellowship schemes by Department of Biotechnology.

Union Minister Dr. Jitendra Singh launched ‘Common Fellowship Portal’-a single interface between applicants and various fellowship schemes by Department of Biotechnology today at National Media Centre, New Delhi. Dr. Jitendra Singh said initiatives of science & technology are in line with PM Modi’s whole of Government Approach- one centralized portal for all research applications. Dr. Singh further informed that at present, Departments under the Ministry of Science & Technology (DST, DBT, **CSIR**) have come

together for submission of application forms and soon application forms for all other Departments such as ICMR, UGC and AICTE will also be on-boarded.
Source: **Pib**

Students are now able to pursue PhD in all 27 institutes of ICMR

Students will now be able to pursue PhD as well in all the 27 institutes of the Indian Council of Medical Research (ICMR), including the Bhopal Memorial Hospital and Research (BMHRC). For this purpose, ICMR has entered into an agreement with the **Academy of Scientific and Innovative Research (ACSIR). ACSIR** has invited applications for PhD (Medical Research) in all the institutes. The last date for applications is 30 April. Under this agreement, all the current Institutes under ICMR, ICMR HQs. and Department of Health Research (DHR), will be recognized as Associate Academic Centres of **AcSIR** providing avenues for Ph.D. and postgraduate students. Dr Manisha Shrivastava, Director in charge, BMHRC, Bhopal said that presently Postgraduate and Super-Speciality courses are conducted in many departments of BMHRC and starting of PhD course will benefit doctors having MBBS or MD degree who are interested in the field of research.
Source: Dailypioneer

Council of Scientific & Industrial Research (CSIR) implements new in-house 'Accounts Manager Software' for financial management

CSIR has set an example for all other Central autonomous institutions in the country by successfully implementing its in-house developed 'Accounts Manager Software' for financial management. On 01 April 2024, **CSIR** generated its Annual accounts for the financial year 2023-24, well ahead of the General Financial Rules (GFR) deadline of 30 June. The Annual Accounts for the financial year 2023-24 have already been submitted to the Office of the CAG. With an intuitive interface designed for ease of use, software users can effortlessly input, track, and manage financial data. Moreover, it generates comprehensive financial reports, balance sheets, income & expenditure statements, and other relevant analytics, empowering **CSIR** with actionable insights for informed decision-making. The software ensures data security through role-based access. One of the most vital features of the **CSIR** software is its real-time monitoring capability, allowing users to monitor financial activities in real-time. This enables timely intervention and better decision-making.
Source: Pib

India's biggest Climate Clock activated at CSIR Hq to celebrate Earth Day

Council of Scientific &Industrial Research (CSIR), as a part of the Earth Day Celebrations, installed and activated India's biggest Climate Clock on the **CSIR** Headquarters Building in Rafi Marg, New Delhi today. The event signifies **CSIR's** aim to spread awareness about climate change and its ill effects. Speaking on the occasion, Prof Chetan Singh Solanki of IIT, Bombay and Founder, Energy Swaraj Foundation said that there is an urgent need for every citizen of the country to be energy literate. He said

every citizen must take steps to avoid or minimise energy usage as much as possible. Dr Shailesh Nayak, Former Secretary, Ministry of Earth Science and Director, National Institute of Advanced Studies, delivered the **CSIR** AMRIT Lecture on "Unravelling the Secrets of Triggered Earthquakes: The Lighthouse Project of Scientific Drilling in Koyna". The **CSIR** Accelerating Modern Research, Innovations and Technologies (AMRIT) Lecture Series aims to learn from the ideas and thoughts of India's foremost S&T leaders that can help pave the way for actions by R&D organisations in general and CSIR in particular.

Source: Pib

भारत की सबसे बड़ी जलवायु घड़ी CSIR मुख्यालय में की गई सक्रिय

विज्ञान एवं प्रौद्योगिकी मंत्रालय ने एक बयान में बताया, सीएसआईआर मुख्यालय में भारत की सबसे बड़ी जलवायु घड़ी सक्रिय की गई। इस अवसर पर आईआईटी, बॉम्बे के प्रोफेसर चेतन सिंह सोलंकी और एनर्जी स्वराज फाउंडेशन के संस्थापक ने कहा कि देश के प्रत्येक नागरिक को ऊर्जा साक्षर होने की तत्काल आवश्यकता है। उन्होंने कहा कि प्रत्येक नागरिक को यथासंभव ऊर्जा के उपयोग से बचने या कम करने के लिए कदम उठाने चाहिए। वहीं दूसरी ओर सभा को संबोधित करते हुए, **सीएसआईआर** के महानिदेशक डॉ. एन कलैसेल्वी ने कहा कि पृथ्वी दिवस हमारे लिए पर्यावरण की रक्षा के लिए एक रिमाइंडर है। उन्होंने बताया कि **सीएसआईआर**-एनर्जी स्वराज फाउंडेशन एमओयू के तहत, सीएसआईआर में बड़ी संख्या में वैज्ञानिकों और कर्मचारियों ने ऊर्जा साक्षरता प्रशिक्षण लिया है। ज्ञात हो कि फाउंडेशन द्वारा प्रदान की गई जलवायु घड़ियाँ अधिकांश सीएसआईआर प्रयोगशालाओं में स्थापित की गई हैं।

Source: DDnews

Indian National Science Academy (INSA) and National Centre for Good Governance (NCGG) jointly organises the 2nd Leadership Development in Science & Technology (LEADS) Programme-2024 from 1-7 April 2024

The Indian National Science Academy (INSA) and the National Centre for Good Governance (NCGG) are jointly organizing the 2nd INSA-NCGG Leadership Development Program in Science and Technology (LEADS) at New Delhi from 1-7, April 2024.This pioneering programme seeks to nurture and empower future leaders in the field of science and technology, fostering visionary leadership and advancing scientific excellence in India. The participants include professors/ scientists selected from various institutions, laboratories/ Universities, of DST, DBT, **CSIR**, ICMR, DAE, ICAR, NITs, IITs, IISERs, MoES, ISRO etc. The National Centre for Good Governance (NCGG) is an apex institution for governance-related training, research, and consultancy. It aims to enhance the capabilities of individuals and organizations involved in governance and public administration in India. The Indian National Science Academy (INSA) is a premier scientific organization that promotes and recognizes excellence in scientific research and fosters scientific cooperation within India and globally.

Source: Pib

ऊर्जा बचाने के लिए सीएसआईआर ने शुरू किया 'रिंकल्स अच्छे हैं' अभियान

ऊर्जा बचाने की दिशा में कदम उठाते हुए सीएसआईआर ने Monday को 'रिंकल्स अच्छे हैं' (डब्ल्यूएएच) अभियान की शुरुआत की है. इस अभियान में सीएसआईआर कार्यबल Monday को बिना इस्त्री किए कपड़े पहन सकते हैं. इस अभियान में देश में परिषद और इसकी घटक प्रयोगशालाएं ऊर्जा बचाने के इस अभियान में शामिल हो गई हैं. **सीएसआईआर** की ओर से जारी विज्ञप्ति के अनुसार इस अभियान का मकसद पर्यावरण और जलवायु परिवर्तन के बारे में जागरूकता फैलाना है. **सीएसआईआर** अपनी सभी प्रयोगशालाओं में बिजली की खपत को 10 प्रतिशत कम करने की भी योजना बना रहा है. हाल ही में, भारत की सबसे बड़ी जलवायु घड़ी सीएसआईआर मुख्यालय भवन के ऊपर स्थापित की गई थी. सीएसआईआर और इसकी प्रयोगशालाएं 1-15 मई 2024 तक स्वच्छता पखवाड़ा मना रही है.

Source: Udaipurkiran

Research Body CSIR Asks Staff To Wear Wrinkled Clothes On Mondays. Here's Why

Till now, one had heard of 'Thank God It's Friday' or 'Casual Friday' dress code followed by many corporates. As part of this, employees avoid formal clothes on Fridays and turn up to work in semiformal relaxed outfits. Now the **Council of Scientific and Industrial Research (CSIR),** the largest civilian network of research labs in India, has started a 'WAH Mondays' campaign -- WAH expanded to 'Wrinkles Acche Hai' (wrinkles are good). The idea is to get people to wear non-ironed clothes to work every Monday in a symbolic fight against climate change. Dr N Kalaiselvi, secretary of Department of Scientific and Industrial Research and the first woman director general of CSIR, says WAH Mondays is part of a larger energy literacy campaign. "CSIR decided to contribute by wearing non-ironed clothes on Mondays. Ironing each set of clothes amounts to emission of 200 g of carbon dioxide. So, by wearing non-ironed clothes, one can prevent emission of carbon dioxide to the tune of 200 g," she said.

Source: NDTV

CSIR DG delivers spl address in KEC at Erode

Dr. N. Kalaiselvi, Director General of **CSIR** and Secretary of DSIR, delivered a special lecture at Kongu Engineering College, Perundurai. During her address, she focused on **CSIR'**s extensive contributions over its 82-year history, operating through 37 laboratories nationwide. These contributions span various sectors like genomics, construction, petroleum, food processing, mining, and agriculture. Notable projects included HAPS (High Altitude Pseudo Satellite), slag roads, Rejupave technology, sustainable aviation fuel, and efforts to align Indian standards with international benchmarks.A.K.Ilango, Correspondent, Dr.V.Balusamy, Principal, were present.

Source: Afternoonnews

Meet Indian genius who declined millions for his innovation, he is 'Father of...'

India has seen many geniuses who contributed to society even before Independence. They also led various research centres in the country. Some even did not take any monetary benefit for their research. One such man was Shanti Swarup Bhatnagar, an Indian colloid chemist, academic and scientific administrator. He was the first director-general of the **Council of Scientific and Industrial Research (CSIR).** Bhatnagar is revered as the Father of Research Laboratories in India. He was also the first chairman of the University Grants Commission (UGC). Born in the Punjab region of British India in 1894, he provided innovative solutions to several industrial problems and did not take any personal monetary benefit. His major innovation was an improvement of the procedure for drilling crude oil. He played a remarkable part in the development and organization of scientific research in the country.

Source: Dna India

Action plan for first 100 days to continue India's progress under the leadership of PM Shri Narendra Modi, says Dr. Jitendra Singh while assuming charge as the Union Minister of Science & Technology (Independent charge)

Dr Jitendra Singh assumed charge Minister of State(Independent Charge) Ministry of Science and Technology today at **Council Scienific and Industrial Research (CSIR)** headquarter in New Delhi. Soon after assuming the charge as Union Minister ,Dr. Jitendra Singh convened a joint meeting of six Science Ministries/ departments and their Secretaries wherein he discussed the first 100 days Action plan under the leadership of Prime Minister Shri. Narendra Modi. “Action plan for the first 100 days is intended to continue India‘s progress under the leadership of PM Shri. Narendra Modi, says Dr. Jitendra Singh. Addressing the media after assuming charge, Union Minister Dr. Jitendra Singh said “India is a frontline nation under PM Modi to offer leadership to the world in the field of Science & technology.

Source: Pib

डॉ. जितेंद्र सिंह ने विज्ञान और प्रौद्योगिकी मंत्रालय का कार्यभार संभाला, पहले 100 दिनों की कार्य योजना पर जोर

डॉ. जितेंद्र सिंह ने विज्ञान और प्रौद्योगिकी मंत्रालय का कार्यभार संभाला, पहले 100 दिनों की कार्य योजना पर जोर – डॉ. जितेंद्र सिंह ने आज विज्ञान और प्रौद्योगिकी मंत्रालय (स्वतंत्र प्रभार) का कार्यभार संभाला। **CSIR** मुख्यालय, नई दिल्ली में पदभार ग्रहण करने के तुरंत बाद, डॉ. सिंह ने छह विज्ञान मंत्रालयों/विभागों और उनके सचिवों की संयुक्त बैठक बुलाई, जिसमें प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में पहले 100 दिनों की कार्य योजना पर चर्चा की गई। डॉ. जितेंद्र सिंह ने कहा, “पहले 100 दिनों की कार्य योजना का उद्देश्य प्रधानमंत्री श्री नरेंद्र मोदी के नेतृत्व में भारत की प्रगति को जारी रखना है।” मीडिया को संबोधित करते हुए,

उन्होंने कहा, "विज्ञान और प्रौद्योगिकी के क्षेत्र में भारत एक अग्रणी राष्ट्र है और पीएम मोदी के नेतृत्व में विश्व को नेतृत्व प्रदान कर रहा है।"

Source: Krishakjagat

"300 women Scientists to get research grants for 3 years under CSIR- ASPIRE scheme" says Union Minister Dr. Jitendra Singh

"300 women Scientists to get research grants for 3 years under **CSIR**- ASPIRE scheme" says Dr. Jitendra Singh Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy and Department of Space and MoS Personnel, Public Grievances and Pensions, today in New Delhi. Chairing a review meeting of Department of Scientific and Industrial research (DSIR) Dr. Singh said Innovations in Science and technology should be to empower citizens in line with the Prime Minister Narendra Modi's vision to promote ease of living. While taking review of the working of DSIR and **CSIR**, Dr. Jitendra Singh commended the **CSIR**- ASPIRE scheme which is a testimony of governments efforts to support women scientist. Aspire is a Special Call for Research Grants for Women Scientists launched on the occasion of International Women's Day last year. Around 3000 proposals were received. After screening and independent reviewing, the area-wise research committees recommended a total of 301 research proposals for support.

Source: Pib

AcSIR ranked among top 10 research institutions of India

The **Academy of Scientific and Innovative Research (AcSIR**) has demonstrated remarkable progress in the Center for World University Rankings (CWUR) Global 2000 list.AcSIR is ranked 9th in India and globally it has moved up from rank 866 (in 2023) to 798 (in 2024) among the 20,966 ranked institutions, making it one of the top 3 percent institutions in the world.As per reports, the 2024 CWUR rankings analyzed 62 million data points across four critical factors namely quality of education, employability, quality of faculty, and research.

Source: Dailyexcelsior

Bangladesh, India sign 10 MoUs to enhance cooperation

Dhaka and New Delhi today signed 10 Memorandums of Understanding (MoUs) including seven new and three renewed in the presence of Bangladesh Prime Minister Sheikh Hasina and her Indian counterpart Narendra Modi to further consolidate the ever-growing relationship between the two neighbouring countries. Another MoU was signed between the Bangladesh Oceanographic Research Institute (BORI) and the **Council of Scientific and Industrial Research (CSIR)** of India for Joint Research on Oceanography of the Indian Ocean and Capacity Building. An MoU on Rail Connectivity between India and Bangladesh was also signed as two separate shared visions of the Bangladesh Digital

Partnership and the shared vision of India Bangladesh Green Partnership for a Sustainable Future were signed between the two sides as well.
Source: **Newagebd**

Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, Dr. Jitendra Singh launches "One Week One Theme" (OWOT) campaign showcasing recent success stories of India in different streams of science and technology.

Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions Dr. Jitendra Singh today launched "One Week One Theme" (OWOT) campaign showcasing recent success stories of India in different streams of science and technology. “Our aim is to integrate the efforts of all CSIR labs working on similar projects to reduce overlap and optimize resources,” said Dr. Jitendra Singh and said, the ‘One Week One Theme’ initiative under **Council for Scientific and Industrial Research (CSIR)** aims to make innovation inclusive for all. Pertinent to mention, ‘One week One Theme’ is the brainchild of Minister Dr. Jitendra Singh. ‘OWOT’ is built on the legacy and success of the ‘One Week One Lab’ (OWOL) initiative started last year. OWOL was also made possible under his guidance.
Source: **Pib**

Indian scheme to provide 300 research grants for women

Three hundred women in India have been selected to receive a research grant that will run over three years as part of a scheme to support and empower female scientists. The **Council of Scientific and Industrial Research (CSIR)** initiative is designed to encourage more women to participate in cross-disciplinary research, including the chemical sciences. On International Women’s Day 2023, the **CSIR** launched – for the first time – a special call for research grants for female scientists branded CSIR-ASPIRE which took in over 3000 submissions across the country. Eligibility criteria stated the principal investigator must be a woman actively carrying out R&D in science and engineering. After an independent review, the research committee chose 301 research proposals to support. The grants, which do not exceed INR2.5–3 million (£236,000–£282,000), will be provided for staff, contingency and minor equipment. The grant also subsidises international travel to enable global exposure and foster international collaboration.
Source: **Chemistryworld**

Council of Scientific and Industrial Research (CSIR) and AIIMS, New Delhi to install a pilot project and study ‘Conversion of Pathogenic Biomedical Waste to Value Added Soil Additives’

Council of Scientific and Industrial Research (CSIR) and AIIMS, New Delhi to install a pilot project and study ‘Conversion of Pathogenic Biomedical Waste to Value Added

Soil Additives'. an MoU was facilitated in this regard at the inauguration of 'One Week One Theme' campaign by Dr. Union Minister Dr. Jitendra Singh on Monday in New Delhi. Dr. Jitendra Singh, Vice-President, CSIR chaired the event in which 24 Technology transfers, Product launches, and MOUs were signed with the respective industry partners for technology transfer. Following the success of the 'One Week One Lab'(OWOL) campaign conducted by all the **CSIR** laboratories in 2023, Dr. Jitendra Singh proposed to start 'One week One Theme' campaign for the year 2024 from the month of June to December to showcase theme-based weeklong activities on technology packages, innovative and indigenized products, processes and devices across the laboratories. OWOT program aims to promote their achievements and foster collaboration with industry to empower MSMEs, SHGs, Agripreneurs and Startups.
Source: Pib

Goan researcher earns CSIR-ASPIRE laurels

Goan researcher Dr Neena Panandikar has earned laurels for the state as she has been selected as one among 300 women scientists under the **CSIR**-ASPIRE scheme, a central government's initiative that aims to empower and encourage women in the field of scientific research. Her research aims to contribute to sustainable development by the reduction in consumption of cement and using alternative suitable material. The **Council of Scientific and Industrial Research (CSIR),** under its ASPIRE scheme, made a special call for research grants only to women scientists across the country. The call was for allocation of grants to facilitate research and development in the major disciplines of science and engineering – life sciences, chemical sciences, physical sciences, engineering sciences and inter or trans disciplinary sciences.
Source: Navhindtimes

7 Students From Mumbai School Selected For CSIR Summer Internship

In a significant stride to bolster ideation, scientific exploration and innovation, total 28 students from Orchids The International School have secured summer internships at the **Council of Scientific & Industrial Research (CSIR).** Of the total students selected, seven are from Mumbai's Mulund and Malad branch. These internships are a result of the students' outstanding submissions to the **CSIR Jigyasa** EPIC Hackathon 2024. **CSIR** has introduced the "Empowering Pupil Innovation and Creativity (EPIC)" initiative under its flagship **CSIR-Jigyasa** outreach program for school students. EPIC is designed to cultivate a culture of curiosity, innovation, and scientific temper among students, empowering them to address national challenges through science and technology. The **CSIR Jigyasa** EPIC Hackathon 2024 epitomizes this mission, providing students with a platform to develop innovative solutions for societal issues through science and technology.
Source: Mumbailive

The Council of Scientific and Industrial Research (CSIR) and MS Swaminathan Research Foundation (MSSRF) signs Memorandum of understanding (MoU)

The **Council of Scientific and Industrial Research (CSIR)** and the M. S. A Research Foundation (MSSRF) entered an MoU to work together for livelihood generation among rural, tribal, and farming communities. The MoU was signed by Dr. N. Kalaiselvi, DG, **CSIR** and Dr. Soumya Swaminathan, Chairperson, MSSRF. Senior officials from **CSIR** and representatives of MSSRF witnessed the signing of the MoU. Speaking on the occasion, Dr. N. Kalaiselvi, DG, **CSIR** expressed that although **CSIR** labs disseminate technologies developed in the labs to potential users, the outreach, especially in the societal sector, would be enhanced through joining hands with organizations such as MSSRF, which works at the grassroot level. Dr Soumya Swaminathan, Chairperson, MSSRF stated that the Foundation, in its efforts to reach out to the tribal and vulnerable communities, is seeking select low-cost, affordable and potential technologies and technical support from **CSIR** laboratories as a technology facilitating partner under this umbrella MoU since the tribals or various other such groups are not able to directly approach **CSIR** labs due to many inherent reasons such as geographical location, language of communication and lack of required resources.
Source: Pib

CSIR और MSSRF ने ग्रामीण आजीविका सृजन के लिए समझौता ज्ञापन पर हस्ताक्षर किए

वैज्ञानिक और औद्योगिक अनुसंधान परिषद (CSIR) और एम. एस. स्वामीनाथन रिसर्च फाउंडेशन (**MSSRF)** ने भारत में ग्रामीण**,** आदिवासी और कृषक समुदायों के बीच आजीविका के अवसरों को बढ़ाने के उद्देश्य से एक समझौता ज्ञापन (**MoU)** पर हस्ताक्षर किए हैं। यह सहयोग **CSIR** के तकनीकी नवाचारों और **MSSRF** की जमीनी पहुंच का उपयोग करके हाशिए पर पड़े समूहों को सशक्त बनाने का लक्ष्य रखता है। समझौता ज्ञापन के उद्देश्य समझौता ज्ञापन के तहत**, CSIR** अपने प्रयोगशालाओं में विकसित किफायती और प्रभावी तकनीकों को **MSSRF** द्वारा चयनित समूहों**,** जैसे स्वयं सहायता समूहों (**SHGs),** गैर-सरकारी संगठनों (**NGOs)** और किसान उत्पादक संगठनों (**FPOs)** को स्थानांतरित करेगा। ये तकनीकें ग्रामीण विकास के लिए महत्वपूर्ण क्षेत्रों जैसे कृषि**,** पोषण और स्वास्थ्य देखभाल पर केंद्रित होंगी।
Source: Hindicurrentaffairs

CSIR Director General Urges Graduates to Foster National Pride

Dr N. Kalaiselvi, Director General of the **Council for Scientific and Industrial Research (CSIR**) urged graduates to create moments of pride for the nation. “The country has high expectations from you. It’s fine to go abroad to study and work, but remember to return and contribute to your nation,” she stated. Dr Kalaiselvi was speaking at the 23 convocation of the International Institute of Information Technology Hyderabad (IIITH) with 600 students graduating, including a record number of 32 PhDs and 224 Masters with thesis. Graduates from IIITH’s Dual-Degree Master of Science and Ph.D. programmes have made significant marks globally in top universities and product groups. Yarramaneni Jaishnav, a BTech graduate in electronics and communication engineering (ECE), received the IIITH gold medal for outstanding academic performance.

Thatipamula Harshvardhan, a BTech graduate in computer science and engineering (CSE), was awarded best all-rounder for notable contribution to academics, extracurricular activities, and IIITH services.
Source: **Deccanchronicle**

28 Orchids International School Students Secure CSIR Summer Internships

In a significant stride to bolster ideation, scientific exploration and innovation, total 28 students from Orchids The International School have secured summer internships at the **Council of Scientific & Industrial Research (CSIR).** These internships are a result of the students' outstanding submissions to the **CSIR** Jigyasa EPIC Hackathon 2024. Out of 960 overall submissions across the country, 42 projects were chosen nationwide in the Grade 7-9 category. Out of this, 14 projects were selected from Orchids International School. Around 28 students, forming a group of duo, students worked on 14 different projects under two categories namely One Health and Clean and Green Energy with the guidance and mentorship of the Academic department of the school. The students from Bangalore, Pune, Mumbai, Indore, Jaipur and Chennai region were selected for this internship.
Source: **Businessnewsthisweek**

Combating piracy. A treaty to protect traditional knowledge

In May 2024, member states of the World Intellectual Property Organisation (WIPO) approved a new Treaty on IP, genetic resources and associated traditional knowledge (TK) – the culmination of negotiations that began in 2001. This ground-breaking treaty includes provisions for indigenous peoples and local communities. Its objectives are to enhance the transparency and quality of the patent system regarding genetic resources and TK and to prevent erroneous patents on non-novel or non-inventive inventions. TK, as defined by WIPO, embraces the know-how, skills and practices developed and passed down by indigenous communities. These are core to the cultural and spiritual identity of the community. Essentially, while conventional intellectual property (IP) rights do not protect TK itself, inventions derived from TK can qualify for IP protection. India has proactively protected TK through initiatives like the **Traditional Knowledge Digital Library** and legal safeguards in the Indian Patents Act and the Biological Diversity Act. The new WIPO Treaty will strengthen the existing protections, potentially leading to changes in domestic legislation to incorporate mandatory disclosure requirements regarding genetic resources and TK.
Source: **Thehindubusinessline**

CSIR DG, CSIR gets two-year extension

Nallathamby Kalaiselvi, the first woman Director General of the **Council of Scientific and Industrial Research (CSIR),** on Tuesday was granted a two-year extension in service. A government order said the Appointments Committee of the Cabinet had approved the extension of tenure of Ms. Kalaiselvi "for a period of two years beyond 07.08.2024, or until further orders, whichever is earlier."

Source: Hindu

7 Students From Mumbai School Selected For CSIR Summer Internship

In a significant stride to bolster ideation, scientific exploration and innovation, total 28 students from Orchids The International School have secured summer internships at the **Council of Scientific & Industrial Research (CSIR).** Of the total students selected, seven are from Mumbai's Mulund and Malad branch. These internships are a result of the students' outstanding submissions to the **CSIR Jigyasa** EPIC Hackathon 2024. **CSIR** has introduced the "Empowering Pupil Innovation and Creativity (EPIC)" initiative under its flagship **CSIR-Jigyasa** outreach program for school students. EPIC is designed to cultivate a culture of curiosity, innovation, and scientific temper among students, empowering them to address national challenges through science and technology. The **CSIR Jigyasa** EPIC Hackathon 2024 epitomizes this mission, providing students with a platform to develop innovative solutions for societal issues through science and technology.

Source: Mumbailive

'स्थायी आजीविका के लिए पारंपरिक ज्ञान' पर पहला विज्ञान प्रौद्योगिकी पहल सम्मेलन (STI Conclave) ISTIC-UNESCO और CSIR द्वारा संयुक्त रूप से आयोजित किया गया

संयुक्त राष्ट्र शैक्षिक, वैज्ञानिक और सांस्कृतिक संगठन (यूनेस्को) के तत्वावधान में दक्षिण-दक्षिण सहयोग के लिए अंतर्राष्ट्रीय विज्ञान, प्रौद्योगिकी और नवाचार केंद्र (इंटरनेशनल साइंस टेक्नोलॉजी इनिशिएटिव सेंटर- आईएसटी आईसी), वैज्ञानिक और औद्योगिक अनुसंधान परिषद (**सीएसआईआर**, नई दिल्ली) के घटकों, **पारंपरिक ज्ञान डिजिटल लाइब्रेरी एकक (सीएसआईआर –टीकेडीएल यूनिट)** तथा **सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ केमिकल टेक्नोलॉजी (सीएसआईआर-आईआईसीटी),** हैदराबाद के साथ मिलकर भारत 29-31 जुलाई 2024 से नई दिल्ली, में "स्थायी आजीविका के लिए पारंपरिक ज्ञान" पर पहला विज्ञान प्रौद्योगिकी पहल सम्मेलन (एसटीआई कॉन्क्लेव) का आयोजन किया जा रहा है। अनुसंधान विभाग (डीएसआईआर) की सचिव डॉ. एन. कलैसेल्वी ने पहले एसटीआई कॉन्क्लेव का उद्घाटन किया।

Source: Insamachar

Strive to develop indigenous technology to make the country self-sufficient, students told

The importance of nurturing indigenous ideas to ensure that developmental projects is both locally relevant and globally competent, said N. Kalaiselvi, Director-General, **Council of Scientific and Industrial Research (CSIR)** and secretary, Department of Scientific and Industrial Research (DSIR). "Graduates should take it as a challenge to develop an indigenous technology in a key field as a tribute to their institute and their country," she said speaking at the convocation ceremony of the National Institute of

Technology – Tiruchi (NIT-T) on Saturday. “In the geopolitical conditions of our times, we cannot depend on any other country for any other technology or livelihood-related requirements,” Ms. Kalaiselvai said. She urged young Indians to cultivate a start-up culture and critically assess the sustainability of such ventures. Although many start-ups faced the challenge of sustaining themselves, she asked graduates to keep up the pursuit of innovative ideas.
Source: **The Hindu**

Tirunelveli Campus Connect APAJ award given

Noorul Islam University, Kumarakoil, Kanniyakumari district, joining hands with Nim Medicity, hosted the Sixth APJ Award Ceremony to honour **N. Kalaiselvi, Director General of CSIR** and Secretary, DSIR, for her contributions to the field of electrochemical power systems over her 25-year career. Kerala Governor Arif Mohammad Khan lauded her leadership and achievements, highlighting her role as an inspiration in the scientific community. Earlier, K.A. Saju, GM of Nim Medicity, welcomed the gathering. Neyyatinkarai MLA K. Anslan presided over the ceremony. Nim Medicity MD M.S. Faizal Khan delivered the foreword, while Noorul Islam University Vice Chancellor Tessy Thomas provided the keynote address. **CSIR**-Trivandrum Director C. Anandaramakrishnan proposed the vote of thanks.
Source: **The Hindu**

Government Boosts Science and Technology with Budget Hike and New Initiatives: Union Minister Dr. Jitendra Singh

Dr. Jitendra Singh, Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy, Department of Space, and MoS Personnel, Public Grievances and Pensions informed. The Government has taken several steps to increase the budget allocation in the field of Science and Technology including R&D such as successive increase in plan allocations for scientific departments while replying to an unstarred question in Lok Sabha today. He also shared that **Council of Scientific and Industrial Research (CSIR)** had launched a programme named “JIGYASA” in collaboration with Kendriya Vidyalaya Sangathan (KVS) to open up the national scientific facilities to school children, enabling **CSIR** scientific knowledgebase and facility to be utilized by school children to instil ‘Scientific Thinking’ in the young minds. The Ministry has been providing doctoral and postdoctoral research fellowships to students to pursue research in science and technology in the country.
Source: **Pib**

Union Minister Dr. Jitendra Singh proposes a ‘National Geospatial Data Repository’ and PPP model

Union Minister Dr. Jitendra Singh proposes a National Geospatial Data Repository and PPP model today while chairing a joint meeting of all the Science Ministries and Departments of Government of India today at Prithvi Bhavan, here. Addressing the

meeting, Dr. Jitendra Singh instructed the Department of Space, Department of Science and Technology and Ministry of Earth Sciences to create a unified Geospatial interface for utilisation of industry and StartUp ecosystem in order to create innovative and indigenous products for the welfare of farmers, rural artisans and others. Towards the conclusion of the meeting, Dr. Jitendra Singh recalled the Prime Minister's vision of India @2047 and highlighted the pivotal role of Science and Technology in achieving the vision. Dr. A.K. Sood, Principal Scientific Advisor to Government of India; Prof. Abhay Karandikar, Secretary, DST; Dr. Rajesh Gokhale, Secretary, Biotechnology; Shri. Ravi Chandran, Secretary Earth Sciences, Dr. N. Kalaiselvi, DG, **CSIR** were present for the meeting.

Source: Pib

Ayurveda: आईआईटी और सीएसआईआर जैसे संस्थान करेंगे आयुर्वेद में शोध, दुनिया भर के संस्थानों से होगा करार

अखिल भारतीय आयुर्वेद संस्थान और आयुष मंत्रालय मिलकर भारतीय पुरातन चिकित्सा पद्धति को वैज्ञानिक दृष्टिकोण से समूची दुनिया में आगे बढ़ा रहे हैं। एआईआईए की निदेशक प्रो. (डॉ.) तनुजा नेसरी ने कहा कि 2047 तक विकसित भारत के लक्ष्य को साकार करने के लिए प्रतिबद्ध है। आयुर्वेद को बढ़ावा देने के लिए आयुष मंत्रालय दुनिया भर के बड़े संस्थानों के साथ शोध के लिए करार करेगा। इसमें आईआईटी और **सीएसआईआर** से जुड़े तकनीकी संस्थान भी शामिल होंगे। इस कड़ी में शुक्रवार को देश के एक निजी विश्वविद्यालय के साथ आयुर्वेदिक चिकित्सा शिक्षा के शोध और प्रौद्योगिकी से जुड़ा समझौता किया गया। यह एमओयू अखिल भारतीय आयुर्वेद संस्थान के साथ हुआ है। गुरुवार को हुए इस करार के दौरान अखिल भारतीय आयुर्वेद संस्थान की निदेशक डॉक्टर तनुजा नेसारी ने बताया कि आयुर्वेद की चिकित्सा पद्धति को और बेहतर करने के लिए जिस वैज्ञानिक शोध और शिक्षा को आगे बढ़ाने की आवश्यकता है। वह इससे आगे बढ़ेगी। इस दौरान निजी तकनीकी शिक्षण संस्थान के साथ प्रौद्योगिकी और शोध कार्यक्रमों को बढ़ावा मिलेगा। संस्थान की निदेशक ने बताया कि इस तरीके का करार देश और दुनिया के अलग-अलग तमाम विश्वविद्यालय के साथ आगे भी किया जाना है।

Source: Amarujala

Scientists uncover medicinal plants atop hill in Gaya, call for involving locals in cultivation

A team of researchers has uncovered an array of medicinal plants at Brahmayoni Hill in Bihar's Gaya, with the most notable of them being Gurmar which is used for its anti-diabetic properties. India's premier research agency, the **Council of Scientific and Industrial Research (CSIR)** has already used Gurmar (Gymnema Sylvestre) for developing anti-diabetic drug BGR-34, the researchers noted. A report of the study titled 'Ethnobotanical research on certain therapeutic plants found on Gaya's Brahmayoni Hill' stressed involving the locals in the cultivation of the most regularly used medicinal herbs

found on the hill to prevent their extinction. Gurmar is one of the three medicinal plants found on the Brahmayoni Hill, a treasure trove for natural remedies on which traditional healers have been relying for diverse medicinal herbs for centuries. The other plants with therapeutic properties found on the hill are Pithecellobium dulce and Ziziphus jujuba, and research on these is still underway.
Source: Theprint

CSIR Floriculture Mission : फूलो की खेती से दीदियों को मिलेगी अतिरिक्त आमदनी

CSIR Floriculture Mission फूलों का उपयोग अपने घर, मंदिरों, शादी एवं सजावट सहित अन्य कार्यों के लिए किया जाता है। फूल श्रद्धा और भावना का प्रतीक है। अपने घरों के बगीचे, गार्डन, गमलों में भी अलग-अलग फूल लगाएं जाते हैं। सुबह-सुबह सुंदर और सुगंधित फूल देखकर मन आनंदित हो जाता है। दूरस्थ वनांचल क्षेत्र की महिलाओं को फूलों के खेती के प्रति प्रेरित करना और रोजगार के अवसर उपलब्ध कराने के लिए उद्यान विभाग द्वारा निःशुल्क पौधे भी उपलब्ध कराये जा रहे हैं। दंतेवाड़ा जिले की स्व-सहायता समूह की 45 दीदियां मिलकर लगभग 4 एकड़ खेत में फूलों की खेती कर आगे बढ़ रही हैं। तुड़पारास, भोगाम, भैरमबंद ग्रामों की दीदियों को दिया गया प्रशिक्षण जिला प्रशासन और बिहान योजना अंतर्गत जिले के महिला स्व सहायता समूह की दीदियों को फूलों की खेती करने के लिए उद्यान विभाग द्वारा प्रशिक्षण दिया गया है।
Source: Thehindkeshari

KBC 16: Contestant fumbles on Rs 12.5 lakh question about climate clock

The second episode of Kaun Banega Crorepati 16 began with the host Amitabh Bachchan imparting a life lesson to the audience. He then moved on to the rollover contestant, Dipali Soni, who took the hot seat in the Monday, August 12, episode. Dipali played well until the 11th question and won Rs 6.40 lakh. However, she couldn't answer the 12th question, worth Rs 12.50 lakh. The question about India's largest climate clock left Dipali in jitters the moment Amitabh Bachchan read it out to her. He asked her, "India's largest climate clock is installed at Anusandhan Bhawan, the headquarters of which organisation, to raise awareness about climate change?" The four options were: DRDO, **CSIR**, BARC, and ISRO. Confused between DRDO and ISRO, Dipali, without wasting time, decided to quit the game and take home Rs 6.40 lakh. After she quit, Amitabh asked her to guess the answer. She chose DRDO, which was indeed incorrect. The correct answer was **CSIR (Council of Scientific & Industrial Research).**
Source: Indiatoday

AcSIR gets 11th NIRF ranking among research institutions

The Academy of Scientific and Innovative Research (AcSIR) has secured 11th position in the National Institutional Ranking Framework (NIRF) 2024 among 'Research Institutions'. Prof Manoj Kumar Dhar, Director of AcSIR, while congratulating all

stakeholders for this stupendous achievement, expressed his gratitude to Dr Jitendra Singh, Minister of Science and Technology for his visionary leadership. He also thanked the Chancellor, AcSIR, **DG CSIR**, DG ICMR, Directors of National Laboratories affiliated to AcSIR, Faculty members and students. “This achievement is a reflection of the hard work and dedication of our faculty, researchers and students. It underscores our mission to drive scientific research and innovation that addresses real-world challenges and contributes to the nation’s development,” he said. AcSIR has been at the forefront of scientific research, with a focus on interdisciplinary and collaborative approaches. The institution’s robust research programs span various domains, including Biological Sciences, Chemical Sciences, Engineering Sciences, Mathematical & Information Sciences, Physical Sciences, Medical Research, and Agricultural Sciences.
Source: **Dailyexcelsior**

Former CSIR Director General Girish Sahni passes away

Former **CSIR** Director General Girish Sahni, known for developing clot busters for treatment of cardiovascular diseases, died on Monday, the Council of Scientific and Industrial Research said. He was 68. "The **CSIR** family mourns the loss of its former Director General, Dr Girish Sahni," the **CSIR** said in a post on X. Sahni, who specialised in protein engineering, molecular biology, and biotechnology, contributed significantly in the area of protein cardiovascular drugs especially 'clot busters' and their mode of action in the human body. The team led by Sahni was responsible for producing technology for India's first indigenous clot blusters, natural streptokinase and recombinant streptokinase. He also developed clot-specific streptokinase, a drug whose licensing rights were sold to Nostrum Pharmaceuticals in New Jersey, the US, in 2006. "His work on streptokinase was a block buster, what he used to call as a clot buster. His was one of the most visible tech transfers in Indian Academia," former Director General of **CSIR** Shekhar Mande said in a post on X.
Source: **Deccanherald**

Council of Scientific & Industrial Research (CSIR) and Laghu Udyog Bharati sign MoU for transfer of CSIR technologies to Micro and Small Entrepreneurs

Council of Scientific & Industrial Research (CSIR) and Laghu Udyog Bharati (LUB) entered into an MoU on 21st Aug 2024 at **CSIR** Headquarters for transfer of selected **CSIR** technologies to Micro and Small Entrepreneurs in the presence of Director General, **CSIR**, All India Secretary of LUB and President LUB. Laghu Udyog Bharati is a registered all India organization of Micro and Small Industries in India since 1994 and a Section 8 Company with presence in more than 575 districts in 27 States of India with more than 51000 members. The specific objectives of the MoU include transfer of 100 Knowhow /Technology / Products of **CSIR** within 100 days to the identified MSMEs under LUB. It also includes providing suggestions / ideas / problems to **CSIR** for developing new technology (ies) in any suggested area(s) of interest by MSMEs within the scope of **CSIR** for technology advancement, meeting regulatory norms, increasing market reach and export promotion / import substitution. The program was presided by Dr. N Kalaiselvi,

Secretary DSIR & Director General, **CSIR**; Dr. R.P. Singh, Head, IMD, Dr. Vibha Malhotra Sawhney, Head, TMD, Dr. Debashis Bandyopadhyay, Dr. Mahesh Kumar and Ms Deepti Sharma Dullu and other dignitaries from **CSIR**.
Source: Pib

Meet man, an Indian genius, who declined millions for his innovations, he is 'Father of...'

Many geniuses in India have contributed to society with their innovations in different sectors. Some invented things with limited resources even before India's independence. One such person was Shanti Swarup Bhatnagar, a renowned chemist, academic and scientific administrator who played a significant role in building the Science and Technology infrastructure in the country. Bhatnagar is known as the Father of Research Laboratories in India. He was the first director-general of the **Council of Scientific and Industrial Research (CSIR).** The Indian genius was also the first chairman of the University Grants Commission (UGC). He provided innovative solutions to several industrial problems and did not take any personal monetary benefit. To honour his name and legacy, **CSIR** in 1958, instituted the Shanti Swarup Bhatnagar Prize for Science and Technology for scientists who have made significant contributions in various branches of science. His major innovation was an improvement of the procedure for drilling crude oil. He played a remarkable part in the development and organization of scientific research in the country.
Source: Dnaindia

CSIR और लघु उद्योग भारती ने सूक्ष्म एवं लघु उद्यमियों को CSIR प्रौद्योगिकियों के हस्तांतरण के लिए समझौता ज्ञापन पर हस्ताक्षर किए

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) और लघु उद्योग भारती (एलयूबी) ने 21 अगस्त 2024 को **सीएसआईआर** मुख्यालय में **सीएसआईआर** के महानिदेशक, एलयूबी के अखिल भारतीय सचिव और एलयूबी के अध्यक्ष की उपस्थिति में सूक्ष्म और लघु उद्यमियों को चयनित **सीएसआईआर** प्रौद्योगिकियों के हस्तांतरण के लिए एक समझौता ज्ञापन पर हस्ताक्षर किए। लघु उद्योग भारती 1994 से भारत में सूक्ष्म और लघु उद्योगों का एक पंजीकृत अखिल भारतीय संगठन है और एक धारा 8 कंपनी है जिसकी उपस्थिति भारत के 27 राज्यों के 575 से अधिक जिलों में है और इसके 51000 से अधिक सदस्य हैं । एमओयू के विशिष्ट उद्देश्यों में एलयूबी के तहत पहचाने गए एमएसएमई को 100 दिनों के भीतर **सीएसआईआर** की 100 तकनीकी जानकारी/प्रौद्योगिकी/उत्पादों का हस्तांतरण शामिल है।
Source: Insamachar

Union Minister Dr. Jitendra Singh chaired bilateral meeting on US-India Civil Nuclear Commerce

Union Minister Dr. Jitendra Singh chaired a pivotal bilateral meeting on US-India Civil Nuclear Commerce, highlighting the deepening cooperation between the two nations in critical areas of science, technology, and clean energy at Prithvi Bhavan. Dr. Jitendra

Singh announced that an Indian astronaut from the Gaganyaan Mission is set to join the International Space Station, marking a significant milestone in Indo-US Space collaboration. He emphasized the importance of this partnership in securing global supply chains, especially in sectors like semiconductors, pharmaceuticals, and clean energy technologies, which are increasingly vital in today's interconnected world. Prof. Abhay Karandikar shared insights into India's progress in emerging technologies, including data analytics, Artificial Intelligence (AI), and machine learning, emphasising the strategic importance of innovation in these fields. Dr. N Kalaiselvi, Director General of **CSIR**, discussed India's advancements in Lithium-Ion Battery development and indigenous battery manufacturing, stressing the importance of creating sustainable and circular energy storage solutions.
Source: Pib

EU, CSIR Announce Co-Funding To Foster EU-India Research Cooperation

The European Union and the India's **Council of Scientific and Industrial Research (CSIR)** on Wednesday launched a new co-funding initiative for the Marie Skłodowska-Curie Actions (MSCA) Staff Exchanges, part of the EU's research and innovation programme, Horizon Europe. Through this scheme, **CSIR** will top up selected MSCA Staff Exchanges projects, enabling its institutes to engage in joint research projects with European and international partners and second their scientific and technical staff to European research organisations for knowledge sharing and research activities. This will promote a balanced researcher mobility and long-term collaborations. The funding will be from 2025 to 2027 and be open to any **CSIR** institution involved in successful projects selected under the upcoming Staff Exchange calls. This new partnership will strengthen research and innovation ties between Europe and India and drive forward scientific and technological progress by enhancing bilateral institutional cooperation, collaborative research and researcher exchanges in a plurilateral setting under Horizon Europe.
Source: Etvbharat

India edges past the UK in critical technologies research; IIT Bombay, Roorkee top performers

India has edged past the United Kingdom by delivering more cutting-edge critical technology research during the period between 2019 and 2023, data published by the Australian Strategic Policy Institute on Wednesday (August 28) showed. The institute updated its critical technology tracker this week by focusing on high-impact research or 10 per cent of the most highly cited papers, as a "leading indicator of a country's research performance, strategic intent, and potential future science and technology capability". The tracker covers 64 critical technologies and crucial fields spanning defence, space, energy, the environment, artificial intelligence (AI), biotechnology, robotics, cyber, computing, advanced materials, and key quantum technology areas. New Delhi-based **Council of Scientific and Industrial Research** is ranked fifth in the world as an institute with the highest quality research in Biofuels, the ASPI critical technology tracker showed.
Source: Wionews

‘Students should lead the nation’s technology revolution’

Young Indians, especially women students who opt for higher education in science, should aim at developing indigenous technology to support the nation’s drive towards self-sufficiency, N. Kalaiselvi, Director General, **Council of Scientific and Industrial Research (CSIR**) said on Thursday. Ms. Kalaiselvi, who also holds additional charge as secretary, Department of Scientific and Industrial Research (DSIR), was addressing students of the Shrimati Indira Gandhi College (SIGC) in Tiruchi as part of the institution’s Teachers’ Day programme. Indigenous technology was the need of the hour in a conflict-driven world. “Over 90% of our basic requirements are dependent on imports; if there is a war and our supply is interrupted, what will we do? We have to develop ourselves. Our scientists have begun mapping our country’s natural resources, in order to become self-sufficient. If students are motivated to come up with indigenous technology, it would be a boon to our scientific community,” Dr. Kalaiselvi said.

Source: The Hindu

"Global Bio India Unveils 30 Breakthrough Startups, Paving the Way for the Future of Biotech" says Union Minister Dr. Jitendra Singh

"Global Bio India Unveils 30 Breakthrough Startups, Paving the Way for the Future of Biotech" says Union Minister Dr. Jitendra Singh at the inaugural ceremony of Global Bio India 2024 here today at Pragati Maidan. Addressing the inaugural ceremony of the Global Bio India Conference, Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy and Department of Space, MoS Personnel, Public Grievances and Pensions, Dr. Jitendra Singh congratulated DBT and BIRAC for enabling the phenomenal growth and said India's bio economy has experienced remarkable growth, skyrocketing from $10 billion in 2014 to over $130 billion in 2024, with projections to reach $300 billion by 2030. Dr. Rajesh S. Gokhale Secretary, Department of Biotechnology, Chairman, BIRAC and DG-iBRIC highlighted the pivotal role of such international conference. Dr. (Mrs.) **N. Kalaiselvi DG, CSIR** called this as the decade of Innovation and research; Mr. G S Krishnan President, Association of Biotech Led Enterprises; Dr. Jitendra Kumar Managing Director, BIRAC were also present at the inaugural ceremony.

Source: Pib

Council of Scientific and Industrial Research organises 5C for Global Sustainable Development at the Science Summit of the 79th UNGA

The **Council of Scientific and Industrial Research (CSIR),** as part of the Science Summit at the 79th United Nations General Assembly 2024 (SSUNGA79), is organising the "**CSIR** for Connect, Collaborate, Converge and Convert (5C) for Global Sustainable Development" on 18 and 19 September 2024. The two-day event, which will encompass six sessions with 29 speakers and a panel discussion, will showcase **CSIR's** contributions to science and technology and its efforts towards global sustainable development and

strengthening South-South cooperation. During the inaugural session, Dr N. Kalaiselvi, Director General, **CSIR** and Secretary, Department of Scientific and Industrial Research, Government of India, emphasised the importance of South-south cooperation for the achievement of SDGs at the global level. Dr Rama Swami Bansal, Head of International S&T Affairs Directorate, **CSIR**, gave an overview of the programme. Directors and scientists of several **CSIR** labs are speaking at the UN Science Summit event. The "Strengthening South-South Cooperation for Achieving SDGs" session is being organised in partnership with WAITRO and APCTT with international experts from several International RTOs, Embassies and NAM S&T Centre.
Source: Pib

Department of Scientific & Industrial Research commences Swachhata Hi Seva Campaign 2024 on the theme 'Swabhav Swachhata, Sanskar Swachhata'

To take on the Government of India Vision of Swachh Bharat, Department of Scientific & Industrial Research (DSIR) along with Autonomous Body, **Council for Scientific & Industrial Research (CSIR)** and two PSUs i.e. National Research Development Corporation (NRDC) & Central Electronics Ltd. (CEL) has launched the Swachhata Hi Seva Campaign 2024 starting from 17th Sept to 2nd Oct., 2024 with a series of activities focusing on collective cleanliness efforts and community engagement. Swachhata Hi Seva campaign rolled out with collective Swachhata Pledge and plantation by senior officers under 'Ek Ped Maa Ke Naam' programme. Special initiatives have been taken by the Department during Swachhata Hi Seva Campaign 2024 which include the Plantation drives, Trainings & Workshop and Shramdaan activity around the office of DSIR and its organizations i.e. **CSIR**, CEL and NRDC.
Source: Pib

Somaiya Vidyavihar University Hosts Convocation Ceremony

Somaiya Vidyavihar University celebrated its 3rd Convocation Ceremony on 21st September 2024, marking a significant milestone in the academic journey of 2780 students. The ceremony was graced by the esteemed presence of Chief Guest Dr. Kalaiselvi Nallathamby the first female Director General of **CSIR** and Secretary of DSIR, Government of India, Shri Samir Somaiya, Chancellor of Somaiya Vidyavihar University. The graduating cohort of 2024 comprises 2,780 students across both undergraduate and postgraduate programs, with 1517 undergraduates (553 females and 964 male) and 1263 postgraduates (639 female and 624 male), representing various fields of study at Somaiya Vidyavihar University such as management studies, engineering and technology, education, science, commerce and business studies, humanities, social sciences, and Dharma studies. Dr. Nallathamby Kalaiselvi, the first female Director General of **CSIR**, a leading figure in electrochemical power systems, has over 25 years of research experience. She has been pivotal in promoting e-mobility in India through collaboration with the Ministry of New & Renewable Energy (MNRE) and TIFAC (Technology Information Forecasting and Assessment Council).
Source: Indiaeducationdiary

Vice President of India inaugurates 83rd Foundation Day Celebrations of Council of Scientific and Industrial Research

The **Council of Scientific and Industrial Research (CSIR)** proudly celebrated its 83rd Foundation Day today. While addressing the event, the Vice President of India, Shri Jagdeep Dhankhar said, “It is **CSIR’s** Foundation Day, but it is integrally connected with the firm foundations of Bharat. You are firming up those foundations of the most vibrant and functional democracy on the planet. You are firming up the foundations of a nation that is on the rise as never before, and the rise is unstoppable”. The Vice President of India, Shri Dhankhar also termed **CSIR** as “Catalyst for Scientifically Imaginative Rashtra”. He appealed for the establishment of Standard Operating Procedures (SOPs) to ensure that investments in human resources and institutions are directed towards authentic and impactful research. The Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy and Department of Space, MoS Personnel, Public Grievances and Pensions, Dr. Jitendra Singh, said, “**CSIR** plays a vital role in making India a global leader in science by promoting women in science, driving economic growth, and ensuring innovations benefit society. Through its initiatives, **CSIR** contributes to the Viksit Bharat @2027 vision by fostering indigenization.”

Source: Pib

"CSIR a National Treasure for All of Us - The True Changemaker of Our Time" saidUnion Minister Dr. Jitendra Singh

"CSIR is a national treasure for all of us and for the scientist fraternity, who are the true changemaker of our time" said Union Minister Dr. Jitendra Singh at the 83rd Foundation Day ceremony of **Council of Scientific and Industrial Research (CSIR)**, here today at NASC Complex, Pusa. Addressing the ceremony, Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy and Department of Space, MoS Personnel, Public Grievances and Pensions, Dr. Jitendra Singh congratulated **CSIR**, in making India, a global leader in sustainable development by fostering breakthroughs such as green hydrogen technology for clean energy or creation of Agri-based startups. **CSIR** through its support to MSMEs, startups and by promoting women in science, is not only driving the economic growth of the nation but is also ensuring that innovation benefits society at large, reiterated Dr Jitendra Singh.

Source: Pib

Text of Vice-President's address at the 83rd CSIR Foundation Day Celebrations at the NASC Complex, New Delhi

Good morning, all of you. It could not have been more delightful for me, everyone present in this room is a role model for me. Your contributions are spinal, your contributions in silence are resonating with the last man in the last row, your efforts are changing Bharat. A great occasion for me to be here, this is a very distinguished premium platinum category

that is defining the growth history of Bharat, home to one-sixth of humanity. Professor Ajay K. Sood, rightly honoured with the civilian distinction of Padma Shri, Principal Scientific Advisor to the Government of India, his address though brief on account of constraints of time, was illuminating. He indicated synergetic stance being generated with all stakeholders to ensure sustainability of the rise of Bharat. Dr. N. Kalaiselvi, Director General, **CSIR**, normally we say, the man is always in the move, gone are those days, she is always on the move, always in action, with passion, mission, and execution.
Source: Pib

उपराष्ट्रपति ने आज नई दिल्ली में CSIR के 83वें स्थापना दिवस समारोह को संबोधित किया

उपराष्ट्रपति जगदीप धनखड़ ने आज कहा, ‘‘शोध एवं विकास कार्यों में योगदान दिखावटी या सतही होने के बजाए पर्याप्त होना चाहिए और इसके परिणाम भी पर्याप्त होने चाहिए। उन्होंने कहा कि शोध एवं विकास कार्यों के लिए वित्तीय संसाधनों को उपलब्ध कराने का वादा पर्याप्त नहीं है और किसी भी शोध का महत्व ठोस परिणामों के संदर्भ में मापा जाना चाहिए।” उन्होंने कहा, “हमें इस बात को लेकर सतर्क रहना होगा कि क्या वित्तीय संसाधनों को उपलब्ध कराने का सिर्फ वादा किया गया है, हम इस बात पर गर्व नहीं कर सकते कि हमने शोध एवं विकास के लिए इतनी धनराशि खर्च की है और इस क्षेत्र में निवेश को ठोस परिणामों से जोड़ा जाना चाहिए।” उपराष्ट्रपति ने आज नई दिल्ली के पूसा रोड में **सीएसआईआर** के 83वें स्थापना दिवस समारोह में उपस्थित लोगों को संबोधित करते हुए वर्तमान परिदृश्य में शोध एवं विकास कार्यों में महत्व की ओर ध्यान आकर्षित किया। उपराष्ट्रपति धनखड़ ने इस बात पर जोर दिया कि शोध एवं विकास कार्य कूटनीति और और राष्ट्रीय सुरक्षा का अभिन्न अंग है। उन्होंने जोर देकर कहा, “शोध एवं विकास में निवेश स्थायी है…..इन दिनों शोध एवं विकास देश की सुरक्षा के साथ पूर्ण रूप से जुड़े हुए हैं और इसलिए इसमें किया गया निवेश राष्ट्र के लिए ही है। यह निवेश विकास और स्थिरता के लिए है।”
Source: Insamachar

सेवानिवृत वैज्ञानिकों और अधिकारियों का सम्मनित किया

केन्द्रीय भवन अनुसंधान संस्थान में शुक्रवार को **वैज्ञानिक और औद्योगिक अनुसंधान परिषद** का 83वां स्थापना दिवस मनाया गया। रविन्द्रनाथ टैगोर सभागार में आयोजित कार्यक्रम का शुभारम्भ मुख्य अतिथि केरल राज्य आपदा प्रबंधन प्राधिकरण के सलाहकार शंकर ने किया। उन्होंने कहा कि सीएसआईआर विभिन्न क्षेत्रों की समस्याओं का विज्ञान और प्रौद्योगिकी के जरिए समाधान कर रहा है। सीबीआरआई के निदेशक प्रो. आर प्रदीप कुमार ने कहा कि युवा वैज्ञानिकों को अनुसंधान के अपने लक्ष्य तय करने होंगे। ताकि हम सामाजिक मुद्दों की पहचान करके कार्य कर सकें। इस अवसर पर सीएसआईआर में 25 वर्षों से अधिक की सेवा करने वाले कार्मिकों, सेवानिवृत वैज्ञानिकों और अधिकारियों को सम्मनित किया गया।

Source: Livehindustan

Sustainable horticulture is the new hope against challenges of climate change, says scientist

Sustainable horticulture is emerging as the new hope to face challenges of climate change, secretary of the Department of Scientific and Industrial Research (DSIR) N. Kalaiselvi said in Bagalkot on Monday. Ms. Kalaiselvi, who is also Director-General of the **Council of Scientific and Industrial Research (CSIR),** was delivering the convocation address at the 13th convocation of the University of Horticulture Sciences. “As the global environmental crisis intensifies, sustainable horticulture seems to offer hope. From small-scale green gardens to large-scale reforestation and waste reduction projects, innovators in the field are looking for ways to increase yields, while limiting negative impacts on our ecosystems. It can be applied at the micro and micro levels from vast farmland to backyards and rooftops. Our society is more environmentally conscious. By adopting good practice we can promote quality biodiversity and improve soil health. This creates a more resilient ecosystem,” Dr. Kalaiselvi said.

Source: The Hindu

Northeast to hold first ever India International Science Festival showcasing Prime Minister’s vision for the Region, says Dr Jitendra Singh

Union Minister of State (Independent Charge) for Science and Technology, MoS (I/C) for Earth Sciences, MoS PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr. Jitendra Singh announced here today that Northeast will hold first-ever International Science Festival. At a press briefing at National Media Centre, Dr. Jitendra Singh disclosed that the 10th edition of the India International Science Festival (IISF) will be held at Guwahati, marking a significant milestone in the region’s journey towards becoming a hub for scientific and technological innovation. The festival, to be hosted at IIT Guwahati from November 30th to December 3rd 2024, is a testimony to the Government’s commitment to the Northeast and aligns with Prime Minister Narendra Modi’s focus on the region as a key player in India’s growth story. The IISF-2024 is being coordinated by the **Council of Scientific and Industrial Research (CSIR)** and involves all the major scientific departments and ministries of the Government of India in collaboration with Vijnana Bharati. The event will feature a range of exhibits, panel discussions, and international collaborations aimed at addressing pressing global challenges like climate change, food security, and sustainable development.

Source: Pib

Dr. Jitendra Singh Calls for Synergy in Science Ministries to Maximize Impact

Union Minister of State (Independent Charge) for Science and Technology, MoS (I/C) for Earth Sciences, MoS PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr Jitendra Singh today chaired a joint meeting of senior officials from all Science Ministries and Departments. The Minister

reviewed the progress of ongoing projects and budget utilization, emphasising synergy and breaking down silos to enhance coordination and efficiency. Dr. Jitendra Singh emphasized the need for timely and optimal use of budgetary resources, urging officials from key departments, including the Department of Science & Technology, Department of Biotechnology, ISRO, **CSIR** / DSIR, Ministry of Earth Sciences, Department of Space and the Department of Atomic Energy to accelerate their work on several projects announced by Prime Minister Narendra Modi. The Minister also reviewed the status of projects announced during the Budget this year and the Budget over the last decade. He also took up follow up discussion on Anusandhan National Research Foundation (ANRF).
Source: Pib

Science and technology key to raising India's profile in the world, says CSIR chief

The current geopolitical situation has made it imperative for India's youth to work towards raising the country's profile in the world by promoting self-reliance as part of the government's 'Viksit Bharat 2047' development roadmap, said N. Kalaiselvi, Director-General, **Council of Scientific and Industrial Research (CSIR)** and secretary, Department of Scientific and Industrial Research (DSIR). Ms. Kalaiselvi was speaking at the convocation of the Bharathidasan University (BDU) on Tuesday, which was presided over by Governor and Chancellor R.N. Ravi. "'Viksit Bharat 2047' is the need of the hour to promote the development of India. It is important that we do not depend on other countries for any of our important requirements. Students must pause for a moment of self-realisation that they are the citizens of a great country. India is in itself a complete package and therefore we are in no way inferior to anyone else in the globe," said Ms. Kalaiselvi. "This is time for us to prove that we can come up with innovative ideas that are not only relevant but also accepted for implementation in the global market. Science and technology alone can help India achieve the target of 'Viksit Bharat'. If we are able to contribute to the nation, Viksit Bharat is not just a tagline, but a commitment towards development," she said.
Source: The Hindu

Everyone must contribute to 'Viksit Bharat 2047': CSIR director general

Achieving 'Viksit Bharat 2047' should have contributions from everyone, especially the younger generation, in areas such as science and technology, engineering, education, and character development, said director general, **Council of Scientific and Industrial Research**, N Kalaiselvi. Delivering the 39th convocation address at Bharathidasan University (BDU) in Trichy on Tuesday, she said, "Viksit Bharat is nothing but an integrated and developed India. We have to realise that we have everything abundantly available, so we have to achieve self-realisation and understand that we are not inferior to anyone. Even Pavendar Bharathidasan said 'puthiyathor ulagam seivom' (let's create a new world). It's time to make his dream come true." Earlier, governor R N Ravi conferred degrees on 520 graduates at the event held on the Palkalaiperur campus. Altogether, 78,524 were conferred degrees in absentia. Vice-chancellor of BDU M Selvam presented

a report on the academic achievements of the university. Higher education minister Govi Chezhiaan, who was expected to participate, did not attend the event.
Source: **Times of India**

Department of Scientific & Industrial Research (DSIR) successfully conducted Special Campaign 4.0

Department of Scientific and Industrial Research (DSIR) along with its Autonomous Body, **Council for Scientific & Industrial Research (CSIR)** and two PSUs i.e. National Research Development Corporation (NRDC) & Central Electronics Ltd. (CEL), successfully conducted Special Campaign 4.0 from 2nd October 2024 to 31st October 2024 under the active guidance of Secretary, DSIR Dr. (Mrs) N. Kalaiselvi. The Campaign started by the Secretary, DSIR & DG, **CSIR** with cleanliness drive on 2nd October, 2024 at **CSIR** Headquarter, Anusandhan Bhavan, New Delhi. Secretary DSIR & DG, **CSIR** felicitated Safai Mitrason the occasion of Swachh Bharat Divas (SBD) 2024 at **CSIR** Hqs on 2nd October, 2024.Also, as a part of Swachhata Hi Sewa Campaign 2024, Joint Secretary, DSIR felicitated Safai Mitras in DSIR, Technology Bhavan, New Delhi in the Ist week of October, 2024. ‘Shramdaan' was also organized during the campaign in DSIR’s and CPSEs i.e. Central Electronics Limited (CEL) and National Research Development Corporation (NRDC) and all 37 labs of **CSIR** across the country wherein officers/staff participated in the cleanliness and plantation drive as part of the ‘EkPedMaaKeNaam’ campaign. Similar plantation drives was carried outat DSIR HQ.
Source: **Pib**

J&K key player in India Viksit Bharat journey: Dr Jitendra

Union Minister Jitendra Singh on Saturday said that Jammu & Kashmir was a key player in India’s ‘Viksit Bharat’ journey. Speaking at the inaugural session of **CSIR** Healthcare Theme Conclave at SKICC Srinagar Singh positioned Jammu and Kashmir as a treasure trove of untapped resources. He presented a vibrant picture of India’s innovation-driven future, emphasising the transformative potential of biotechnology, space technology, and youth-led startups. The audience included Startups, doctors, scientists, innovators, and young entrepreneurs. “India’s startup ecosystem, now the third-largest globally with over 1.6 lakh ventures, stands testament to our entrepreneurial spirit. From just 350 startups a decade ago, we’ve grown exponentially, becoming a powerhouse of innovation,” the Minister of State (Independent Charge) of the Ministry of Science and Technology said. Jitendra highlighted India’s remarkable progress in the space sector, achieved through public-private partnerships. “Three years ago, we had just single-digit collaborations in space; today, over 300 global-standard partners have joined hands with ISRO. Our first-generation space startups are now celebrated entrepreneurs and knowledge leaders,” he said.
Source: **The Kashmir Horizon**

Science & Tech Ministry signs agreements under PACE programme

The Ministry of Science & Technology on Thursday announced that it has signed agreements under the Patent Acquisition and Collaborative Research and Technology Development (PACE). The PACE programme by the Department of Scientific & Industrial Research (DSIR) fosters collaborative research between Indian industries and R&D organisations, academic institutions, and universities. It emphasises innovative work and supports the development of new technologies focused on the commercialization of products and processes addressing unmet industrial needs. The ministry notified the signing of two separate tripartite agreements with Devashish Polymers (DPPL), Mumbai and GPS Renewables, Bangalore, and Agarkar Research Institute (ARI), Pune. The MoU with DPPL aims to develop compounded elastomers and evaluate their performance for diverse applications under this project. The GPS Renewables in collaboration with ARI seeks to scale up and conduct pilot trials for enhanced microbial methane production from agricultural residues using anaerobic fungi. “The PACE programme represents a cornerstone of DSIR’s commitment to fostering innovation and collaborative research in India,” said Dr. N. Kalaiselvi, Secretary, DSIR & Director General, **CSIR**.
Source: Bhaskarlive

Top Indian companies leading the global patent race

Indian companies are making innovation waves, developing solutions that resonate globally. Apart from India, the top innovators are actively filing patents in markets like the United States (US) and Europe. Tata Consultancy Services (TCS) leads among these companies with 3,893 patents filed worldwide over the past five years. This volume underscores TCS’s work in software, information technology (IT), and digital solutions. Wipro Ltd, another major player in tech, follows with 1,021 patents, focusing on IT services and business solutions. This level of activity highlights the global ambitions of Indian tech companies as they capitalise on new opportunities abroad. The drive for innovation extends beyond corporations to India’s universities and research institutions. The **Council of Scientific and Industrial Research (CSIR),** a government-supported organisation, has contributed significantly with 1,501 patents in the last 5 years, covering a wide range of scientific and technological fields. The organisation is actively developing solutions that tackle real-world issues, playing a pivotal role in nurturing India’s young talent and future leaders in science and technology.
Source: Hindustantimes

From being led, India in a position to lead, says S& T Minister

Union Minister of State (Independent Charge) for Science and Technology; Earth Sciences and Minister of State for PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr. Jitendra Singh said here today that from being led, India is today in a position to lead others across the world and this is amply borne out by recent success stories accomplished under PM Sh Narendra Modi including Space sector headway, Biotechnology Vaccine breakthroughs and **CSIR** Purple Revolution. The Union Minister was addressing the 8th Convocation of "Academy of Scientific & Innovative Research", possibly the only one of its kind in India. On the

occasion, Dr Jitendra Singh presented Doctor of Science degrees to four renowned scientists - Dr. Raghunath A. Mashelkar, Prof. Samir K. Brahmachari, Prof. Suresh Bhargava and Dr.Thirumalachari Ramasami, during the 8th convocation of the **Academy of Scientific and Innovative Research (AcSIR),** recognizing their groundbreaking contributions to science and technology. A celebrated figure in polymer science and engineering, Dr. Mashelkar was honoured for his pioneering research and exceptional leadership. Recognized as a trailblazer in genomics, Prof. Brahmachari was awarded for his work on repetitive DNA's role in health and disease. Prof. Bhargava received the honour for his groundbreaking contributions to chemical sciences and engineering.
Source: Pib

Laghu Udyog Bharati organises MSME Sangamam 2024

The Laghu Udyog Bharati (LUB) has signed up with **Council of Scientific and Industrial Research (CSIR)** and a majority of technology transfers are happening in Tamil Nadu. At the MSME Sangamam 2024 organised by Laghu Udyog Bharati, its All India General Secretary, Om Prakash Gupta, said, "We have tied up with various organisations like **CSIR**. And in the last 60 days, we have signed 57 technologies with them and almost 25 more are in pipeline. And 50% of Transfer of Technology has happened from Tamil Nadu and majority are from women entrepreneurs." According to data shared by Mr. Gupta, LUB has its presence in 27 States and 583 districts. It has 4,000 members, including 3,500 women entrepreneurs. V. Anantha Nageswaran, Chief Economic Advisor to Government of India, delivered his special address through video and said: "The SME sector in India is hobbled by extensive regulations, compliance, inspection and regulatory regime still dominate and stifle the aspiration for growth. I'm also aware that even when companies think big or a successful entrepreneur thinks big he or she may not be allowed to grow because they are intimidated by the extent of regulatory compliance, which may become inevitable once they exceed a certain threshold." "That is why both policy makers and industry must think in very big terms," he added.
Source: The Hindu

10m high moon replica put up at IIT-G

A giant 10-metre high replica of the moon has been erected on the Indian Institute of Technology-Guwahati (IIT-G) campus to celebrate the success of India's Chandrayaan mission as the city hosts the first-ever India International Science Festival (IISF) in the northeast. The model has been erected at the premier institution as part of the four-day 10th edition of IISF, starting Saturday. The event is organised by the **Council of Scientific and Industrial Research (CSIR),** under the aegis of the ministry of science and technology and ministry of earth sciences, in collaboration with the department of atomic energy, department of space, IIT-G and Vijnana Bharati. The breath-taking art installation, 'The Museum of the Moon', features the life-sized replica of the moon, measuring about seven metres in diameter. It has been installed by British artist Luke Jerram. The event will also feature a science, technology and space expo at the same venue, which will be open to the visitors without any fee. The moon features a 120 dpi

detailed NASA imagery of the lunar surface and at an approximate scale of 1:500,000, each centimetre of the internally lit spherical sculpture represents five kilometres of the moon's surface. The installation showcases intricate imagery of the lunar surface, creating a mesmerising visual experience.
Source: Times of India

The Story of Viksit Bharat Will Be Written in the Alphabet of Science - Dr. Jitendra Singh

The story of Viksit Bharat will be written in the alphabet of science," declared Union Minister Dr. Jitendra Singh as he inaugurated the 10th edition of India International Science Festival (IISF) 2024 in Guwahati. Addressing the audience, the emphasized that India's path to becoming a developed nation is deeply intertwined with its commitment to scientific advancement and innovation. Dr. Jitendra Singh underscored the importance of fostering a culture where science drives progress, shaping a future where technology and research contribute to every facet of society, from healthcare to infrastructure. His words served as a powerful reminder of the transformative power of science in realizing Prime Minister Narendra Modi's vision of a Viksit Bharat. The festival drew luminaries from India's scientific community, including Dr. VK Saraswat of NITI Aayog, Professor A.K. Sood, Principal Scientific Advisor to the Government of India, Dr. N. Kalaiselvi, the first woman to lead **CSIR**, Dr. Rajesh Gokhale, Secretary of Biotechnology, and Professor Abhay Karandikar, Secretary of the Department of Science and Technology. Their presence highlighted the festival's role as a platform for scientific innovation and collaboration. The **Council of Scientific and Industrial Research (CSIR)** is organising IISF 2024, highlighting its commitment to promoting science and technology in India. Union Minister Dr. Jitendra Singh lauded Dr. N. Kalaiselvi, the Director General of **CSIR**, for her leadership in executing such a large-scale and impactful event.
Source: Pib

Massive Moon Replica at IIT's Science Festival Wins Praise From ISRO Chief

A beautiful replica of the moon is proving to be a crowd-puller at the ongoing India International Science Festival at IIT, Guwahati. The installation, with a diameter of seven meters, been conceived by British artist Mr Luke Jerram and has been made using images from the Lunar Reconnaissance Orbiter (LRO) flown to the moon by NASA. The moon's images are printed on the inflatable balloon and each centimetre represents about five kilometers of the lunar surface. The rendition, titled "The Museum Of Moon", is so good that the mountains and craters of the moon seem to have come alive on the IIT campus. ISRO chairman Dr S Somanath praised the Moon exhibit, adding that the space agency would look at collaborating with an artist to create a similar model. He added that India has the best images of the lunar surface and has been supplying them to whoever is asking for them. "The world's space agencies are using them for landing on the Moon," he said. The India International Science Festival has been supported by the Ministry of Science and Technology and pivoted by the **Council of Scientific and Industrial**

Research in collaboration with VIBHA or Vigyan Bharati and about 8,000 delegates are expected to participate in the annual science festival.
Source: **Ndtv**

'Made-in-India paracetamol to hit market next year'

Country's premier industrial research organisation, the **Council of Scientific and Industrial Research (CSIR),** has been transforming the industrial-innovation landscape by reducing its reliance on like China. **CSIR's** first woman Director General Dr N Kalaiselvi tells Jitendra Choubey about the research body's endeavours to scale up India's industrial innovation. Execrpts:

What are the key CSIR innovations in recent years? How many have been commercialised?

We have made many innovations in three-four years. We have developed indigenous hydrogen cylinder type-IV of paracetamol. Other innovations include hydrogen fuel cell technology, aerospace technology like Hansa-3 two-seater light trainer aircraft, seaweed farming technology, and management of steel sludge in road construction.

So we were not manufacturing our own paracetamol?

Yes. So far we have been importing ingredients of paracetamol from different countries. India will soon make its own paracetamol by next year as **CSIR** has innovated a new technology which is effective and cheaper. Karnataka-based company Satya Deeptha Pharmaceuticals Ltd will use **CSIR** technology to manufacture cheaper and more effective paracetamol and other tablets to make India self-reliant in pharmacy.
Source: **Newindianexpress**

अब भारत में ही तैयार होगी Paracetamol, किफायती दर पर मिलेगी दवा

देश का प्रमुख रिसर्च ऑर्गनाइजेशन **CSIR (Council of Scientific and Industrial Research)** चीन जैसे देशों पर निर्भरता कम करने की तैयारी में है. **CSIR** भारत में Industrial innovation को लगातार बढ़ावा दे रहा है. इसी कड़ी में भारत अब खुद का पैरासिटामोल बनाने जा रहा है. यह दवा अगले साल तक बाजार में आएगी. इस बात की जानकारी खुद **CSIR** की महानिदेशक डॉ एन कलाइसेल्वी ने दी है. भारत में कई बड़े इनोवेशन ET के रिपोर्ट के मुताबिक डॉ एन कलाइसेल्वी ने कहा कि पिछले तीन-चार सालों में **CSIR** ने कई बड़े इनोवेशन किए हैं. इनमें हाइड्रोजन सिलेंडर टाइप-IV, हाइड्रोजन फ्यूल सेल टेक्नोलॉजी, हंसा-3 लाइट ट्रेनर एयरक्राफ्ट, समुद्री शैवाल की खेती की तकनीक, और स्टील स्लग से सड़क निर्माण जैसी तकनीक भी शामिल हैं. अब ऐसे में भारत खुद का पैरासिटामोल बनाने की तैयारी में है. अब पूरी तरह से भारत में होगी तैयार अभी तक भारत को पैरासिटामोल तैयार करने के लिए दूसरे देशों से रॉ मैटेरियल इंपोर्ट करना पड़ता था, लेकिन अब **CSIR** ने इसे 100 फीसदी भारत में ही तैयार करेगी. इसके लिए एक नई और सस्ती तकनीक भी विकसित की है. उम्मीद है कि भारत अगले साल अपना खुद का पैरासिटामोल

बनाएगा. Satya Deepthi Pharmaceuticals Limited इस टेक्नॉलजी का इस्तेमाल करके सस्ती और इफेक्टिव दवाइयां बनाएगी.

Source: **Tv9hindi**

S&T institutions commit to transform India into tech-driven manufacturing hub at IISF

Guwahati, India's leading science institutions have committed to transforming the nation into a science and technology-driven global manufacturing hub by 2047 and aligning their activities to achieve this goal. Leaders of India's leading state-run science and technology institutions made this declaration during the four-day India International Science Festival at the IIT-Guwahati campus here which witnessed the participation of thousands of researchers and students from across the country. The four-day event, which began on Saturday, concluded on Tuesday. "It is the mission of all Science and Technology Institutions in the country to exemplify the vision of transforming India into a science and technology-driven global manufacturing hub by 2047," the Guwahati Declaration read out by N Kalaiselvi, Director-General **Council of Scientific and Industrial Research (CSIR)** said. "The institutions shall align the activities in this direction for transforming and expanding the Indian manufacturing landscape, thereby enhancing India's position in the global supply chain and solidifying its status as a manufacturing powerhouse," the declaration read.

Source: **Manufacturing**

"भारत ने CSIR-DST के जरिए छुईं विज्ञान और प्रौद्योगिकी में नई ऊँचाइयाँ"- पूर्व केंद्रीय मंत्री डॉ. महेश शर्मा

पूर्व केंद्रीय मंत्री डॉ. महेश शर्मा ने आज यानी बुधवार को नोएडा स्थित कैलाश अस्पताल के सेक्टर 27 में आयोजित एक कार्यक्रम में भारत की विज्ञान और प्रौद्योगिकी में 2014-2025 के दौरान हुई महत्वपूर्ण प्रगति पर चर्चा की। इस दौरान उन्होंने प्रधानमंत्री नरेंद्र मोदी के नेतृत्व में किए गए तकनीकी और वैज्ञानिक नवाचारों का उल्लेख किया। कार्यक्रम में डॉ. महेश शर्मा ने भारतीय विज्ञान संस्थाओं की प्रमुख योजनाओं और उनके योगदान के बारे में विस्तार से बताया। उन्होंने **CSIR (Council of Scientific and Industrial Research)** और DST (Department of Science and Technology) की उपलब्धियों पर भी प्रकाश डाला, जिनसे देश की तकनीकी प्रगति को नया आयाम मिला है। **CSIR** की प्रमुख योजनाएं और उपलब्धियां (2014-2024)

1. **CSIR** एरोमा मिशन और फ्लोरीकल्चर मिशन
2. गांव का पानी गांव में मिशन
3. स्वदेशी बायो-जेट ईंधन तकनीक
4. कोविड-19 महामारी में **CSIR** का योगदान

5. स्वदेशी E-ट्रैक्टर और E-टिलर
6. स्वच्छता अभियान में **CSIR** का योगदान
7. स्ट्रेटेजिक तकनीकी विकास और राष्ट्रीय मिशन

Source: Sudarshannews

Dr. Jitendra Singh Advocates Fusion of Traditional Knowledge with Cutting-Edge Technologies which could be India's advantage over others;

Union Minister of State (Independent Charge) for Science and Technology; Earth Sciences and Minister of State for PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr. Jitendra Singh said here today fusion of traditional knowledge with modern technology could give India's advantage over others. The Minister underscored the transformative potential of blending India's ancient wisdom with contemporary scientific innovations while speaking at the celebration of five years of the Science and Heritage Research Initiative (SHRI). Organized by the Department of Science and Technology, the event celebrated the strides made in preserving and modernizing India's rich heritage. The Minister highlighted this fusion as India's unparalleled strength in achieving Prime Minister Narendra Modi's vision of Viksit Bharat by 2047. He cited examples of successful fusion, including the Lavender Revolution through **CSIR's Aroma Mission**, which transformed the lives of farmers in Jammu and Kashmir, and projects like Deep Sea Mission and Hydrogen Mission that draw inspiration from India's ecological heritage. "These examples show how India's traditional wisdom complements the most advanced scientific innovations to address today's challenges," he explained.

Source: Pib

AIIMS, CSIR to collaborate for research in healthcare, emerging technologies

All India Institute of Medical Sciences (AIIMS), New Delhi, on Wednesday announced a partnership with the **Council of Scientific and Industrial Research (CSIR)** to promote collaboration in healthcare, emerging technologies, their applications, and policy development. The Memorandum of Understanding (MoU) will boost regular dialogues and also drive innovative solutions to address healthcare challenges in the country. "The importance of leveraging synergies between the two premier institutions will be of immense value to the translational research and play a key role in delivering quality patient care," said Prof. M. Srinivas, Director of AIIMS. **CSIR** is a research organisation with a network of laboratories, outreach centers, and innovation complexes across India. It's known for its research and development knowledge base in various scientific and technological areas. Together the **CSIR** and AIIMS will establish a synergistic partnership aimed at propelling medical research forward, enhancing healthcare delivery, and tackling pressing health challenges in India. It will combine the clinical expertise of AIIMS with the technological and research excellence of **CSIR** to revolutionise healthcare innovations.

Source: Newsroomodisha

सीएसआईआर ने भवन व खेतों की दरार नापने के लिए लगाए उपकरण

लखवाड़ बांध परियाेजना का निर्माण शुरू होने के बाद से बांध स्थल ग्राम पाली में स्थित घर-मकान, सार्वजनिक मार्ग व खेत खलिहानों में आ रही दरारों की जांच **केंद्रीय वैज्ञानिक एवं औद्योगिक परिषद (सीएसआईआर)** ने शुरू कर दी है। जांच को पहुंची वैज्ञानिकों टीम ने मौका मुआयना करने के साथ घरों में आई दरारों पर विशेष प्रकार के उपकरण लगाने के साथ खेतों की मिट्टी के नमूने भी एकत्रित किए। क्षेत्र की प्रमुख लखवाड़-व्यासी जल विद्युत परियोजना के लिए बन रहे लखवाड़ बांध का निर्माण शुरू होने के साथ ही ग्राम पाली स्थित भवन व रास्तों में दरार आने लगी थीं। इसके साथ ही खेतों में भी दरार आने या भूस्खलन की स्थिति उत्पन्न हो गई थी। पाली-कंडरियाज विकास समिति ने दरार संबंधी समस्या को जलविद्युत निगम से लेकर प्रदेश सरकार उठाया। समिति का आरोप है कि बांध के निर्माण के लिए पहाड़ तोड़ने के लिए उपयोग किए जा रहे विस्फोटकों से भवन व खेत-खलिहानो में दरार आ रही हैं। उधर, समस्या को लेकर लगातार ग्रामीणों के मुखर रहने के बाद केंद्रीय वैज्ञानिक एवं औद्योगिक परिषद की टीम ने गांव का दौरा किया। इस दौरान उन्होंने दरारों की समस्या का गहनता से निरीक्षण करने के साथ भवनों में आई दरारों पर विशेष प्रकार के उपकरण लगाए। इसके साथ ही टीम ने भूस्खलन व दरार की समस्या से प्रभावित खेतों की मिट्टी के नमूने भी आवश्यक जांच के लिए एकत्रित किए।

Source: **Amarujala**

किसानों को जागरूक करेगी सीएसआईआर

शाहजहांपुर। **वैज्ञानिक तथा आद्योगिक अनुसंधान परिषद**, विज्ञान एवं प्रौद्योगिकी मंत्रालय नई दिल्ली द्वारा संचालित राष्ट्रीय परियोजना **सीएसआईआर-एरोमा** मिशन के अंतर्गत जिले के बेहटी गांव में किसान जागरूकता कार्यक्रम का आयोजन किया जाएगा। यह कार्यक्रम दोपहर 12 से दो बजे तक किया जाएगा। कार्यक्रम में दिल्ली की टीम के साथ वैज्ञानिकों की टीम किसानों को जागरूक करेगी।

Source: **Livehindustan**

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CSIR-Fourth Paradigm Institute [CSIR-4PI)

More extreme rains likely in future due to warm temperatures: UoH study

In the future, there could be a decrease in cloud cover along with an increase in cloud water content, suggesting a shift in the cloud type to more convective clouds resulting in extreme rains. It means the Indian summer monsoon season is expected to have short bursts of convective rains leading to extreme rainfall events but drier conditions for most days. Dr. Stella Jes Varghese, currently working as a Science and Engineering Research Board (SERB) national post-doctoral fellow at CEOAS carried out the research under the mentorship of Ashok Karumuri. It is also collaborative research involving scientists from **CSIR Fourth Paradigm Institute**, Indian Institute of Technology (IIT) Bombay and Meteorological Research Institute (MRI), Japan, including Sajani Surendran, Kavirajan Rajendran, Subimal Ghosh and Akio Kitoh.

Source: **The Hindu**

CSIR launches tech-driven initiative to improve productivity, farmers' income

The **Council of Scientific and Industrial Research (CSIR)** has launched a unique mission to develop region-specific smart agro-technologies for paddy in south India, besides for other crops, aiming to improve soil health and productivity and thereby enhance the farmers' income, a senior scientist said. This endeavour will help the Central government to introduce the use of automation, sensors, drones, and Artificial Intelligence gadgets for agriculture in the future. "This is one of the first of the mission mode projects that have been conceived and implemented on the ground," he said. A team of scientists and technologists from **CSIR Fourth Paradigm Institute,** Bengaluru, **CSIR-National Aerospace Laboratories**, **CSIR-Indian Institute of Integrative Medicine** Jammu, and **CSIR-Central Mechanical Engineering Research Institute**, Ludhiana, identified the paddy fields of farmers at Chengalam, Thiruvarppu panchayat and Muleppadam Panchayat in Kottayam, Kerala, Senbagaraman Pudur and Navalkadu in Nagercoil, Tamil Nadu, and Hosapete in Karnataka for the mission.

Source: **Deccanherald**

Why India Is Disappearing Under China In Tectonic Tug-Of-War

The military stand-off between India and China along the Line of Actual Control (LAC) found an amicable solution recently. However, another kind of tug-of-war between India and China - a continuous and ancient tectonic one - has been going on with the Indian tectonic plate constantly losing land by sliding under the Tibetan plate. The Indian landmass has been shrinking as its tectonic plate has been sliding under the Eurasian or

Tibetan plate. This correspondent experienced the war of continents first-hand high in the Himalayas at Hanle in Ladakh, where in the last 25 years or so Hanle may have risen by about 2.5 centimetres since this correspondent's last visit almost a quarter century ago to the same locations. To accurately monitor what is happening on the ground, Indian scientists from the **CSIR Fourth Paradigm Institute (CSIR-4PI),** Bengaluru, have set up high-accuracy reference stations one on the Tibetan plate at Hanle in Ladakh and the other at Bengaluru. By tracking the movement of these reference points using sophisticated global positioning system (GPS) instruments and satellites, the Indian team can assess how the land masses have moved respective to each other.

Source: **Ndtv**

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CSIR-Advance Material and Process Research Institute (CSIR-AMPRI)

Know-How Technology on "Bamboo Composites" transfers on the Day-2 of IISF 2023

One of the unique and extraordinary mega science festival — India International Science Festival (IISF 2023) is being organized during 17-20 January 2024 in Faridabad, Haryana. During the second day of this science festival on 18 Jan 2024, the Know-How Technology on "Bamboo Composites" was transferred to a well-known materials manufacturing company, M/s Asili Bamboo Products, Meerut, in the presence of Dr. Avanish Kumar Srivastava, Director, **CSIR-AMPRI**, Bhopal, and Mr Akshay Joshi, Director, M/s Asili Bamboo Products, Meerut. On this occasion various other dignatries were also present, namely Mr Md. Ali Shah, Sadhana; Dr. C. Anandharamakrishnan, Director, **CSIR-NIIST** Trivandrum; Prof. Manoranjan Parida, Director, CSIR-CRRI, New Delhi; Dr. B. Chandrasekaran, Former Director, **CSIR-CLRI**; Prof. Sudhir Singh Bhadauria, Director, UIT RGPV Bhopal; Shri Mayank Mathur, RC Member from CSIR-Headquarter; Dr. J.P. Shukla, Chief Scientist; Mr. Somnath Mazumder, CoA; Dr. J.P. Chourasia, Head PPD, CSIR-AMPRI; Dr. Sandeep Singhai, Head Business Development; Dr. Sarika Verma, PI and Principal Scientist; Dr. Neeta V.M. Khalkho, Sr. Principal Scientist, **CSIR-AMPRI;** and Dr. Satanand Mishra, Principal Scientist, **CSIR-AMPRI,** Bhopal.

Source: Pib

The Council of Scientific & Industrial Research (CSIR) - Advanced Materials and Processes Research Institute (AMPRI), in collaboration with Knowledge & Awareness Mapping Platform (KAMP) conducts Scientific Excursion for over 250 Students

The **Council of Scientific and Industrial Research (CSIR) - Advanced Materials and Processes Research Institute (AMPRI),** in collaboration with the Knowledge and Awareness Mapping Platform (KAMP), conducts Scientific Excursion on April 29th, 2024 at Bhopal, Madhya Pradesh. The Scientific Excursion was conducted by KAMP under the **CSIR** Jigyasa and Viksit Bharat Program with 250 students accompanied by their teachers from DPS Kolar Road Bhopal, IES public school Sehore, and IES public school, Ratibad, Bhopal. The programme was inaugurated by Dr. D.P Mondal, Chief Scientist. Head, Alloys, Composites and Cellular Materials Division, **CSIR-AMPRI,** Bhopal and Dr. Satanand Mishra Principal Scientist & Jigyasa Coordinator, **CSIR-AMPRI,** Bhopal.

Source: Pib

घर में बनाएं बाजार से 10 गुना सस्ता सेनिटाइजर, AMPRI ने डेवलप की डिसइन्फेक्टेंट बनाने की तकनीक

कोरोना का डरावना दौर किसे याद नहीं। कोविड काल के बाद हमारी जीवनशैली में भी काफी बदलाव आया है। लोग अपने स्वास्थ के प्रति अब पहले से ज्यादा सजग हैं। संक्रमण से बचने के लिए हर संभव तरीके अपना रहे हैं। संक्रमण से बचने के लिए **Disinfectant Liquid** एक कारगार माध्यम है। एडवांस मटेरियल एंड प्रोसेस रिसर्च इंस्टिट्यूट **CSIR-(AMPRI)** भोपाल ने इसे अब आम लोग तक पहुंचाने के लिए बेहद आसान बना दिया है। **AMPRI** ने इसे लेकर एक नई टेक्नोलॉजी बनाई है। जिसमें एक बच्चा भी अपने घर में बेहद आसान तरीके से **Disinfectant Liquid** बना सकता है और उसका उपयोग कर सकता है। तो आइये राष्ट्रीय प्रौद्योगिकी दिवस के इस मौके पर हम आपको बताते हैं कि आखिर ये नई टेक्नोलॉजी क्या है जो सीधे तौर पर हमारे स्वास्थ से जुड़ी हुई है।

Source: **Bansalnews**

CSIR AMPRI Bhopal: मेटल थ्री डी प्रिंटिंग से बिना जोड़ वाले हल्के और मजबूत कल-पुर्जे बनेंगे एम्प्री में

भोपाल स्थित **प्रगत पदार्थ एवं प्रक्रम अनुसंधान संस्थान (एम्प्री)** में देश में पहली बार मेटल 3 डी प्रिटिंग मशीन एलपीबीएफ (लेजर पावडर बेड फ्यूजन) और इलेक्ट्रान बीम पावडर बेड फ्यूजन (ई-पीबीएफ) एक साथ स्थापित की गई है। इन मशीनों से ऐसी सामग्री (कलपुर्जे) बनाई जा सकेगी जो काफी मजबूत होने के साथ हल्की भी होगी। थ्री डी प्रिंटिंग से बनने के कारण इन कलपुर्जों में जोड़ भी नहीं रहेंगे। हल्की और मजबूत सामग्री होने के कारण इनका उपयोग एयरक्राफ्ट के इंजन में लगनी वाली चीजों, सुरक्षा उपकरण सहित अन्य उपकरण बनाने में किया जा सकेगा। इस तकनीक को एडिटिव मैंनूफैक्चरिंग कहा जाता है। कलपुर्जे बनाने में ग्राफीन का बीएचआइ उपयोग किया जाएगा, जो कि कार्बन का यौगिक है। यह हल्का और बहुत मजबूत होता है। एम्प्री में ग्राफीन से चीजें बनाने का काम लगभग छह वर्ष पहले शुरू किया गया था। तीन डी मेटल प्रिंटिंग के पहले उस चीज की फोटो (इमेज) ली जाती है, जिसकी मेटल प्रिटिंग की जानी है। इसके बाद इसे बनाया जाता है। लड़ाकू जेट, हेलीकाप्टर, जेट इंजन और समुद्री गैस टरबाइन इंजन आदि के निर्माण में इस मशीन से बनी चीजों का उपयोग किया जा सकेगा। ग्राफीन से बनी चीजों की मांग इनमें इसलिए अधिक है कि यह स्टेनलेस स्टील स्टील से 200 गुना तक अधिक मजबूत है।

Source: **Msn**

The Council of Scientific & Industrial Research (CSIR) - Advanced Materials and Processes Research Institute (AMPRI), in collaboration with Knowledge & Awareness Mapping Platform (KAMP) conducts Scientific Excursion for over 250 Students

The **Council of Scientific and Industrial Research (CSIR) - Advanced Materials and Processes Research Institute (AMPRI),** in collaboration with the Knowledge and Awareness Mapping Platform (KAMP), conducts Scientific Excursion on April 29th, 2024

at Bhopal, Madhya Pradesh. The Scientific Excursion was conducted by KAMP under the **CSIR** Jigyasa and Viksit Bharat Program with 250 students accompanied by their teachers from DPS Kolar Road Bhopal, IES public school Sehore, and IES public school, Ratibad, Bhopal. The programme was inaugurated by Dr. D.P Mondal, Chief Scientist. Head, Alloys, Composites and Cellular Materials Division, **CSIR-AMPRI,** Bhopal and Dr. Satanand Mishra Principal Scientist & Jigyasa Coordinator, **CSIR-AMPRI,** Bhopal.
Source: Pib

घर में बनाएं बाजार से 10 गुना सस्ता सेनिटाइजर, AMPRI ने डेवलप की डिसइन्फेक्टेंट बनाने की तकनीक

कोरोना का डरावना दौर किसे याद नहीं। कोविड काल के बाद हमारी जीवनशैली में भी काफी बदलाव आया है। लोग अपने स्वास्थ के प्रति अब पहले से ज्यादा सजग हैं। संक्रमण से बचने के लिए हर संभव तरीके अपना रहे हैं। संक्रमण से बचने के लिए Disinfectant Liquid **एक कारगार माध्यम है। एडवांस मटेरियल एंड प्रोसेस रिसर्च इंस्टिट्यूट** CSIR-(AMPRI) **भोपाल ने इसे अब आम लोग तक पहुंचाने के लिए बेहद आसान बना दिया है।** AMPRI **ने इसे लेकर एक नई टेक्नोलॉजी बनाई है। जिसमें एक बच्चा भी अपने घर में बेहद आसान तरीके से** Disinfectant Liquid **बना सकता है और उसका उपयोग कर सकता है। तो आइये राष्ट्रीय प्रौद्योगिकी दिवस के इस मौके पर हम आपको बताते हैं कि आखिर ये नई टेक्नोलॉजी क्या है जो सीधे तौर पर हमारे स्वास्थ से जुड़ी हुई है।**
Source: Bansalnews

CSIR AMPRI Bhopal: मेटल थ्री डी प्रिंटिंग से बिना जोड़ वाले हल्के और मजबूत कल-पुर्जे बनेंगे एम्प्री में

भोपाल स्थित **प्रगत पदार्थ एवं प्रक्रम अनुसंधान संस्थान (एम्प्री)** में देश में पहली बार मेटल 3 डी प्रिटिंग मशीन एलपीबीएफ (लेजर पावडर बेड फ्यूजन) और इलेक्ट्रान बीम पावडर बेड फ्यूजन (ई-पीबीएफ) एक साथ स्थापित की गई है। इन मशीनों से ऐसी सामग्री (कलपुर्जे) बनाई जा सकेगी जो काफी मजबूत होने के साथ हल्की भी होगी। थ्री डी प्रिंटिंग से बनने के कारण इन कलपुर्जों में जोड़ भी नहीं रहेंगे। हल्की और मजबूत सामग्री होने के कारण इनका उपयोग एयरक्राफ्ट के इंजन में लगनी वाली चीजों, सुरक्षा उपकरण सहित अन्य उपकरण बनाने में किया जा सकेगा। इस तकनीक को एडिटिव मैंनूफैक्चरिंग कहा जाता है। कलपुर्जे बनाने में ग्राफीन का बीएचआइ उपयोग किया जाएगा, जो कि कार्बन का यौगिक है। यह हल्का और बहुत मजबूत होता है। एम्प्री में ग्राफीन से चीजें बनाने का काम लगभग छह वर्ष पहले शुरू किया गया था। तीन डी मेटल प्रिंटिंग के पहले उस चीज की फोटो (इमेज) ली जाती है, जिसकी मेटल प्रिटिंग की जानी है। इसके बाद इसे बनाया जाता है। लड़ाकू जेट, हेलीकाप्टर, जेट इंजन और समुद्री गैस टरबाइन इंजन

आदि के निर्माण में इस मशीन से बनी चीजों का उपयोग किया जा सकेगा। ग्राफीन से बनी चीजों की मांग इनमें इसलिए अधिक है कि यह स्टेनलेस स्टील स्टील से 200 गुना तक अधिक मजबूत है।
Source: Msn

CSIR-AMPRI से आत्मनिर्भर बनेगा भारत, US-फ्रांस जैसे देशों से आने वाले अहम पार्ट्स भोपाल में होंगे तैयार

मध्य प्रदेश (Madhya Pradesh) **की राजधानी भोपाल** (Bhopal) **में अब अंतरिक्ष** (Space Sector) , **डिफेंस** (Defence) **और मेडिकल** (Medical) **से जुड़े कई ऐसे पार्ट्स** (Parts) **तैयार किए जाएंगे**, **जिसके लिए भारत** (India) **पहले विदेश पर निर्भर रहता था**. **इंडियन नेवी** (Indian Navy), **डीआरडीओ** (DRDO), **हिंदुस्तान एयरोनॉटिक्स लिमिटेड** (HAL) **जैसे संस्थानों के लिए कॉम्पोनेंट अब भोपाल में स्थित सीएसआईआर एम्प्री CSIR-Advanced Materials and Processes Research Institute (AMPRI) में ही बनेंगे**. **इस कदम से मेक इन इंडिया** (Make in India) **और आत्मनिर्भर भारत** (Self-reliant India) **या** (Atmanirbhar Bharat) **जैसी पहल को बल मिलेगा**. **आइए एम्प्री भोपाल के डॉयरेक्टर डॉ अवनीश श्रीवास्तव से जानते हैं कितना अहम है प्रोजेक्ट**. **यह प्रोजेक्ट मटेरियल डेवलपमेंट टेक्नोलॉजी में बड़ी पहल माना जा रहा है**, **इस फैसले से विदेशी उपकरणों पर लग रही लागत में कमी आएगी**. **इसी के साथ देश की जरूरतों को ध्यान में रख मैन्युफैक्चरिंग परफॉर्मेंस पर ज़ोर दिया जाएगा**. **देश में पहली बार ऐसी हाई-टेक मशीन स्थापित हुई हैं**, **जो मुख्य तौर पर थ्री डी प्रिंटिंग** (3D Printing) **और लेज़र कटिंग** (Laser Cutting) **का काम करेंगी**. **एम्प्री भोपाल** (**AMPRI** Bhopal) **में बने कल-पुर्जे देश के विभिन्न संस्थान मुख्यतः डीआरडीओ**, **हिंदुस्तान एयरोनॉटिक्स**, **इंडियन नेवी और मेडिकल सेक्टर में इस्तेमाल किए जा रहे उपकरणों का हिस्सा बनेंगे**.
Source: Ndtv

Rashtriya Hindi Vigyan Sammelan 2024: Promoting Scientific research in Hindi Language

The **Council of Scientific and industrial Research-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal, in collaboration with Vijnana Bharati Madhya Bharat Province, the Madhya Pradesh Council of Science and Technology, Bhopal, Madhya Pradesh Bhoj (Open) University, Bhopal; **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR),** New Delhi, and Atal Bihari Vajpayee Hindi University, Bhopal, organized the "Rashtriya Hindi Vigyan Sammelan 2024," continuing the tradition of previous years. This was the fourth edition of the conference, held on July 30-31. The conference's primary aim was to offer a platform for researchers to present and discuss their work in Hindi, fostering the popularisation of science and technology through this language. The event was inaugurated by Dr. Mohan Yadav, Chief Minister of Madhya Pradesh, who emphasised

the importance of advancing knowledge and science in our own language. "We can become a VishwaGuru only through knowledge and science in our own language," stated Dr. Yadav, expressing his hope for the conference to evolve into an international event.
Source: Pib

One Week One Theme (OWOT) Programme for Civil, Infrastructure and Engineering (CIE) theme of CSIR celebrated at CSIR-SERC

The **Council of Scientific & Industrial Research (CSIR),** known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. **CSIR** has a dynamic network of 38 national laboratories, 39 outreach centers, 1 innovation complex, and three units with a pan-India presence. One Week One Theme (OWOT) campaign was launched by Dr. Jitendra Singh, Minister of Science & Technology and Earth Sciences, to highlight India's recent successes in science and technology. Among the eight R&D themes of **CSIR**, numerous events are being organized at various places across the country. As a part of this campaign, a one-day event comprising a stakeholder meet cum exhibition under the OWOT Campaign initiative focused on Civil Infrastructure and Engineering (CIE) theme was organized on 5 September 2024, at **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, with five **CSIR** labs working in the area, viz, **CSIR-Central Building Research Institute (CSIR-CBRI),** Roorkee, **CSIR-Central Road Research Institute (CSIR-CRRI),** New Delhi, **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, **CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal and **CSIR-SERC** participating in it.
Source: Pib

सीएसआइआर- एमप्री बना देश का पहला 5 स्टार रेटेड नेशनल लैबोरेट्री

एम्प्री की नई बिल्डिंग को इंटीग्रेटेड हैबिटेट असेसमेंट के लिए ग्रीन रेटिंग में 5 स्टार प्राप्त हुआ है। भवन का कुल क्षेत्रफल 13428 वर्ग मीटर है। परिसर में एक एडमिन और रिसर्च ब्लॉक शामिल है। अंग्रेजी के अक्षर डबलू के आकार की बिल्डिंग के भूतल पर विभिन्न प्रयोगशालाएं, विभाग और कमरे, लिफ्ट, रिसेप्शन आदि बनाए गए हैं। पहली मंजिल में वैज्ञानिकों के लिए 75 कमरे, एक निदेशक कक्ष, योजना कक्ष और प्रदर्शन प्रभाग साथ ही प्रदर्शनी हॉल, अनुसंधान विद्वानों के लिए एक आम बैठने की जगह, सेवा कक्ष, सम्मेलन कक्ष और बैठक हॉल मौजुद है। दूसरी मंजिल पर डिजिटल लाइब्रेरी, मीटिंग रूम और स्टाफ रूम के साथ वरिष्ठ अधिकारियों के कार्यालय हैं। इसके अलावा, प्रयोगशाला ब्लॉक में विद्वानों के लिए बैठने की जगह भी है। परिसर में सभी अत्याधुनिक सुविधाओं के साथ एक सर्विस ब्लॉक और एक कैंटीन ब्लॉक भी है। यह परिसर 15 केएलडी सीवेज उपचार संयंत्र, 102500 लीटर की भूमिगत भंडारण क्षमता वाला एक व्यापक जल आपूर्ति नेटवर्क और एक वर्षा जल संचयन प्रणाली से भी सुसज्जित है। 11 एकड़ में बने इस परिसर को बनाने के लिए 7982लाख रु. की लागत लगी है। इस अवसर पर **सीएसआइआर** की डॉयरेक्टर

जनरल डॉ. एन. कलैसेल्वी ने बिल्डिंग का उदघाटन किया। नए प्रयोगशालाओं की सुविधाओं से लैस नई इमारत में एचपीएलसी लैब और बायोमिमेटिक्स और बायोमटेरियल्स लैब, ग्राफीन सेंटर की 3डी प्रिंटिंग सुविधाएं, सेमी-ऑटोमैटिक हॉट प्रेस और हाइड्रोलिक प्रेस सुविधा, एडवांस्ड रेडिएशन शील्डिंग और जियो-पॉलीमेरिक मैटेरियल्स और गामा रेडिएशन पैनल सेंटर, एक्स-रे शील्डिंग टाइल्स, बांस कम्पोजिट, बांस समग्र संरचना "बैठक, बायो ग्रीन कम्पोजिट, पराली कम्पोजिट, रमन स्पेक्ट्रोस्कोपी सुविधाएं होंगी।

Source: Patrika

IIT Indore, CSIR-AMPRI ink five -year research pact

The Indian Institute of Technology (IIT) Indore signed a memorandum of understanding (MoU) with **CSIR-Advanced Materials and Processes Research Institute (AMPRI),** Bhopal, to enhance research and academic collaborations. IIT-I and **CSIR AMPRI,** Bhopal, will collaborate on joint research endeavours encompassing additive manufacturing, graphene and 2D materials, metal-polymer composites and advanced energy materials. The partnership will emphasise innovative projects including the synthesis and characterisation of aluminium alloy foams utilising liquid metallurgy, energy absorption in lightweight structures, and optimisation of foam structures for impact resistance. The five-year agreement was executed by professor Suhas Joshi, director of IIT Indore, and Dr AK Srivastava, director of **CSIR-AMPRI** whilst Dr Nallathamby Kalaiselvi, director general of **CSIR**, was present. Prof Joshi said, "For the mutual benefit of both the organisations, there will be an exchange of faculty/ scientists/ students and technical members of the mentioned organisation for research and academic purposes. We will work closely to generate appropriately trained manpower in the related areas through the organisation of formal academic curricula, symposia, short-term training courses etc. The scientists of **CSIR-AMPRI** shall be associated as guide and co-guide subject to fulfilment of the requirement of both the organisations."

Source: Times of India

Go Back

केंद्रीय भवन अनुसंधान संस्थान, रूड़की
CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE
(A Consultant Establishment of CSIR)

CSIR-Central Building Research Institute (CSIR-CBRI)

At Ayodhya temple, 'Surya Tilak' for Lord Ram on every Ram Navami

Every Ram Navami, an intricate network of lenses and mirrors will be used to channel a ray of sunlight in the sanctum sanctorum of the Ram temple in Ayodhya and converged on the forehead of Ram Lalla as "Surya Tilak". The event on the ninth day of the Chaitra month will mark Lord Ram's birth. The "Surya Tilak" system has been designed by scientists at the **CSIR-Central Building Research Institute (CBRI)** and it will channel the ray on the idol's forehead from 12 noon for about six minutes. The idol will be placed in the sanctum sanctorum of the upcoming temple during a consecration ceremony (Pran Prathistha) on January 22.

Source: Times of India

Land subsidence: CBRI conducts fresh inspection of Joshimath

Roorkee-based central government agency **Central Building Research Institute (CBRI**) is conducting a fresh inspection of Joshimath to ascertain if there was any further aggravation in geological situation and implementation of recovery and reconstruction plan, a senior official said. A 15-member NDMA team along with experts conducted Post-Disaster Disaster Needs Assessment (PDNA) in April last year. (ANI file photo) A 15-member NDMA team along with experts conducted Post-Disaster Disaster Needs Assessment (PDNA) in April last year. (ANI file photo) Dr Ajay Chourasia, chief scientist at **CBRI**, said, “After the Post-Disaster Disaster Needs Assessment (PDNA) last year, the government has sanctioned funds for Joshimath (for rehabilitation and recovery plan). It is high time to implement them. Our team is visiting the town to check if there is any further aggravation in geological instability and if any structures/buildings are left out of the high-risk category (to be rehabilitated). Zonation of land has also been done.

Source: Hindustantimes

Science, Technology, and Innovation Exhibition of IISF 2023

With the closing ceremony of IISF at the grand A.P.J. Abdul Kalam Hall, where the Chief guest was Shri Manohar Lal Khattar, Chief Minister of Haryana. The Minister announced the development of a “Science City” in the city of Faridabad, Haryana. He also visited the mega science expo where countless commendable innovations were displayed. Dr. Jitendra Singh, Union Minister of State for the Ministry of Science & Technology visited the mega expo at the inaugural day, the first day of the India International Science Festival (IISF) 2023. Among the many displays, Ram Mandir model was the centre of attraction of the exhibition due to its inauguration ceremony on January 22, 2024. The unique design

including the “Surya Tilak,” highlighting the scientific prowess in the monument was given by the **CSIR** lab, **Central Building Research Institute (CBRI)** located at Roorkee, Uttarakhand.
Source: Pib

No Iron And Steel Was Used To Construct Ayodhya Ram Temple. Here's Why

The grand temple at Ayodhya for Ram Lalla or the child form of Lord Ram is truly an amalgamation of traditional Indian heritage architecture incorporating science for construction so that it can last for centuries. "The very best quality granite, sandstone, and marble has been used and there is no use of cement or lime mortar in the joints, only a lock and key mechanism using groves and ridges has been used in the construction of the entire structure", says Dr Pradeep Kumar Ramancharla, Director of the **CSIR-Central Building Research Institute**, Roorkee who has been actively involved in the construction project. **CBRI** says the structural design of 3 floored structures has been done to resist an earthquake of the return period of 2,500 years.
Source: NDTV

Shri Ram Mandir construction has been technically assisted by atleast four leading National Institutes of CSIR (Council of Scientific & Industrial Research) and DST (Department of Science & Technology) under Ministry of Science & Technology, in addition to certain inputs from other institutions like IITs as well as ISRO (Indian Space Research Organisation), says Union Minister Dr Jitendra Singh

Shri Ram Mandir construction has been technically assisted by atleast four leading National Institutes of **CSIR (Council of Scientific & Industrial Research)** and DST (Department of Science & Technology) under Ministry of Science & Technology, in addition to certain inputs from other institutions like IITs as well as ISRO (Indian Space Research Organisation). Disclosing this here today, Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said, the four institutes which made a significant contribution include **CSIR -Central Building Research Institute (CBRI) Roorkee; CSIR - National Geophysical Research Institute (NGRI)** Hyderabad; DST - Indian Institute of Astrophysics (IIA) Bengaluru and **CSIR-Institute of Himalayan Bioresource Technology (IHBT)** Palampur (HP).
Source: Pib

Central Building Research Institute identifies 14 high-risk zones in subsidence-hit Joshimath

The **Central Building Research Institute (CBRI)** has identified 14 high-risk zones in subsidence-hit Joshimath and recommended that the administration should ask the residents in these areas of the town to either take compensation or get relocated. "After a detailed survey, we have identified 14 high-risk zones in Joshimath from where land subsidence was reported last year. The houses in Marwari, Sunil, Upper Bazar, Lower

Bazar, Singhdhar and Manohar Bagh areas of the town fall into this category. Residing in these houses is fraught with danger, " CBRI scientist Ajay Chaurasia said
Source: Orissadiary

Ayodhya Ram Temple can withstand once-in-2,500-year quake due to its 'superstructure material': Scientist

The Ram Mandir in Ayodhya has been meticulously engineered to endure seismic events that occur once every 2,500 years. This feat of structural resilience was confirmed by scientists and researchers from the **CSIR-Central Building Research Institute (CSIR-CBRI),** who conducted comprehensive scientific studies on the temple's site. These studies included geophysical characterization, geotechnical analysis, foundation design vetting, and advanced 3D structural analysis. The primary objective was to ensure the temple's structural integrity against the Maximum Considered Earthquake, which is equivalent to a seismic event with a 2,500-year return period.
Source: Businesstoday

National Science Day celebrated at CSIR Campus, Chennai

National Science Day is celebrated in India every year on 28 February to mark the discovery of the Raman Effect by Indian Physicist Sir C.V. Raman. National Science Day was celebrated with great enthusiasm at the **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC) during 28-29 February 2024. The National Science Day function was organized on 29.2.2024 and was presided over by Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC. Prof. S.K. Bhattacharyya, Vice Chancellor, Shiv Nadar University, Chennai, and Former Director, **CSIR-Central Building Research Institute (CSIR-CBRI**), Roorkee, was the Chief Guest of the function. In her welcome address, Dr. Anandavalli mentioned that science and technology are integral parts of Indian culture, deeply interlinked, and are also fundamental to the growth of the country and humanity. Speaking briefly on Sir CV Raman and the genesis of National Science Day, she said that this day is a powerful reminder of the impact of science and technology in our everyday lives. Talking about the theme of National Science Day 2024 – Indigenous Technology for Viksit Bharat, she said that India has always been a land of innovation and highlighted on the contributions of **CSIR** towards developing indigenous technologies. Dr. Anandavalli also remembered the contributions of Dr. N. Lakshmanan, Former Director of **CSIR-SERC**, for the structural engineering field and his outstanding work at **CSIR-SERC.**
Source: Pib

The Science Behind 'Surya Tilak' Ceremony At Ayodhya's Ram Temple

At noon, today, the grand Ram Temple in Ayodhya witnessed a unique event as the forehead of the Ram Lalla idol was anointed with a ray of sunlight, known as 'Surya Tilak' on the occasion of Ram Navami. Commissioned by the temple trust, scientists from a leading government institution devised a sophisticated apparatus consisting of mirrors and lenses. This mechanism, officially termed the 'Surya Tilak mechanism', marks a

significant scientific and engineering feat. Dr Pradeep Kumar Ramacharla, Scientist and Director at the **Central Building Research Institute (CBRI),** Roorkee, explained to NDTV the intricate workings of the optomechanical system.
Source: NDTV

Telugu professor plays key role in Surya Tilak at Ayodhya

A professor hailing from the city has been instrumental in 'Surya Tilak' project at the Ram Mandir in Ayodhya. R Pradeep Kumar, director of **CSIR-Central Building Research Institute (CBRI),** Roorkee, mentored the fabrication and installation of the opto-mechanical system at Ram Mandir which was crucial to the project. Under the 'Surya Tilak' project, a mechanism was devised to direct Sun's rays onto the forehead of Ram idol at Ayodhya. "After repeated trials, the Sun rays appeared on Wednesday on the centre of the forehead of the idol at 12noon and continued for 3 to 3.5 minutes," Kumar said. "I feel proud as a Telugu to be one of the members of the team that contributed to the Surya Tilak installation project," he said.
Source: Times of India

Panel approves SOP for scientific scan of Shree Jagannath Temple's Ratna Bhandar

The standard operating procedure (SOP) for the investigation of Shree Jagannath Temple's Ratna Bhandar for presence of any tunnel or more chambers inside it, was approved by the shrine's managing committee on Monday. In an emergency meeting of the temple managing committee presided over by Gajapati Maharaj Dibyasingha Deb, it was decided that scientific techniques like laser scanning may be used for the purpose. "Following approval by the state government, the Archaeological Survey of India (ASI) will consult reputed institutions like IITs or Roorkee-based **Central Building Research Institute (CBRI)** for the non-invasive examination," said temple chief administrator Arabinda Padhee. The Shree Jagannath Temple Administration (SJTA) will write to the ASI in this regard. Another SOP on shifting of the almirahs and chests from both the inner and outer chambers of Ratna Bhandar was also approved by the managing committee. Both the SOPs will be sent to the state government for its approval.
Source: Newindianexpress

सीबीआरआई ने हरी प्रोजेक्ट को किया लांच

सीएसआईआर की महानिदेशिका और विज्ञान और औद्योगिक अनुसंधान विभाग की सचिव डॉ. एन. कलैसेल्वी ने केन्द्रीय भवन अनुसंधान संस्थान **(सीबीआरआई)** में हाई एल्टीट्यूड रीजनस ऑफ इंडिया (एचएआरआई, हरी) का औपचारिक शुभारंभ किया। शुक्रवार को **सीबीआरआई** के सभागार में कार्यक्रम कि शुरुआत **सीबीआरआई** के निदेशक प्रोफेसर आर. प्रदीप कुमार ने मुख्य अतिथि का स्वागत करने के साथ किया। बाल विद्या मंदिर **सीबीआरआई** स्कूल के छात्रों ने एक नृत्य प्रदर्शनी से मुख्य अतिथि का स्वागत किया। इसके बाद क्लाइमेट रिज़िल्यन्ट बिल्डिंग्स (सीआरबी) की आधारशिला रखी गई। यह आयोजन

जलवायु परिवर्तन को ध्यान में रखते हुए सुरक्षा, सेवा, स्थिरता, अर्थव्यवस्था, सौंदर्य, आराम और सामाजिक स्वीकार्यता को ध्यान में रखकर भवन निर्माण के प्रति **सीएसआईआर** की प्रतिबद्धता का प्रतीक है। डॉ. कलैसेल्वी ने वरिष्ठ अधिकारियों के साथ **सीएसआईआर-सीबीआरआई** की विभिन्न अत्याधुनिक सुविधाओं का दौरा किया। उन्होंने हरी की रणनीतिक और सामाजिक महत्ता पर जोर दिया। कहा कि यह लद्दाख जैसे क्षेत्रों के लिए स्थाई बुनियादी ढांचे, ऊर्जा समाधान और पर्यावरण प्रबंधन रणनीतियों को प्रदान कर सकता है।

Source: Starofmysore

2-day disaster mgmt training workshop concludes

A two-day training workshop organised by the District Disaster Management Authority (DDMA) concluded today at the Deputy Commissioner's office in Nahan. The workshop, held under the guidelines of the National Disaster Management Authority (NDMA), New Delhi, and conducted by the **Central Building Research Institute (CBRI),** Roorkee, focused on the risk assessment of buildings in earthquake and landslide-prone areas within the district. Additional District Magistrate (ADM) LR Verma emphasised the importance of such training programmes for effective disaster risk management. The workshop saw participation from approximately 40 technical staff members from various departments, including the Rural Development Agency, Panchayati Raj, Himachal Pradesh Public Works (PWD) and HIMUDA. ADM Verma highlighted that on the second day of the workshop, participants conducted practical risk assessments of several private and government buildings in Nahan. The findings and a comprehensive report were then submitted to the **Central Building Research Institute (CBRI),** Roorkee, for further analysis.

Source: Tribune India

Two-day retrofitting workshop in Kinnaur

A two-day sensitisation workshop on retrofitting of buildings commenced today at the ITDP building in Reckong Peo. The event is being organised by the District Disaster Management Authority in collaboration with **CSIR-CBRI,** Roorkee. The workshop was inaugurated by Assistant Commissioner Vijay Kumar. Kumar said the event aimed to provide information to the departments concerned regarding the retrofitting of buildings in Kinnaur district. ASK Negi and Ashish Kapoor from **CBRI**, Roorkee, as the resource persons at the workshop, are conducting practical sessions on retrofitting techniques. On the first day of the event, Negi and Kapoor talked about the methods and tools used in retrofitting. They explained how old structures and buildings could be revitalised using retrofitting equipment and machinery, thereby extending the lifespan of the buildings and ensuring the safety of occupants. The types of retrofitting discussed included techniques used for concrete structures, masonry structures, floors, roofs, tanks and pipelines. The workshop was attended by officials of the Public Works Department, Jal Shakti Department, Health Department, Electricity Department, Police Department, District

Development Office, revenue officers, officials from all three development blocks, and the naib-tehsildar of Sangla.
Source: Tribuneindia

National Disaster Management Authority team visits landslide-hit Vilangad

A study team of the National Disaster Management Authority (NDMA) visited the landslip-hit areas in Vilangad in Kozhikode on Saturday (August 31, 2024). The team that had earlier assessed the situation in Wayanad was in Vilangad upon the request of MLA E.K. Vijayan. The four-member team comprising R. Pradeep Kumar, Director of **Central Building Research Institute,** Scientists D.P. Kanungo, Ajay Chaurasia and Member Secretary of Kerala State Disaster Management Authority Shekhar. L. Krurikose visited areas such as Vayad, Panniyeri, Malayangadu and Vilangad town, some of the worst hit areas in the landslip that took place on July 30, 2024 They spoke to survivors and collected data from the local authorities. A Post-Disaster Needs Assessment (PDNA) report will be submitted to the Central Government within two weeks, comprising the information gathered from Chooralmala, Mundakkai and Vilangad. The team was accompanied by MLA E.K. Vijayan and representatives of Vanimal Grama Panchayat.
Source: The Hindu

One Week One Theme (OWOT) Programme for Civil, Infrastructure and Engineering (CIE) theme of CSIR celebrated at CSIR-SERC

The **Council of Scientific & Industrial Research (CSIR),** known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. **CSIR** has a dynamic network of 38 national laboratories, 39 outreach centers, 1 innovation complex, and three units with a pan-India presence. One Week One Theme (OWOT) campaign was launched by Dr. Jitendra Singh, Minister of Science & Technology and Earth Sciences, to highlight India's recent successes in science and technology. Among the eight R&D themes of **CSIR**, numerous events are being organized at various places across the country. As a part of this campaign, a one-day event comprising a stakeholder meet cum exhibition under the OWOT Campaign initiative focused on Civil Infrastructure and Engineering (CIE) theme was organized on 5 September 2024, at **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, with five **CSIR** labs working in the area, viz, **CSIR-Central Building Research Institute (CSIR-CBRI),** Roorkee, **CSIR-Central Road Research Institute (CSIR-CRRI),** New Delhi, **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, **CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal and **CSIR-SERC** participating in it.
Source: Pib

Roorkee institute to retrofit 20 British-era buildings in Shimla

The **Central Building Research Institute (CBRI),** Roorkee, will undertake retrofitting of the British-era buildings in Shimla district, including the landmark colonial heritage properties, to make these earthquake-resistant,. The buildings that will be retrofitted in

the first phase include Raj Bhawan, Oak Over, Secretariat, Deputy Commissioner's Office, Superintendent of Police's Office, All India Radio Building and Doordarshan. A two-day workshop was organised by the District Disaster Management Authority (DDMA) here today, which was presided over by Additional District Magistrate (Protocol) Jyoti Rana. There are many old buildings in Shimla district, which need to be retrofitted so that disaster risk can be reduced. In the first phase, 20 old government buildings have been selected for retrofitting in Shimla district. Rana said it was the buildings that cause maximum loss of life during an earthquake, for which we need to make them quake-resistant. Himachal Pradesh falls in the most vulnerable seismic zones four and five, which make these areas highly prone to earthquakes, she added.
Source: Tribuneindia

After Delhi Airport canopy collapse, government enlists CBRI to advise airport operators on structural safety

In response to a series of structural failures at various airports, including the partial collapse of a canopy at Terminal 1 (T1) of Delhi's Indira Gandhi International Airport in June, the Indian government has enlisted the expertise of the **Central Building Research Institute (CBRI).** The Roorkee-based **CBRI** has been tasked with advising airport operators across the country on structural safety and integrity. The decision to engage **CBRI** follows several concerning incidents, including canopy collapses at Jabalpur and Rajkot airports in June. A senior official from the Ministry of Civil Aviation confirmed that the **CBRI** will guide the structural aspects of airport infrastructure, ensuring operators take necessary precautions to prevent such occurrences in the future. In addition to **CBRI's** involvement, the ministry is also organizing a technical workshop for airport operators, where experts from the institute will provide specialized training on structural safety and resilience.
Source: Financialexpress

CBRI holds Student-Scientist Interaction event

CSIR-CBRI, Roorkee organised a Student-Scientist Interaction Programme under Jigyasa 2.0, here, today. Around 350 students and 20 teachers from PM Shri Central KV, DL, Meerut Cantt, and PM Shri Central KV, Muradnagar, made an educational visit to **CSIR-CBRI,** Roorkee. Senior Scientists Dr Chandan Swaroop Meena, Dr Tabish Alam and Dr Hemlata welcomed the students and their teachers. During the programme, the students visited the Exhibition Gallery and Rural Technology Park, where the scientists and coordinators provided an overview of various housing technologies developed by **CBRI**. These included solar water heating systems, two-pit sanitation systems, energy-efficient rural housing, innovative rooftop technologies and water filtration systems commonly used in rural areas. The explanations covered the scientific principles behind these technologies and their practical applications in daily life. Notable projects highlighted during the visit included the construction of Ram Mandir, an iconic architectural achievement, and the controlled demolition of Supertech Twin Towers, a remarkable feat in modern engineering. In addition, the students visited the laboratory of

the APEE Department, known as the Energy Building, during their visit. Dr Tabish Alam delivered a lecture on the establishment and contribution of **CSIR-CBRI**. He also shared valuable information about the Tribal Pride Year 2024-2025 celebrations at **CBRI** and emphasised the significant contributions of tribal heroes like Birsa Munda. The students and staff members expressed their gratitude to **CBRI** Roorkee for organising this wonderful and educational tour.
Source: Garhwalpost

Student-Scientist interaction held at CSIR-CBRI, Roorkee

CSIR-Central Building Research Institute (CBRI), Roorkee, organised a Student-Scientist Interaction Programme under the Jigyasa 2.0 initiative, welcoming around 50 students and 7 teachers from Government Girls' Inter College, Sector-51, Noida. Senior Scientists Dr Hemlata and Dr Chandan Swaroop Meena greeted the students and their teachers, marking the beginning of the educational visit. As part of the programme, the students explored the Exhibition Gallery, where scientists and coordinators provided insights into various housing technologies developed by **CBRI**. Dr Chandan highlighted the extensive network of **CSIR** laboratories across India, emphasising the **CSIR-CBRI** (Roorkee) expertise in building science and technology. The visit showcased notable projects such as the construction of the iconic Ram Mandir and the controlled demolition of the Supertech Twin Towers, reflecting modern engineering marvels. Students also learned about **CBRI's** innovative air purification systems developed during the COVID-19 pandemic and its significant contributions to sustainable housing under the Pradhan Mantri Gramin Awas Yojana (PMAY-G).
Source: Garhwalpost

Go Back

CSIR-CCMB

CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB)

No north, south divide when it comes to genetic history, says CCMB researcher

The highly-debated North-South divide in India is narrowing down, it seems. A recent study conducted by a team of researchers in Hyderabad exploring the history of Indian populations claims there is no distinct divide in the genetic history of North and South Indians. In the most recent genetic study published by the **Centre for Cellular and Molecular Biology (CCMB)** in Hyderabad, it was revealed that the traditional warrior and feudal lords of Nairs, Thiyyas and Ezhavas from Kerala, and Bunts and Hoysalas from Karnataka in the South were "genetically closer" to populations of north-west India.
Source: **The Federal**

Hyderabad: 30 young doctors enriched in Life Science Research at CCMB's MedSRT program

A total of 30 young doctors from across the country participated in the two-week Medical Students Research Training (MedSRT) program, aimed to familiarize medicos with cutting-edge life science research being taken-up at Hyderabad-based **Centre for Cellular and Molecular Biology (CCMB).** The program is specifically designed for medical students, who are provided training on research methodologies through a series of lectures and hands-on experiments. During the course of the training program, the young doctors also got exposed to concepts like scientific ethics, good laboratory practices, bio-safety and first-hand experience of working at various research facilities at **CCMB** and its Annexes.
Source: **Telangana Today**

Tiger samples sent to CCMB and Meat Institute

The Forest department has sent viscera samples of the tigress and tiger that were found dead at Daregaon in Kaghaznagar for examination to different institutes in the city and are awaiting the reports. In the case of the tigress, hair and other samples were sent to the **Centre for Cellular and Molecular Biology (CCMB)** to determine the cause of death. The tigress was found dead by forest staff on January 6. Though officials said after initial investigation that it could have been killed in a territorial fight with another tiger, they have sent the hair samples found in the mouth of the tigress for further investigation to **CCMB**.
Source: **Telangana Today**

Parts of human DNA remained unchanged for over 65 million years: scientists

Hundreds of thousands of stretches of DNA have remained unchanged in humans and other primates for over 65 million years but not in other mammals, an international team of scientists, including chief scientist at the **CSIR-Centre for Cellular and Molecular Biology (CCMB)** G. Umapathy and his lab members Manu Shivakumara and Mihir Trivedi, discovered. Researchers across the world were also part of this latest collaborative global study. These evolutionary records could play an important role in improving human health as the aim of genetics research is to identify functional DNA sequences, understand genetic causes, understand the role of these elements in complex diseases and improve diagnoses, they say.
Source: The Hindu

CSIR-CCMB young innovators program 2024: 5 MS Creative School students shine

In an effort to cultivate scientific curiosity and foster creativity among young minds, the renowned **CSIR-Center for Cellular and Molecular Biology (CCMB)** in Hyderabad conducted the Young Innovators Program (YIP) this year. The program included participants from 8th, 9th, and 10th-grade students across government and private schools in Telangana, with a total of 27 individuals selected to take part. Among the chosen participants, five students from MS Creative School made their mark during the 10-day program held from 3rd to 12th January 2024.
Source: Siasat

Scientists from CCMB uncover the genetic ancestry of the Ladakh population

The genetic history of the Ladakhi population has been uncovered by the **Centre for Cellular and Molecular Biology (CCMB)** in Hyderabad and the Birbal Sahni Institute of Palaeo Sciences (BSIP) in Lucknow. The study, led by Dr Kumarasamy Thangaraj from CCMB and Dr Niraj Rai from BSIP, involved analyzing the DNA of 108 individuals from three major communities in Ladakh: Brokpa, Changpa, and Monpa. They compared the Ladakh populations' DNA with DNA from different regions and also used archaeological and historical records to support their findings. The study, published in the journal Mitochondrion, provides insights into demographic changes in Ladakh over the past 3,000 years. Director of **CSIR-Centre for Cellular and Molecular Biology,** Dr Vinay K Nandicoori, explained that the study confirms the movement of people through the Trans Himalayan corridor and the Silk Route.
Source: Telanganatribune

Marrying within own caste is same as consanguinity: CCMB scientist

Marrying within one's own caste (endogamy) may be no different from close relatives marrying (consanguinity) when it comes to genetic diseases, a top scientist has pointed out. Speaking at a session on 'Who are Indians: Understanding our ancestry' at the Hyderabad Literary Festival, K Thangaraj, **CSIR–Centre for Cellular and Molecular Biology** senior scientist, said studies have estimated that one third of the Indian population is expected to have population-specific recessive diseases (require two copies of the mutated gene, one from each parent). Such populations or communities exist in

Andhra Pradesh and Madurai according to recent findings, while many more are yet to be discovered.
Source: Times of India

"Genomics holds immense potential in future outbreaks by identifying the genetic basis of infectious agents and chronic diseases"

Tuberculosis (TB) has been a long-standing problem in India. To effectively treat TB, it is imperative to find newer targets, which are important for in-vivo bacterial survival and persistence. Hyderabad-based **Centre for Cellular & Molecular Biology (CCMB),** led by its director Dr Vinay Kumar Nandicoori, is working on finding new TB targets. In an interaction with BioSpectrum, he shed light on key focus areas of **CCMB's research in molecular biology and particularly genetic research** in addressing personal and targeted medicines for patients suffering with TB, breast cancer and to identify various strains of viral and other communicable diseases.
Source: Biospectrum India

Green Hydrogen will play a key role in India's energy transition: CSIR-NCL Director

Green Hydrogen, a form of Hydrogen produced through processes with substantially low carbon emissions, will play a key role in India's energy transition, **CSIR-National Chemical Laboratory** Director Ashish Lele said here on Thursday. Lele was delivering the keynote lecture titled 'India's Energy Status and the Possibility of Using Green Gydrogen Fuel in the Country' at the city-based **CSIR-Centre for Cellular and Molecular Biology (CCMB),** which celebrated the birth anniversary of its Founder Director P M Bhargava. "Green hydrogen -- produced through processes with substantially low carbon emission -- will play a key role in India's energy transition particularly in the sectors of industry and heavy-duty commercialisation," a **CCMB** release quoted Lele as saying.
Source: Economic Times

'10,000 genome' project completed, says government

The Department of Biotechnology (DBT) on Tuesday officially announced the completion of the '10,000 genome' project — an attempt to create a reference database of whole-genome sequences out of India. While India first sequenced a complete human genome in 2006, creating a database that is representative of the diversity of India's population, is seen as a key step to being able to learn about genetic variants that are unique to India's population groups and use that to customise drugs and therapies. The United Kingdom, China, and the United States are among the countries that have programmes to sequence at least 1,00,000 of their genomes. About 20 institutions across India are involved in the project with the Indian Institute of Science (IISc), Bengaluru and the **Centre for Cellular and Molecular Biology**, Hyderabad being the lead institutions coordinating the project.
Source: The Hindu

Hyderabad-based institutes play vital role in genome sequencing

Two major genetic research institutions from Hyderabad, part of the prestigious GenomeIndia initiative, have played a vital role in completing genome sequencing of

10,000 individuals across India. Researchers from the Centre for DNA Fingerprinting and Diagnostics (CDFD) and the **Centre for Cellular and Molecular Biology (CCMB)** have played their part in understanding the human genome, which many geneticists concur is the instruction manual of the human body. The preliminary results of the genome sequencing of 10,000 individuals, released last month by the Union Minister of State for Science and Technology, Dr Jitendra Singh in New Delhi, have indicated distinct genetic diversity in India. GenomeIndia is a national project funded by the Department of Biotechnology (DBT) and in the first phase completed genome sequencing of 10,000 representative individuals.
Source: Telanganatoday

CSIR-CCMB ties up with Blockchain For Impact for biomedical research

Centre for Cellular and Molecular Biology (CCMB), a premier life science research organisation under the **Council for Scientific and Industrial Research (CSIR),** has forged an alliance with Blockchain For Impact (BFI) under the BFI-Biome Virtual Network Program to accelerate biomedical research and innovation in the country.
Source: TheHindu

Atal Incubation Centre – Centre for Cellular and Molecular Biology signs agreement with Thermo Fisher Scientific to advance innovation in India

The Atal Incubation Centre - Centre for Cellular and Molecular Biology, a premier bio-incubator in Hyderabad, has signed an agreement with Thermo Fisher Scientific. The agreement includes equipping **AIC-CCMB's** state-of-the-art facility, the Centre for Innovation, with cutting-edge technology to enable scientists in start-ups with opportunities to enhance their expertise and entrepreneurial acumen. Speaking on the agreement, Dr. Madhusudhana Rao, CEO, AIC-**CCMB** said "As one of the largest facilities supporting start-ups in healthcare, pharmaceuticals and biotechnology, AIC-CCMB endeavors to build an ecosystem that fosters innovation. Through our agreement with Thermo Fisher Scientific, we are enabling startups to drive research initiatives and reduce time-to-market for new products."
Source: Hindustantimes

CCMB study finds genetic link between Sri Lankan tribe and ethnic Indians

CSIR-Centre for Cellular and Molecular Biology (CCMB) is part of a new study that has shed light on the initial people of Sri Lanka and the ancient genetic ties between the Vedda, an indigenous group of Sri Lanka, and other populations in Asia. Dr K Thangaraj, JC Bose fellow at **CSIR-CCMB,** Hyderabad, is one of the 10 researchers part of the study. He said, "The language isolate Vedda, who are among the least studied indigenous populations in Sri Lanka, have long intrigued scientists and historians alike due to their unique linguistic and cultural characteristics". The research indicates that despite the lack of close linguistic similarities, the indigenous population shares a significant genetic link with ethnic populations in India. "Our autosomal analyses suggest a close genetic connection between the Vedda and Indian ethnic populations speaking various tongues, pointing towards a deep-rooted history that predates linguistic diversifications," said Prof

Gyaneshwer Chaubey, Molecular anthropologist at the Banaras Hindu University (BHU) in Varanasi.
Source: New Indian Express

The tools helping scientists up the rate at which they find new drugs

India is one of the world's leading manufacturers as well as consumers of antimicrobial drugs. However, many of these life-saving drugs are now becoming ineffective against disease-causing bacteria. Around 4.9 million people around the world died in 2019 due to ineffective antimicrobial drugs. These deaths include those due to the infections as well as the morbidity resulting from antimicrobial resistance. Yet we have also been struggling to find new drugs. Two research groups working at the **CSIR-Centre for Cellular and Molecular Biology**, Hyderabad, recently identified potential targets for new antimalarial drugs by studying the basic biology of Escherichia coli bacteria and the human malarial parasite Plasmodium falciparum. Manjula Reddy's group has been studying how the bacteria's outer cell-walls expand when the bacterial cell grows in size before dividing into two. The group's focus is on the peptidoglycan layer, a mesh of sugar and amino acids in E. coli essential for the bacteria's survival. When the cell grows, the mesh breaks and extra peptidoglycan material is added to enlarge the mesh.
Source: The Hindu

New rice variety immune to Yellow Stem Borer

Genetic scientists from Hyderabad, for the first time in the country, have developed an exclusive line of rice, which is resistant to Yellow Stem Borer (YSB), a prolific rice pest in India that can cause 20-60 per cent loss in the production of rice. Not many Indian rice varieties are naturally resistant to YSB and the most common method farmers employ to manage the pest is through the application of chemical pesticides. Researchers from the **Centre for Cellular and Molecular Biology (CCMB)** and the ICAR-Indian Institute of Rice Research (IIRR) have collaborated to develop the unique line of rice. The **CCMB**-ICAR-IIRR study, published in Springer Nature (May 7, 2024), said the researchers "unravelled the mechanisms that might help rice to combat Yellow Stem Borer infestation, thus providing insights and scope for developing YSBresistant rice varieties".
Source: Telanganatoday

CCMB develops assay to map presence of invasive catfish

Scientists at **CSIR-Cellular and Molecular Biology (CCMB)** in Hyderabad have developed an Environmental DNA-based quantitative PCR assay to map the presence and spread of invasive armoured sailfin catfish in the water bodies of the Eastern Ghats. The work of Neeldeep Ganguly and Dr G Umapathy, chief scientist at **CSIR-CCMB**, has been published in the journal 'Environmental DNA'. The armoured sailfin catfish was introduced for its unique appearance and its ability to clean algal growth in tanks and aquariums. However, the species has spread to 60% of the water bodies in the Eastern Ghats, thereby damaging the ecosystem. They are particularly concerning in extremely biodiverse countries like India.

Source: Newindianexpress

CSIR-CCMB & ICAR scientists identify rice line resistant to Yellow Stem Borer pest

Scientists in Hyderabad-based **CSIR-Centre for Cellular and Molecular Biology (CCMB)** and ICAR-Indian Institute of Rice Research (IIRR) have identified a rice line with enhanced natural resistance to a major pest 'Yellow Stem Borer' (YSB). When tested in field conditions during different seasons, the resistant line showed an average damage of less than 10% as against 40-60% damage in the susceptible line. The resistant line has been registered as a germplasm at ICAR-National Bureau of Plant Genetic Resources and will go through rigorous field trials to ascertain its suitability for field cultivation. The resistant rice line was further characterised by using cutting-edge technologies like genomics, transcriptomics and metabolomics, to gain deeper insights into the molecular mechanisms governing the YSB resistance.

Source: The Hindu

'One in 7 couples infertile': Hyderabad CSIR scientists identify gene behind male fertility

The scientists at the **Council of Scientific & Industrial Research-Centre for Cellular and Molecular Biology (CSIR-CCMB)** in Hyderabad have, for the first time, identified the gene (Tex13b), essential for sperm cell development and male fertility. The study was led by Dr K Thangaraj, in collaboration with his colleagues Dr P Chandra Shekar and Dr Swasti Raychaudhuri at the **CSIR-CCMB,** and their findings were published in the journal Human Reproduction. Infertility is a global issue Approximately, one in every seven couples worldwide is infertile. The male factors account for approximately 50 per cent of total infertility due to abnormal semen parameters, such as the complete absence of sperm in semen ejaculate, low sperm count, abnormal motility of sperm and abnormal sperm shape and size.

Source: Newsmeter

Balancing two forms of SNCA protein could help manage Parkinson's, study finds

Synuclein alpha (SNCA) is a mysterious protein. It's present in healthy cells but we don't know what it does there. It is notorious for its involvement in age-related neurodegenerative diseases. Twenty-seven years ago, researchers first associated SNCA with Parkinson's disease. People with this disease lose neurons that communicate with each other using dopamine as a neurotransmitter in a part of their brains. These dopaminergic neurons have been found to contain aggregated masses of proteins called Lewy bodies. Most of these proteins are SNCA. A recent study from Swasti Raychaudhuri's lab at the **CSIR-Centre for Cellular and Molecular** Biology, Hyderabad, published in the Journal of Cell Science, reported two ways in which SNCA is present as aggregates in cells: one that interferes with the structural integrity of cells' nuclei and another that allows the cell to degrade misfolded proteins. The researchers found that the former are related to diseased states while the latter is important for healthy cells.

Source: The Hindu

European Wellness BioMedical Group to set up base for promoting cell therapy

The European Wellness BioMedical Group (EWBG) has announced the formation of an Indian chapter of International Association of Cell Therapy, International Association of Stem Cell Therapy, and European Society of Anti-Aging and Bio-Regenerative Medicine, to foster collaboration and exchange their deep technology innovations with institutions like the **CSIR-CCMB's** Atal Incubation Centre (AIC), Center for Cellular and Molecular Platforms (C-CAMP) Bengaluru, IIIT-Hyd and others, on Tuesday. EWBG chairman Prof. Dato Sri. Dr. Mike Chan and director of scientific research & CEO of Indian wing Ravi Tej Allam told the media that a loop web application designed to connect certified and registered doctors for facilitating real-time sharing of scientific endeavours and literature for driving targeted innovations to address healthcare challenges has been launched.
Source: **The Hindu**

CSIR-CCMB, Aganitha ink pact to use AI for new-gen therapeutics

CSIR-CCMB and private sector firm Aganitha has signed a framework agreement to apply generative AI for therapeutic design and research in multiple disease areas, especially for malaria, tuberculosis (TB) and neurological disorders in the initial phase of collaboration on Wednesday. The memorandum of understanding is to apply AI (artificial intelligence) solutions for small molecule and antibody design for translation of **CCMB's** research and development findings into therapeutic candidates as well as design of research antibodies, said an official release. **CCMB** director Vinay Nandicoori noted that "the collaboration is forward-looking in utilising the institute's strength in fundamental research on disease biology-driven solutions. It is timely for us to forge such a collaboration to take our lab leads towards more real-life solutions."
Source: **The Hindu**

This rice is a boon for diabetic patients…scientist gave this advice to the patients

Samba Mansoori rice is resistant to bacterial blight disease and also has a very low glycemic index, which is very beneficial for diabetic patients. It is worth noting that the Glycemic Index (GI) is a scale that ranks carbohydrate-rich food or drink on the basis of how much glucose increases in the blood after eating or drinking it. Sambha Mansuri paddy is an advanced variety from the regions of South India. Farmers cultivate this there. Its rice is tasty to eat and at the same time, due to the crop being harvested in less days, the farmer does not have to incur much cost. Today this species is being cultivated in more than 1.5 lakh hectares of land in various states like Uttar Pradesh, Karnataka, Tamil Nadu, Chhattisgarh, Jharkhand, Telangana. This is to say of Dr. Hitendra Patel, Senior Principal Scientist of **CSIR-CCMB**, who had come to participate in the program on the occasion of National Technology Day organized by **CSIR-CIMAP.**
Source: **Anytvnews**

New research heralds breast cancer diagnosis with just a drop of blood

The CSIR-Centre for Cellular and Molecular Biology (CCMB) scientists in association with clinicians of the Regional Cancer Centre (RCC) in Thiruvananthapuram (Kerala) have identified a potentially cost-effective and non-invasive method to detect various kinds of breast cancer from just a drop of blood. The researchers have analysed microRNA signatures in hundreds of human cancer samples and identified 439 microRNAs (miRNAs) that are associated with invasive breast cancer, of which 107 qualified to be potential biomarkers for the stratification of different types, grades and stages of invasive ductal carcinoma., according to **CSIR-CCMB** Chief Scientist Lekha Dinesh Kumar, who led the research. Most of the cellular processes in a body are regulated by miRNAs molecules which are 23-25 base small non-coding RNA molecules. Identification of miRNAs involved in the regulation of the initiation and progression of breast cancer holds great promise for the development of molecular tools for early diagnosis and prognosis, said Dr. Lekha.
Source: **The Hindu**

TB continues to be No-1 killer among infectious diseases despite rampant use of antibiotics: Expert

Despite the clinical use of over 20 antibiotics and BCG, a century-old vaccine, tuberculosis has remained as the number one killer among all infectious diseases, accounting for nearly 1.5 million deaths yearly, a leading microbiologist said here on Thursday. Dr Vinay Nandicoori, Director, **CSIR-CCMB,** Hyderabad, however, said recent findings in labs on mycobacterial cell division held out hopes of dealing with the increasingly drug-resistant strains of the disease in a more effective manner. He was delivering a talk on the topic “Delineating Molecular Mechanisms that drive the survival of Mycobacterium Tuberculosis (Mtb)” at Rajiv Gandhi Centre for Biotechnology (RGCB) here. RGCB Director Prof Chandrabhas Narayana welcomed the gathering. Dr Nandicoori, a J C Bose Fellow, said TB has been among the oldest diseases in the world with its strains found in mummies in Egypt. The gradual rise in the emergence of increasingly drug-resistant strains and HIV-TB co-infection highlights the urgency to identify newer attractive drugs.
Source: **Uni India**

Genetic study shows why some east Indian tribes are adopting Indo-European languages

A large-scale genetic study by scientists at the **CCMB** in Hyderabad and the Birbal Sahni Institute of Palaeosciences in Lucknow suggested that industrialisation and cultural exchange caused Austroasiatic and Indo-European languages to mix among some East Indian tribal populations. About 5 per cent of Indians speak Austroasiatic languages, largely among the ancient tribal populations of Odisha, Chattisgarh, and Jharkhand. Overall, the Austroasiatic speakers have retained their languages firmly for the last 4000 years. However, recently, some of these populations have started adopting Indo-European languages. A recent study led by Dr. Kumarasamy Thangaraj at the **CSIR Centre for Cellular and Molecular Biology (CCMB),** Hyderabad, and Dr. Niraj Rai at

the DST-Birbal Sahni Institute of Palaeosciences, Lucknow, shed light on understanding these changes in the ancient tribes of East India. Cell Press has published the findings in the international journal Heliyon. This is the first high-throughput genetic study of the East Indian tribal populations. The researchers studied four major tribal populations—Bathudi, Bhumij, Ho, and Mahali—from Odisha. They examined the genetic affinities of these populations and a few Indo-European speakers from nearby areas.
Source: **Deccanherald**

CCMB researchers unravel 'SNCA' gene role in Parkinson's disease

In a ray of hope for the elderly suffering from Parkinson's disease, the progressive disorder that impacts the nervous system and parts of the body controlled by nerves, a group of researchers from Hyderabad have unraveled the intricate mechanism and the important role that a gene known as Alpha-synuclein (SNCA) plays in the disease. It turns out that there are two-forms of alpha-synuclein (SNCA) structures including amyloid filaments and smaller aggresomes. And if, both of them are balanced, then the Parkinson's disease among individuals can be managed, the cutting-edge research by geneticists of Hyderabad-based **Centre for Cellular and Molecular Biology (CCMB**) led by Swasti Raychaudhari, published in Journal of Cell Sciences (April, 2024), indicated. Out of the two forms of SNCA, the aggresomes are known to break proteins and they eventually degrade the SNCA gene itself. According to **CCMB** researchers, there is no safe balance between the aggresomes and amyloid filaments among patients with Parkinson's disease, which indicates that there is a need to find a treatment modality that strikes a balance between the two.
Source: **Telanganatoday**

Tribals of East India hold on to traditions despite external influences

Tribal populations living in the interior parts of eastern India have largely managed to retain their cultural heritage despite the influence of modernisation but face threat to their language. According to a study done by a consortia of Indian institutes, the ancient tribal populations of Odisha, Jharkhand and Chhattisgarh have retained their languages for the last 4000 years. These tribal groups have preserved their cultural and linguistic identity withstanding both industrialisation and demographic changes, the study mainly done by the **CSIR-Centre for Cellular and Molecular Biology** and the DST-Birbal Sahni Institute of Palaeosciences, Lucknow has suggested. However, recently some of these populations have started adopting Indo-European languages. The study led by Dr Kumarasamy Thangaraj at **CSIR-Centre for Cellular and Molecular Biology (CCMB),** Hyderabad, and Dr Niraj Rai at the Lucknow Institute has shed light on understanding these changes in the ancient tribes of East India. "Using genetic and linguistic data, for the first time, we established that the language of Austroasiatic-speaking tribal groups is altered by the recent demographic changes. This linguistic shift largely has socio-cultural effects and presents a threat to the Austroasiatic languages, if this trend continues given a small number of people speak these languages," said Dr. Thangaraj.
Source: **Siasat**

CCMB invites applications for Ph.D program

The Hyderabad-based **Centre for Cellular and Molecular Biology (CCMB)** has invited applications from eligible candidates to pursue research in modern biology leading to a Ph.D. Degree for its January 2025 Ph.D program. The projects offered for Ph.D. would be in the broad areas of Cell Biology, Molecular Biology, Genetics, Genomics, Developmental Biology, Plant Molecular Biology, Conservation Biology, Ecology, Protein Structure and Function, Biology of Macromolecules, Biology of Infection, Immunology, Epigenetics, Chromatin Biology and Bioinformatics. September 16 is the last date to submit online applications, which then will be screened and eligible candidates will be called for a computer-based written test at one of their preferred centres on September 29. Candidates who qualify in the test and with a valid fellowship to pursue PhD will be shortlisted to appear for an in-person interview at **CCMB** in the second/third week of October.

Source: Telanganatoday

Scientists link origins of Indian centipedes to ancient supercontinent Gondwana

Scientists at Hyderabad based **Centre for Cellular and Molecular Biology (CCMB)** found that the Indian scutigeromorphs originated in Gondwana and continued to evolve within Peninsular India. They also believe that Australian biodiversity of Scutigeromorpha is likely to have originated when the Indian ancestor dispersed from India within the last 100 million years. They used specimens from across the Western Ghats and Eastern Ghats as well as a global dataset of genetic sequences. The tremendous species richness of the peninsular region of India, particularly within the Western and Eastern Ghats mountain chains have intrigued the researchers. This is even more so as the Peninsular Indian landmass is extremely old. It was part of the supercontinent Gondwana which consisted of present-day Africa, Antarctica, Australia and South America merged together approximately 200 million years ago. Eventually, Gondwana broke into parts and the Indian landmass drifted to its current position

Source: Deccanherald

CSIR's revolutionary sickle cell anaemia test promises widespread impact

A team of scientists at the **CSIR-Centre for Cellular & Molecular Biology (CSIR-CCMB)** has developed an accurate, rapid, and affordable molecular test for screening sickle cell anaemia (SCA). This test uses indigenously developed reagents and is designed to better detect the prevalence of this genetic disease, which affects a significant portion of both the tribal and mainland populations in the country. Chief scientist and director of the CSIR-SCA Mission, Giriraj Ratan Chandak, announced that their polymerase chain reaction (PCR)-based test has been validated by the Indian Council of Medical Research (ICMR) with "100% sensitivity and 100% specificity." This test can screen individuals using just a drop of blood, identifying their status as normal, carriers, or patients in one go, at a cost of ₹100 or less. Besides being half the cost of current confirmatory tests, it eliminates the

need for intravenous blood collection, storage, transport, and additional confirmatory tests.
Source: The Hindu

Centipedes' global odyssey

It was a rainy night in 2015. We were conducting a frog camp in the remote village of Bisle, near Sakleshpur. One of the participants had spotted an arthropod eating a froglet. It was a House Centipede belonging to the order Scutigeromorpha. These predatory arthropods measure up to 4 cm and are found across the globe. Contrary to the name, they only have a pair of 15 legs. I had forgotten about this encounter until I came across a recent research paper that provided evidence that the Scutigeromorphs have an ancient history and were once widespread across what is called the Gondwanaland. The study, led by researchers from India and abroad, reports that Scutigeromorphs likely rafted on the broken fragments of the supercontinent and diversified on the continents, moved from one to another, or colonised new landmasses when they came in contact. While the evolutionary relationships in Scutigeromorpha are relatively well studied, little is known about their biogeographic history, particularly those found in the Indian subcontinent. Researchers from the Evolutionary Ecology Lab at the **Centre for Cell and Molecular Biology (CCMB)** set out to resolve this group of centipedes' biogeographic history by extensive sampling across India.
Source: Deccanherald

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक, शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.
Source: Indias.news

CCMB opens its gates to curious minds on Open Day

Every year curious students and common people wait for the **Centre for Cellular and Molecular Biology (CCMB)** to open its gates for them for one day to explore its state-of-the-art laboratories and engage in scientific discussions with the scientists fraternity at the premier research organization in frontier areas of modern biology. The **CCMB** held its Open Day on Thursday, September 26, which marks the Foundation Day of **Council of Scientific and Industrial Research (CSIR).** The Open Day saw an active participation from more than 7,000 students from various educational institutions in Hyderabad, Rangareddy and Medchal-Malkajgiri region. **CCMB** conducts two Open Days every year, one on 26 September and another on 28 February. It was a once-in-a-lifetime opportunity for many students to visit the hub of research activities. The students were seen busy exploring the advanced machinery such as big old electron microscopes and taking notes from the information provided on posters in the viewing areas. The visiting students were intrigued by the guided tours to the labs, model exhibits, posters, conservation genetics, wildlife forensics and activities at the research centre. According to the **CCMB**, the main objective behind the 'Open Day' concept is to ignite young brains.

Source: Hyderabadmail

CSIR-CCMB building a Animal BSL-3 facility to study infectious diseases

CSIR-Centre for Cellular & Molecular Biology (CCMB) is getting prepared to tackle the next viral outbreak or a probable pandemic-like scenario by building a full-fledged Animal BSL- 3 facility within the campus, taking over an entire floor for the purpose. A BSL-3 (bio-safety level) is an airtight totally controlled negative pressure facility used by scientists to study infectious diseases, in this case, among animals. The institute currently has a 500 sq.ft BSL-3 facility, but it is for the first time an exclusive ABSL3 facility is being built across a 6,000 sq.ft space with funding from the Department of Science and Technology (DST). "Being one of the leading scientific research institutions, we want to build our own capacities to deal with infectious viruses and bacteria, to perform experiments on small animals. During the COVID pandemic, we could contribute significantly because we had a BSL-3 facility, Having an ABSL3 facility allows us to perform animal infection experiments to test vaccines and drugs against any future pathogen of unknown infectious level," informed Director Vinay Kumar Nandicoori, in an exclusive interaction.

Source: The Hindu

CCMB Team Using MicroRNAs to Detect Breast Cancer From a Drop of Blood

Even as MicroRNAs hit the headlines with the Nobel Prize, a city-based scientist has been working on the use of MicroRNAs in the early detection of Invasive ductal carcinoma (IDC), which is the most common form of breast cancer that accounts for 85 per cent of all breast cancer diagnoses. Using microRNAs, a **CSIR-CCMB** study has helped in deciphering the change of microRNA signatures in breast cancer tissue samples. Speaking of the relevance and significance of microRNAs, Dr Lekha Dinesh Kumar, the

chief scientist at **CCMB**, who led the research, said, "MicroRNA was discovered by two Nobel-winning scientists in 1993 in C. elegans (kind of a roundworm). But its significance wasn't understood at that time. It was later found that microRNAs play a critical role in regulating various body functions. Eventually, researchers realised that microRNAs also control the regulation of our normal genes, acting as a "master switch" for gene expression." This holds tremendous potential for disease detection in future.
Source: **Deccanchronicle**

Studies zero in on biology TB bacteria use to evade immune response

Tuberculosis (TB) is a major focus in India's healthcare goals. The country is steadily improving its ability to diagnose and track TB patients and help them adhere to the long course of antibiotics required to treat it. But with increasing antimicrobial resistance in Mycobacterium tuberculosis (Mtb), the pathogen that causes TB, many existing antibiotics aren't working as effectively to kill it. So researchers are studying Mtb to identify its important proteins and then design new drugs that can act against them. Where there's a Cys, there's a way A study published on August 29 in the journal eLife by researchers at the **CSIR-Centre for Cellular and Molecular Biology (CCMB),** Hyderabad, explored the role of different cysteine synthases in Mtb. The researchers grew Mtb in a bacterial growth medium and restricted its access to nutrients. Then they created oxidative stress conditions in the dish (by adding certain compounds) and looked for genes whose expression patterns changed as a result. This is how they found Mtb's cysteine synthase genes are expressed more during oxidative stress. Mtb has at least three cysteine synthase enzymes. They make cysteine in cells through different chemical reactions.
Source: **The Hindu**

16th Conference of Startup Incubators To Be Held In Hyd On October 18

The Indian STEPs and Business Incubators Association's (ISBA) annual conference, ISBACON 2024, a gathering of startup incubators, investors, government officials, and industry experts, will be held at **CSIR - CCMB**, Hyderabad on October 18 and 19, 2024. A Revanth Reddy, Chief Minister, Telangana is the Chief Guest, while the Guest of Honour is D Sridhar Babu, Minister for Information Technology. Over 250 major stakeholders will be attending the three days discussions on global innovation synergies, India's ground-breaking advances, and policy frameworks, besides participating in networking opportunities. The 16th edition of ISBACON 2024 is jointly organised by ISBA and the Atal Incubation **Centre -Centre for Cellular and Molecular Biology (AIC-CCMB**). Before the main event, a pre-conference workshop is going to be co-led by ISBACON and T-Hub at T-Hub on October 17. Jayesh Ranjan, Special Chief Secretary for Information Technology, Government of Telangana will be presiding over the meeting.
Source: **Bizzbuzz**

Internal caste marriage is consanguinity, according to CCMB scientists

When it comes to genetic illnesses, marrying within one's own caste (endogamy) may be no different than marrying close relatives (consanguinity), according to a leading scientist.

K Thangaraj, senior scientist at the **CSIR-Centre For Cellular And Molecular Biology,** stated at the Hyderabad Literary Festival's 'Who are Indians: Understanding our ancestry' session that studies have estimated that one-third of the Indian population is expected to have population-specific recessive diseases (which require two copies of the mutated gene, one from each parent). According to recent research, such people or communities exist in Andhra Pradesh and Madurai, with many more yet to be uncovered. While tracing the ancestry of Indians who moved from South Africa in two waves, Thangaraj stated that we all share genes, with the exception of the unique Andaman Islands population. All Indians are a combination of diverse communities and ancestors. Except for the Andaman Islands, there is no pure archaic population. They have a separate gene pool since they have remained isolated all this time."
Source: **Bizzbuzz**

Centipedes originated in Gondwana and evolved in peninsular India

Centipedes originated in the ancient supercontinent Gondwana and evolved in southern India before crawling their way into Australia and then to the rest of the world, a study by researchers at the **CSIR-Centre for Cellular & Molecular Biology** in Hyderabad reveals1. One of the authors of the paper, Jahnavi Joshi, explains that they found about 10 new species of the centipedes Scutigeromorpha had originated in peninusular India, where previously only two species had been reported. They were initially widely distributed across Gondwana — a supercontinent consisting of present-day Africa, South America, India, Madagascar, Sri Lanka, Australia and Antarctica, that existed more than 200 million years ago — and diversified into more species. Thereuoneminae, a subfamily with high species diversity, originated within peninsular India. The current biodiversity of centipedes in Australia, parts of southeast Asia, and central Asia, originated from this Indian ancestor. Most species currently found in peninsular India evolved there, unlike many birds, lizards and mammals which arrived from other areas within the last 65 million years. Joshi says that centipedes can disperse across large distances, including oceans, and successfully colonize and thrive in new areas.
Source: **Nature**

CCMB works on low GI rice variety

Dr Vinay Nandcoori, director, **Centre for Cellular and Molecular Biology (CCMB),** said that the research institute was working on developing new plant varieties, such as the improved Sama Masuri rice (grown in Chhattisgarh), which has a low glycemic index and is resistant to bacterial infections. “We are continuously working on creating plants with better yields and resistance to environmental stresses like drought and salt,” he told Deccan Chronicle on the sidelines the 16th edition of Isbacon, a major forum for incubators, entrepreneurs, and government officials in the science and technology sector. “Genome editing is a tool we utilise in various projects. For instance, we've tested nearly 3 million people to study sickle cell anemia. We're also working on tuberculosis, participating in a project that involves sequencing 31,000 clinical strains," Dr Nandcoori said. Dr Ullas Kolthur, director, Centre for DNA Fingerprinting and Diagnostics (CDF),

highlighted a lesser-known contribution of the instition: Its involvement in the export of Basmati rice. All Basmati exports from India must be validated by CDFD to ensure the authenticity of the product.
Source: **Deccanchronicle**

Students of government schools in Virudhunagar take part in CSIR Jigyasa programme in Hyderabad

Hundred students of government schools, who showed keen interest in chemistry, and toppers in academics along with 10 teachers from Virudhunagar district participated in a two-day residential training programme conducted under **CSIR** Jigyasa programme in Hyderabad. The training programme was organised by **CSIR-Indian Institute of Chemical Technology, CSIR-National Geophyscial Research Institute and The Centre for Cellular and Molecular Biology** on October 17 and 18. Director of **CSIR-National Geophysical Research Institute** Prakash Kumar spoke about mother earth, studying and preserving natural resources and importance of geophysical and geographical research. He touched upon the role of geophysics in ensuring sustainability and resource management for future generations. On the second day, Director of Indian Institute of Chemical Technology Srinivasa Reddy spoke about the importance of chemistry in daily life.
Source: **The Hindu**

AIIMS signs MoU with CSIR-CCMB to combat sickle cell

The All India Institute of Medical Sciences (AIIMS) Bhopal has signed a Memorandum of Understanding (MoU) with the **Council of Scientific and Industrial Research and the Centre for Cellular and Molecular Biology (CSIR-CCMB),** Hyderabad, to enhance diagnostic capabilities and research initiatives for sickle cell disease and related genetic disorders. This collaboration marks a significant milestone in addressing the challenges of sickle cell disease, particularly in central India. Prof. (Dr.) Ajai Singh, Executive Director of AIIMS Bhopal, emphasized the importance of this partnership, stating, "Our collaboration with **CSIR-CCMB** is a significant step towards enhancing diagnostic capabilities for sickle cell disease. The introduction of this PCR-based test will enable us to offer accurate diagnoses, especially in underserved communities, thereby significantly improving patient care." He further noted that the test is currently in the initial validation phase and will be compared with other government-approved tests. A key aspect of this partnership is the implementation of a molecular PCR-based diagnostic test developed by **CSIR-CCMB,** which will be operational at AIIMS Bhopal. This advanced diagnostic tool aims to provide opportunities for rapid and accurate diagnoses for patients, leading to improved management of sickle cell disease.
Source: **Dailypioneer**

State varsity joins hands with Hyd institute for sickle cell research

Pt Deendayal Upadhyay Memorial Health Sciences and Ayush University has signed an MoU with Hyderabad-based **Centre for Cellular and Molecular Biology (CSIR-CCMB)**

to conduct genetic research and testing for sickle cell anemia in the state. Sickle cell disease is an inherited blood disorder that affects hemoglobin, the protein that carries oxygen through the body. The collaboration focuses on comprehensive diagnosis, identification, and prevention strategies for sickle cell anemia. The agreement encompasses genetic testing and carrier analysis, enabling identification of affected individuals and providing vital information for at-risk populations to enhance health outcomes. University vice chancellor Pradeep Kumar Patra highlighted that this partnership would enhance early detection capabilities, enabling healthcare professionals to better understand and treat this hereditary condition.
Source: Times of India

Art Meets Science in a Lab

Art met science at the **Centre for Cellular and Molecular Biology (CCMB)** in the city recently when a group of artists paid the institute a visit. At the unusual interaction, scientists, who can usually be seen looking through a microscope, found themselves seeing the world from a different prism. The **CCMB** often hosts ‘open days' to raise awareness about science among the public. Usually, these events attract children only. To bring all age groups into the fold, and also to widen their own perspective, the institute invited artists belonging to the Urban Sketchers group in Hyderabad. As many as 50 ‘skechers' – children and adults – made their way to the lab on Nov 9. What followed at the Habsiguda lab was a profound meeting that opened a new way of looking at the world for both sides. Caught in frame During the interaction, Dr Raghunand Tirmulai, senior principal scientist at **CCMB**, was seen using a magnifying glass to closely examine a sketch. The scientist was impressed by the details, much like all other researchers who could not help but awe over the works of artists. Dr Somdatta Karak, head, science communication and public relations, and Aditya Undru, senior project associate, at **CCMB** first came up with the idea of inviting the urban sketchers over to the **CCMB** campus.
Source: Times of India

CCMB Hosts Indo-German Innovators’ Connect Event

The Atal Incubation Centre at the **Centre for Cellular and Molecular Biology** hosted the Innovators Connect Tandem, from November 14 to 19, inviting 28 Indo-German tandems on a single platform to exchange knowledge between innovators and entrepreneurs. The institute hosted seven Indo-German tandems by engaging them in a week-long immersion programme. The event was organised in collaboration with DWIH, German House for Research and Innovation, Delhi, and the DAAD, German Academic Exchange Service. IIITH and University of Hyderabad featured dynamic workshops on critical entrepreneurial topics.
Source: Deccan Chronicle

Telangana's Adivasi Farmers Embrace Apple Orchards in Komaram Bheem

Farmers in Komaram Bheem Asifabad district, including from the Adivasi communities, are showing increasing interest in cultivating apples in the mandals of Kerameri, Wankidi,

Tiryani, and Sirpur (U), thanks to the district's favourable climate. Dubbed the "Kashmir of Telangana," the old Adilabad region experience cold weather during winter that supports the growth of apples. Apple trees require cold temperatures for sapling growth and flowering. Once flowering begins, it takes approximately 120 days for the apples to mature. Pruning typically starts in December, and the harvest begins in May. The first crop of apples in Dhanora village, Kerameri mandal, is notable for its sweetness and vibrant red colour, drawing significant attention. Minimum temperature in the region drops to 3ºC in December and remains below 6ºC for many nights until February. In December 2017, Kerameri recorded 2.5ºC. A scientist from the **Centre for Cellular and Molecular Biology (CCMB)** stated that the weather and soil in Kerameri mandal are well-suited for apple farming. The area's natural features, including hillocks, forests, and perennial streams, further enhance its potential.
Source: **Deccanchronicle**

CSIR Gives Cutting Edge Tech with Eye on Future

"Science should focus on carbon capture utilisation and pollution control measures. The **CSIR** is trying to come up with smog towers that can capture and manage carbon dioxide. But for a country this big, technology could take some time to make an impact," asked Dr N. Kalaiselvi, director-general of the **Council of Scientific and Industrial Research (CSIR)** said. **CSIR** was also working on the technologies that can improve green mobility, she said. Talking to Deccan Chronicle, Dr Kalaiselvi said, "For instance, we are working on supercapacitors for sustainable aviation fuel. We have converted used cooked oil into a sustainable aviation fuel. This year's Republic Day parade had two aircraft in the flypast fuelled by converted used cooking oil." "We have industry collaborations in Maharashtra and Tamil Nadu to commercialise this technology. As to road transportation, the **CSIR-National Chemical Laboratory**, Pune, in collaboration with KPIT Technologies recently built a hydrogen fuel cell-powered bus," she explained. Dr Kalaiselvi earlier inaugurated the P.M. Bhargava Auditorium at the **CSIR- Cellular and Molecular Biology (CCMB)** on Monday, named after its founder-director Pushpa Mittra Bhargava. The institute will observe its 37th Foundation Day on November 26. Dr Kalaiselvi was joined by Dr D. Srinivas Reddy and Dr Prakash Kumar, directors of **IICT** and **NGRI** respectively. She congratulated **CCMB** on its work on sickle cell anaemia. In her speech, she spoke extensively on climate change.
Source: **Deccanchronicle**

CCMB inaugurates PM Bhargava auditorium on occasion of 37th Foundation Day

The **Centre for Cellular and Molecular Biology (CCMB)** inaugurated the PM Bhargava auditorium, a day before its 37th Foundation Day. Named after the institute's Founder Director, Dr Pushpa Mittra Bhargava, renowned for his vision of how science should integrate with society, the auditorium is the first one for **CCMB** to have on its campus. Dr N Kalaiselvi, Director-General, **Council of Scientific and Industrial Research (CSIR),** who was the Guest of Honor, inaugurated the auditorium complex, which is a three-floored complex with a 300-seater auditorium, a 100-seater lecture hall and 2 smaller 25-

seater lecture halls. Alluding to the many research institutes and Osmania University in the vicinity of CCMB, Dr Kalaiselvi said, “Hyderabad should consider naming this street as the Science Corridor of Hyderabad. An auditorium complex like this is an asset for the entire community.” Dr Kalaiselvi was joined by Dr D Srinivasa Reddy and Dr Prakash Kumar, Directors, **CSIR-Indian Institute of Chemical Technology** and **CSIR-National Geophysical Research Institute**, Hyderabad. Senior scientists and Heads of **CSIR** laboratories opined that the auditorium adds to the scientific infrastructure of the city, and augments the possibilities of the kinds of programs that the **CSIR** labs and other research institutes in the city can consider hosting.
Source: **Telanganatoday**

CSIR महानिदेशक ने उच्च शिक्षा में वैश्विक भाषाओं के महत्व पर बल दिया

वैज्ञानिक और औद्योगिक अनुसंधान परिषद Council of Scientific and Industrial Research (सीएसआईआर) के महानिदेशक डॉ. एन. कलईसेलवी ने क्षेत्रीय भाषाओं में आधारभूत शिक्षा जारी रखते हुए उच्च शिक्षा में वैश्विक रूप से स्वीकृत भाषाओं को एकीकृत करने के महत्व पर प्रकाश डालते हुए इस बात पर जोर दिया कि उच्च अध्ययन और अनुसंधान में अंतर्राष्ट्रीय मानकों को प्राप्त करने के लिए वैश्विक भाषाओं को अपनाना महत्वपूर्ण है। वे सोमवार को हैदराबाद में **सीएसआईआर-सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी (सीसीएमबी)** में पी.एम. भार्गव ऑडिटोरियम के उद्घाटन के दौरान मीडिया को संबोधित कर रही थीं। टीएनआईई के एक सवाल के जवाब में उन्होंने अंतरराष्ट्रीय मानकों को पूरा करने के लिए अनुसंधान और शिक्षा को आगे बढ़ाने में वैश्विक भाषाओं की महत्वपूर्ण भूमिका पर ध्यान दिलाया।नए ऑडिटोरियम परिसर में तीन मंजिला परिसर शामिल है जिसमें **300** सीटों वाला मुख्य ऑडिटोरियम**, 100** सीटों वाला व्याख्यान कक्ष और **25-25** सीटों की क्षमता वाले दो छोटे व्याख्यान कक्ष हैं।
Source: **Jantaserishta**

New CCMB study throws fresh light on origin of Nicobarese

The population genetic researchers from Hyderabad-based **Centre for Cellular and Molecular Biology (CCMB)** and Banaras Hindu University (BHU), Varanasi in a recent study have thrown a new light on the genetic origins of Nicobarese people. It was earlier believed that linguistic ancestors of Nicobarese had settled in Nicobar archipelago during the early Holocene, about 11, 700 years ago. However, new genetic study of the Nicobarese population taken up by **CCMB** and BHU researchers indicates a significant ancestral connection of Nicobarese shared with Austroasiatic populations across South and Southeast Asia. The study also suggests that the Nicobar islanders settled there about 5000 years ago. Austroasiatic is spoken in southern parts of Asia including Vietnam and Cambodia as the main official languages and in India, Bangladesh, Nepal, Burma, Laos, Thailand, and Malaysia as the first language of many minority groups that are isolated from each other by other language speakers. Two major extant branches of the

Austroasiatic language tree are Munda in eastern, northeastern, and central India and Khasi-Aslian, which stretches from the Meghalaya in the northeast of the subcontinent to the Nicobars, Malay Peninsula, and Mekong delta in southeast Asia.
Source: **Telanganatoday**

Hyderabad: CCMB calls for applications from school students for 'Young Innovators Program'

Hyderabad-based **Centre for Cellular and Molecular Biology (CCMB)** is calling for applications from interested students for its "**CCMB**-Young Innovators Program" for school students of classes VIII to X. The program will be held during the first and second week of January 2025 and since it has limited seats, the selection process involves a two-step process. The **CCMB** has urged individual schools to select maximum of five students who will have an opportunity to attend an in-person lecture by Dr. Mudrika Khandelwal from IIT-Hyderabad on Biomaterials at 2.30 pm on Dec 23 at **CCMB** campus. The talk will be followed by a selection test for students. In the second step, based on the online selection test, a few students will be selected for the in-person program tentatively to be held between Jan 1 and January 10, 2025. The selected students will be informed about the in-person program a couple of days after the screening test. It is mandatory that the relevant authority/school principal share their mobile and other details when sending nominations to notify them in a timely manner. The nomination by schools must be sent on or before December 18, 2024.
Source: **Telanganatoday**

CSIR, New Delhi and AIIMS, New Delhi Sign MoU for Collaborative Research in Healthcare Domain

The **Council of Scientific and Industrial Research (CSIR),** New Delhi and All India Institute of Medical Sciences (AIIMS), New Delhi signed an Memorandum of Understanding (MoU) on December 17, 2024 at AIIMS, New Delhi aimed to provide a formal basis for initiating interaction between the two organizations to harness their respective strengths to advance medical research, enhance healthcare delivery, and tackle critical health challenges in India through the collaboration. This strategic partnership marks a significant step forward in leveraging combined expertise and resources to address critical healthcare challenges and innovate solutions for improved patient outcomes. During the event, under the Umbrella MoU between CSIR and AIIMS, another MoU was signed between **CSIR's Centre for Cellular & Molecular Biology (CSIR-CCMB),** Hyderabad and AIIMS, New Delhi for focused research projects and to extend the use of facilities at **CSIR-CCMB** to AIIMS. The MoUs were signed in the presence of Prof M Srinivas, Director, AIIMS, **CSIR** lab Directors of Institutes under the Healthcare theme, Senior officials of **CSIR** Hqrs as well as Senior faculty & Heads of different Departments at AIIMS. Speaking at the signing ceremony, Prof. M. Srinivas, Director, AIIMS, New Delhi added, "We are excited about the potential of this partnership. Together, we can explore new frontiers in healthcare research and ensure that our findings lead to real-world applications that improve patient care.

Source: Pib

AMR Frontline Workshop at CSIR – CCMB on Dec 26 2024 – Hyderabad

The AMR Frontline Workshop at **CSIR – CCMB** on December 26, 2024, is part of the "MedSRT" program, offering a month-long research training opportunity for 30 MBBS students from colleges across the country. This workshop features a dynamic lineup of expert speakers and engaging activities aimed at enhancing participants' understanding of antimicrobial resistance. Two exciting new additions, "AMR Battle Bingo" and "The Resistance Riddle: Breaking the AMR Code," an interactive Escape Room experience, promise to combine fun with learning to reinforce key concepts effectively.
Source: Sasuperbugs

Year-Ender 2024: CSIR Achieves Breakthroughs In Breast Cancer Detection, Sickle Cell Anaemia And Parkinson's Research

The **Council of Scientific and Industrial Research (CSIR)** has made significant scientific and research gains in 2024, especially for breast cancer, sickle cell anaemia, and Parkinson's disease in the year 2024, said the Ministry of Science and Technology on Friday. The **CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB)** and Regional Cancer Centre (RCC), Thiruvananthapuram developed a non-invasive blood test for early breast cancer detection. The low-cost method led to the analysis of MicroRNA (miRNA) signatures in hundreds of cancer samples, identifying 439 miRNAs linked to invasive breast cancer, with 107 as potential biomarkers for different types and stages of the disease, the ministry said. The **CSIR-CCMB** also launched the first-of-its-kind initiative for the development of the Indian Breast Cancer Genomic Atlas (IBCGA) for India-specific cancer resources. The Atlas is being developed by mapping nearly 1,000 breast cancer tumor genomes across the country. The initiative aims to identify molecular features specific to Indian breast cancer cases, which could enhance clinical management and treatment options.
Source: freepressjournal

Go Back

CSIR-Central Drug Research Institute (CSIR-CDRI)

Dr Nitya Anand, Man Behind India's 1st Oral Contraceptive 'Saheli', Dies at 99

Dr Nitya Anand, who discovered India's first oral contraceptive 'Saheli', passed away on Saturday after a prolonged illness at SGPGIMS Lucknow. He was 99 at the time he died and the last rites will be held on Monday. Anand, the former director of the **Central Drug Research Institute (CDRI),** was with **CDRI** since its inception in 1951 and served as its director from 1974 to 1984. According to a TOI report, Anand was the man behind the discovery of 'Centchroman', popularly known as 'Saheli.' It is the world's first and only non-steroidal, non-hormonal oral, once-a-week oral contraceptive. It was launched by then Prime Minister Rajiv Gandhi in 1986.

Source: News18

Researchers find cure to liver cancer through target therapy

Liver cancer, a growing health challenge often diagnosed in its advanced stages, can be prevented by changing the metabolic programming of cells as a target therapy, a research has concluded. The research, conducted over six years, is a collaborative effort of scientists from **CSIR-Central Drug Research Institute (CSIR-CDRI), Central Institute of Medicinal and Aromatic Plants (CIMAP)**, and Centre of Biomedical Research (CBMR), SGPGIMS, Lucknow. Led by CDRI scientist Madhav Nilakanth Mugale, the research concludes that cancer cells change metabolic programming, and it can be used as a diagnostic tool for cancer prevention.

Source: Times of India

CSIR-CIMAP Celebrates Foundation Day

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) celebrated its Foundation Day on Friday at Utsav Hall, **CSIR-CIMAP**, Lucknow. On this occasion, Dr. Ajit Kumar Shasany, Director, **CSIR-NBRI** was the chief guest, Dr. Radha Rangarajan, Director, **CSIR-CDRI** was the guest of honor and Dr. Gopaljee Jha, Scientist-V, NIPGR was the special guest. Dr. Prabodh Kumar Trivedi, Director, **CSIR-CIMAP**, welcomed the Chief Guest in his welcome address, he apprised the audience about the contribution of the Institute in last 6 decades. He also mentioned the important achievements of the Institute, in particular, the **CSIR** – Aroma Mission. In the last 65 years **CSIR-CIMAP** has always been in the fore front and has played a vital role in services towards the nation building. **CSIR-CIMAP** contribution has made India a leading essential oil exporter in

methanol mint and lemongrass. **CSIR-CIMAP** has played a prominent role in serving the society, industry.
Source: Thenewsagency

Discovery of India's First Contraceptive Pill

The **Central Drug Research Institute (CDRI**) in Lucknow discovered India's first contraceptive pill, 'Centchroman' or 'Saheli,' which marked a revolutionary advancement. This once-weekly, non-hormonal, non-steroidal oral contraceptive transformed family planning by giving women an easy-to-use approach to preventing unintended pregnancy. Dr. Nitya Anand developed 'Saheli', the world's first and only contraception of its kind, which provides women with unique birth control options.
Source: Medboundtimes

CSIR-CDRI & TETC India will organize symposium on career development in biological & biomedical sciences

The **CSIR-Central Drug Research Institute (CSIR-CDRI)** in collaboration with Trust for Education and Training in Cytometry (TETC), India, is organizing a Symposium on Career Development in Biological & Biomedical Sciences on 6th February and Silver Jubilee 25th INDO-US Flow Cytometry Workshop on “Flow Cytometry and its Advanced Applications in Biological Sciences on 7th and 8th February 2024. The event will serve as a crucial platform for students, technologists, postdoctoral scholars, scientific officers, faculty, and professionals in non-academic sectors, by providing invaluable insights into diverse career paths within the biological and biomedical sciences.
Source: Biovoicenews

Cipla partners with CSIR-CDRI to develop formulation for fungal keratitis

Drug major Cipla on Thursday said it has tied up with **CSIR-Central Drug Research Institute** to jointly develop a novel ophthalmic formulation for fungal keratitis. The collaboration aims to leverage the combined expertise and resources of both organisations to develop a safe and efficacious drug for fungal keratitis, the Mumbai-based drug maker said in a statement. Globally, around 1.2 million cases of fungal keratitis are reported every year with tropical countries recording a higher incidence. Fungal keratitis often occurs following ocular trauma and exposure to fungal pathogens from organic matter, thus putting agricultural workers at greater risk.
Source: Economic Times

CDRI to work on major drugs, aims to cut healthcare costs

Lucknow: The C**entral Drug Research Institute (CDRI)** will be working on around a dozen major drugs this year, targeting its goal of making affordable healthcare available to society. On National Science Day, the institute shared that the institute is working on Umifenovir for Covid-19, Picroliv for non-alcoholic fatty liver (NAFLD), Centinhale for drug-sensitive TB, S007-1500 for fracture healing and L-Ormeloxifene for contraception and that they are at different stages of clinical development. Discussing the year-long plan, **CDRI** director Radha Rangarajan said, “**CSIR-CDRI** is dedicated to the research and development of drugs, diagnostics and process technologies towards ‘affordable healthcare for all’. The institute engages in a blend of basic and translational research in

eight different therapeutic areas. In line with India's mixed burden of disease, **CSIR-CDRI** works on communicable and non-communicable diseases."
Source: **The Times of India**

WARM-TH 2024 inaugurated at CSIR-IITR in Lucknow

Themed on a gender-equal world, free of bias, stereotypes, and discrimination while also being equitable, and inclusive is everyone's dream, a three-day conference on 'Women in Academia, Research and Management of Toxicology and Health-Wellness (WARM-TH 2024)' was inaugurated at **CSIR–IITR** here on Wednesday. The conference is being organized in collaboration with **CSIR–Central Drug Research Institute (CSIR–CDRI),** King George Medical University (KGMU), National Institute of Pharmaceutical Education and Research (NIPER) Raebareli and Association of Food Scientists and Technologists of India (AFSTI) Lucknow Chapter. The inaugural programme was graced by the presence of Pramoda Devi Wadyar, Maharani of Mysore, as the Chief Guest of the day.
Source: **The Statesman**

CDRI develops first-of-its-kind oral pill to fasten bone healing process

Lucknow's **Central Drug Research Institute (CDRI)** has come out with an oral pill that might help fasten the process of healing after a fracture. The institution is currently working on two bone healing entities, namely **CDRI-1500** and **CDRI-399**. Necessary approvals from drug regulatory bodies have been received and the phase-1 clinical trials for **CDRI-1500** will begin soon. Tests show that the drug has therapeutic potential and can work as a rapid fracture repairing agent. It can also help improve bone health in the management of osteoporosis and other bone-related disorders. "Pharmacological data suggests that S007-1500 possesses potential osteogenic property and shows accelerated fracture repairing by significantly increasing the callus formation at the fracture site in the test models," **CDRI** wrote.
Source: **Knocksense**

Lucknow University, CDRI sign up for mutual exchange programmes

Lucknow University (LU) has joined hands with the **Central Drug Research Institute (CDRI)** for several mutual exchange programmes in research and academic training. LU spokesperson Durgesh Srivastava said that LU and **CDRI** will be conducting collaborative research programmes in specific fields of interest and the submission of collaborative projects for extramural funding (such as CSIR, DST, DBT, ICMR, and other funding agencies). "Also, the collaboration will organise training programmes for postgraduates and research scholars, faculty exchange programmes and sharing of instrumentation facilities," he said. He said that these agreements will help in exchanging knowledge, utilisation of the start-of-the-art facilities for research and improving research quality.
Source: **Daijiworld**

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Source: Thenewsagency

IMTECH-led team on path of developing Parkinson's cure

Indian researchers, led by scientists from Institute of Microbial Technology (IMTECH) in Chandigarh, have in a collaboration with Denmark discovered a molecule which could lead to developing a cure for Parkinson's, a neurodegenerative disease. The study, till now only carried out on mice, has shown promising results for one molecule. The researchers have filed an international patent for four molecules that have potential to provide cure for the disease. The researchers are planning to carry out studies for tolerability of the molecule in animals. If the team, which includes researchers from IIT Bombay, IIT Delhi, **Central Drug Research Institute**, Lucknow and a group in Denmark, manages to provide a cure for Parkinson's, a similar strategy could be explored for Alzheimer's.
Source: Times of India

Liver Cancer Drugs Market Size to Capture USD 9.94 Bn Leading at 14.2% of CAGR by 2032

Liver cancer, responsible for over 800,000 deaths annually, ranks as the fourth leading cause of death worldwide. Public health authorities are deeply concerned about liver cancer due to its increasing incidence and the low 30%–35% projected 5-year survival rate after diagnosis. Primary liver cancer occurs when malignant cells form in the liver tissues. It's important to distinguish primary liver cancer from metastatic cancer, which originates elsewhere in the body and spreads to the liver. **CSIR's** Latest Research Highlights on Liver Cancer Prevention, January 2024 In January 2024, the **Central Drug Research Institute (CDRI)** in India, in collaboration with **CIMAP**, CBMR, and **CSIR-CDRI**, released new findings suggesting that preventing liver cancer may involve targeting metabolic changes in cells. The study, led by Dr. Madhav Nilakanth Mugale of **CSIR-CDRI,** focused on hepatocellular carcinoma (HCC), the most common form of liver cancer. It revealed that cancer cells undergo metabolic reprogramming, which could be utilized for both preventive and diagnostic purposes.
Source: Biospace

Bougainvillea Festival in Lucknow: 'Discovered in Brazil, bougainvillea requires minimal care'

Bougainvillea was first discovered by the French botanist Philibert Commerson in Rio de Janeiro, Brazil in the 1760s, said Radha Rangarajan, a scientist and director of **CSIR-**

CDRI, Lucknow, on Sunday during the Bougainvillea Festival. “The name Bougainvillea was named after his friend sailor Louis de Bougainville,” added Rangarajan while sharing interesting historical facts at the festival organised by **CSIR-NBRI** at its KN Kaul Block Lawn where she was the guest of honour. “The splashing colours of bougainvillea refresh our heart and mind. This plant requires very little care and maintenance. This virtue of the plant can provide us insights to explore climate-resilient features,” said PK Trivedi, director, **CSIR-CIMAP**, who was also the guest of honour at the one-day flower festival.
Source: **Hindustantimes**

CDRI study nails gene playing key role in IBD

CSIR’s Central Drug Research Institute (CDRI) has conducted research on inflammatory bowel disease (IBD), making its treatment easier. The study by a team of 18 scientists and doctors has identified a gene named ORMDL3 in the human body that plays a crucial role in causing IBD. The study has been published in the International Journal of Biological Chemistry. The research was a collaborative effort between **CDRI** scientists, the department of transfusion medicine at King George’s Medical University, Lucknow, and the department of gastroenterology at Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), Lucknow. “The newly discovered gene ORMDL3 can also serve as an indicator of the severity of IBD, enabling us to determine the treatment. For example, a medical practitioner can examine this gene to assess whether it is highly activated or if there are any changes in it or others to diagnose the stage or severity of colitis,” said senior scientist Amit Lahiri, who spearheaded the research. This study holds significance as there is currently no definitive therapy for IBD.
Source: **Times of India**

Students have a date with plants, its science

CSIR-Central Drug Research Institute (CDRI) and **CSIR-National Botanical Research Institute (NBRI)** opened their gates for school students during **CSIR** Foundation Day celebrations held on Friday. At **CDRI**, students learned all about drug discovery, while at **NBRI** they had curious questions related to plant sciences while making a visit to laboratories, the botanic garden, herbarium, exposition and library. As many as 750 students and faculty were invited from across the region, including Sitapur, Hardoi, Rae Bareli, Unnao, Kanpur and Lucknow. "It was a unique opportunity for students to visit the **CDRI** laboratory and explore the world of cutting-edge research and innovation. Students actively participated in a variety of engaging and educational activities aimed at inspiring the next generation of scientists and researchers. Scientists and research scholars of **CDRI** organised a scientific exhibition highlighting the institute's major achievements and a video showcasing **CSIR-CDRI's** accomplishments was displayed in the auditorium," said **CDRI** spokesperson Sanjeev Yadav. He said school students also participated in a range of competitions, including theme-based science projects, quizzes and extempore competitions, while they toured the laboratory and interacted with scientists.
Source: **Times of India**

Zydus ties up with CSIR-CDRI to develop drug for CKD-induced osteoporosis

Zydus Lifesciences on Friday said it has tied up with Lucknow-based **CSIR-Central Drug Research Institute (CDRI)** to develop a drug for chronic kidney disease-induced osteoporosis. A collaborative research agreement was inked between the parties to develop oral medication through the discovery of small molecule inhibitors of Sclerostin, the Ahmedabad-based drug firm said in a regulatory filing. As per the agreement, **CDRI** and Zydus will jointly undertake preclinical research, it said. Any drug candidate emerging from the efforts will be developed by Zydus for India and other markets, it added. "CSIR-CDRI's deep-rooted expertise in biomedical research, coupled with Zydus' innovative approach to drug discovery and development, creates a powerful synergy," Zydus Lifesciences Chairman Pankaj Patel said. Together, the entities will explore new avenues for treating bone metabolism disorders, ensuring that CKD patients have access to effective and affordable therapies that improve their quality of life, he added. Chronic kidney disease (CKD) affects over 10 per cent of the global population, posing significant health challenges. CKD causes a progressive loss of kidney function and can ultimately lead to kidney failure.

Source: **Zeebiz**

छात्र-छात्राएं अनुसंधान और नवाचार से रूबरू हुईं

कार्यालय संवाददाता **सीएसआईआर केंद्रीय औषधि अनुसंधान संस्थान (सीडीआरआई)** का गुरुवार को 83वां स्थापना दिवस मनाया गया। कई स्कूल एवं कॉलेज के छात्रों ने संस्थान की प्रयोगशाला का दौरा कर आधुनिक अनुसंधान और नवाचार के बारे में जानकारी हासिल की। विज्ञान मॉडल प्रतियोगिता में छात्रों ने रचनात्मकता और वैज्ञानिक ज्ञान का प्रदर्शन करते हुए नवाचारी परियोजनाओं को प्रस्तुत किया। केन्द्रीय विद्यालय आरडीएसओ के प्रखर विश्वास एवं देवांश ने प्रथम पुरस्कार जीता। जवाहर नवोदय विद्यालय सीतापुर की मुस्कान एवं अक्षरा को दूसरा और एमिटी इंटरनेशनल स्कूल के लाविष्य बनर्जी, पीयूष शर्मा, अभिराज श्रीवास्तव एवं दीत्या बिष्ट को तीसरा स्थान मिला। जवाहर नवोदय विद्यालय एवं केन्द्रीय विद्यालय एएमसी ने सांत्वना पुरुस्कार जीता। क्विज़ प्रतियोगिता में केन्द्रीय विद्यालय एएमसी के दीपक यादव व वेदांश सिंह को पहला, केन्द्रीय विद्यालय सीआरपीएफ़ बिजनौर की योगिता तिवारी एवं आयुष तिवारी को दूसरा एवं जवाहर नवोदय विद्यालय, पिपरसंडके अमन मिश्रा एवं गौरव राजपूत को तीसरा स्थान मिला। तात्कालिक भाषण प्रतियोगिता में केन्द्रीय विद्यालय सीआरपीएफ़ बिजनौर की शुभांगी त्रिवेदी को प्रथम, केन्द्रीय विद्यालय एएमसी की दीपमाला यादव को दूसरा और जवाहर नवोदय विद्यालय सीतापुर की तन्वी पटेल को तीसरा स्थान मिला।

Source: **Livehindustan**

Blockchain for Impact inks MoU with Central Drug Research Institute to foster biomedical research

Blockchain for Impact (BFI) and **Council of Scientific & Industrial Research (CSIR)-Central Drug Research Institute (CDRI)** have signed a Memorandum of Understanding (MoU) to foster biomedical research and innovation under the aegis of the BFI-BIOME Virtual Network Programme. This partnership will harness the drug research prowess of **CSIR-CDRI** to support the development of indigenous therapeutic interventions for tackling communicable and non-communicable diseases. Under this collaboration, BFI will fund Lucknow-based **CDRI** over three years for conducting upstream research in disease biology and translating the results into therapeutics to face healthcare challenges of the future. With **CSIR-CDRI,** a premier drug research institute of India, now a part of the BFI-BIOME Virtual Network Programme, BFI is positioned to contribute to national health missions and goals.
Source: Biospectrumindia

CDRI finds protein-drug combo to treat osteoporosis induced by chronic kidney disease

After research of five years, **CSIR-Central Drug Research Institute (CDRI)** has discovered that treating the protein 'sclerostin' with a drug can potentially help in treatment of osteoporosis or fractures induced by chronic kidney disease (CKD). Based on the research findings, **CDRI** has partnered with multinational pharmaceutical company Zydus Lifesciences Ltd, Ahmedabad, to develop drugs for treating bone metabolism disorders. The collaboration aims to ensure CKD patients struggling with osteoporosis and fractures have access to effective and affordable therapies that improve their quality of life. CDRI director Radha Rangarajan said, "Chronic kidney disease affects over 10% of the global population, posing significant health challenges. CKD causes progressive loss of kidney function and can ultimately lead to kidney failure. One of the hallmarks of CKD is disruption of mineral metabolism, increasing risk of osteoporosis and fractures. Hence, **CDRI**, along with Zydus, has begun drug discovery for a cure for osteoporosis and fractures triggered by CKD."
Source: Times of India

नवजात शिशु के जीवित रहने की दर बढ़ाता है तत्काल कंगारू मदर केयर

ट्रांसलेशनल लेक्चर श्रृंखला के तहत, **सीएसआईआर- केंद्रीय औषधि अनुसंधान संस्थान** ने वर्धमान महावीर मेडिकल कॉलेज एवं अस्पताल, सफदरजंग, नई दिल्ली की बाल रोग विशेषज्ञ और मातृ-नवजात शिशु गहन देखभाल इकाई की प्रभारी डॉ. सुगंधा आर्या का स्वागत किया। **सीडीआरआई** में तत्काल कंगारू मदर केयर और मदर न्यूबॉर्न केयर यूनिट" पर व्याख्यान आयोजित डॉ. आर्या ने "तत्काल कंगारू मदर केयर और मदर न्यूबॉर्न केयर यूनिट: साक्ष्य से व्यवहार तक की यात्रा" विषय पर एक व्याख्यान दिया। डॉ. आर्या ने भारत में तत्काल कंगारू मदर केयर (iKMC) अध्ययन की नैदानिक अन्वेषक के रूप में अपने कार्य पर प्रकाश डाला, जिसने नवजात शिशु देखभाल तकनीक में क्रांति ला दी है। आईकेएमसी, स्तनपान को बढ़ावा देता है एवं मां-बच्चे के रिश्ते को मजबूत करता है: डॉ. आर्य उन्होंने ऐसे ठोस साक्ष्य प्रस्तुत किए, जो दिखाते

हैं कि जन्म के तुरंत बाद शुरू की गई iKMC तकनीक शिशु के जीवित रहने की दर को बढ़ाती है, यह तकनीक विशेष रूप से स्तनपान को प्रोत्साहित करती है और मां-बच्चे के संबंध को मजबूत बनाती है। डॉ. आर्या ने स्वास्थ्य सेवा प्रणाली में मदर न्यूबॉर्न केयर यूनिट्स (MNCU) को शामिल करने की आवश्यकता पर जोर दिया, जहां मां अपने नवजात शिशुओं के साथ विशेष सुविधाओं में रह सकती हैं और सतत त्वचा से त्वचा की देखभाल प्रदान कर सकती हैं।

Source: **Nationalnewsvision**

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CSIR-Central Electro Chemical Research Institute (CSIR-CECRI)

International meet on nanomaterials ends at VIT-AP University

The valedictory session of a three-day international conference on advanced nanomaterials and applications (ICANA-2024), jointly organised by VIT-AP University and the University of Southern Denmark on July 13 (Saturday) brought together renowned researchers and academicians from around the globe to discuss the latest advancements and applications in nanomaterials. The participants included Yogendra Kumar Mishra, professor at the University of Southern Denmark; Shankara Radhakrishnan, professor at the University of Pretoria, South Africa; M.M. Nayak, professor at Indian Institute of Science (IISc), Bengaluru; G.A. Basheed, principal scientist at Council of Scientific and Industrial Research **(CSIR)-National Physical Laboratory,** New Delhi; Ajeet Kaushik, assistant professor at Florida Polytechnic University, the U.S.; Leo Cristobal C. Ambolode II, professor at Mindanao State University, The Philippines; Aditya Sadhanala, professor at IISc, Bengaluru; Debasis Chaira, professor at NIT-Rourkela; L. Giri Babu, senior principal scientist at **CSIR-IICT**-Hyderabad; Tomoya Ohno, professor at Kitami Institute of Technology, Japan; Deepak Kumar Dubey, development engineer II at First Solar Inc, the U.S.; Somnath C. Roy, professor at IIT-Madras; Vijay Raj Singh, associate professor at Central University of South Bihar, India; N. Lakshminarasimhan, senior principal scientist at **CSIR-CECRI**-Karaikudi; P.K. Khanna, professor at DIAT-Pune; and Pradeep G. Siddheshwar, professor at Christ University-Bengaluru.

Source: **The Hindu**

Ohmium International to double electrolyser manufacturing capacity to 4 GW by 2026

The US-headquartered Ohmium International, a developer of electrolyzer systems for green hydrogen production plans to double the capacity of its electrolyser manufacturing facility near Bengaluru, Karnataka, to 4 giga watts from 2 giga watt, said a company official. On Friday, Ohmium commissioned a new giga factory in Dodaballapura, near Bengaluru. Ohmium designs, manufactures, and deploys advanced Proton Exchange Membrane (PEM) electrolysers. Ohmium's research engagements with India's **CSIR-Central Electrochemical Research Institute (CSIR-CECRI)** and IIT Madras Research Park (IITMRP) enable the rapid transfer of innovation into production to meet the growing demand for green hydrogen projects in India and around the world, the company added.

Source: **Msn**

Dr N. Kalaiselvi: Empowering women in STEM

Dr Nallathamby Kalaiselvi made history when she became the first woman to be appointed Director General (DG) of one of India's premier scientific agencies, the **Council of Scientific and Industrial Research (CSIR),** in 2022. Over her career, she has authored over 125 research papers and holds six patents. In her role as DG of **CSIR**, she oversees the work of 38 laboratories and nearly 4,500 scientists. Dr Kalaiselvi began as a teacher of science and engineering before joining **CSIR's Central Electrochemical Research Institute (CECRI)** in 1997. Over her career, she has significantly contributed to the development of Lithium-ion batteries (LIBs) and energy storage systems in general. Her work includes establishing India's first LIB production facility at **CSIR-CECRI.** Hailing from Ambasamudram in Tamil Nadu, Dr Kalaiselvi's early education in a Tamil medium school fostered her love for science, leading her to earn a B.Sc. from the Government Arts College for Women, Tirunelveli, and an MSc from the Government Arts College, Coimbatore. She later pursued a PhD in synthetic organic chemistry, transitioning to electrochemistry during her time at **CECRI**. Dr Kalaiselvi is also an advocate for gender equality in STEM fields, and has emphasised the need for more women-centric initiatives and support systems to bridge the gender gap in scientific research and academia.
Source: Bestcolleges

IIT Kanpur Hosts BIS – Academia Workshop on Technical Advancements in Powder Metallurgical Processes & Products

The Advanced Centre for Materials Science (ACMS) at the Indian Institute of Technology Kanpur (IITK) and the Bureau of Indian Standards (BIS), New Delhi, organized a BIS-Academia Workshop on 'Technical Advancements and the Role of Standardization in Powder Metallurgical Processes and Products,' in collaboration with the Department of Materials Science and Engineering at IIT Kanpur and the Indian Institute of Metals, Kanpur Chapter. Dr. Mayadhar Debata, Senior Principal Scientist at **CSIR-IMMT,** Bhubaneshwar, discussed the "Development of Non-Ferrous Alloys through Powder Metallurgy" with a special focus on strategic applications. The third lecture, by Dr. Pradyut Sengupta, Senior Scientist at **CSIR-IMMT,** focused on the "Design and Development of Intermetallics and Composites by Powder Metallurgy Route for High-Temperature Strategic Applications," highlighting advanced materials for critical engineering challenges. In the subsequent lecture, Dr. Gururaj Telasang, Scientist E, ARCI Hyderabad, delivered a talk on "Metal Additive Manufacturing: Materials, Processes, and Case Studies," exploring innovative processes for engineering applications. Dr. Deepak Pattanayak, Principal Scientist at **CSIR-CECRI,** discussed the "Application of Metal Additive Manufacturing Technology in the Biomedical Field."
Source: Indiaeducationdiary

Tamil Nadu govt inks pact with Ohmium for Rs 400 cr green hydrogen electrolyser gigafactory

The Tamil Nadu government has inked a pact with US-based Ohmium to set up a new green hydrogen and electrolyser gigafactory in Chengalpattu district of the state. The Memorandum of Understanding (MoU) was signed in the presence of Chief Minister M K

Stalin in San Francisco, on the second day of the CM's US trip, on Saturday. State Minister for Industries, Investment Promotions and Commerce TRB Rajaa and Ohmium Co-Founder and CEO Arne Ballantine were present. Ohmium's proposed Chengalpattu plant will be set up at an estimated cost of Rs 400 crore. The plant is expected to generate 500 jobs, a state government release said. Green hydrogen, a clean energy source that only emits water vapour and leaves no residue in the air, unlike coal and oil, is expected to enable India's transition to clean energy. Ohmium has existing R&D partnerships with the IIT Madras Research Park (IITMRP) and the ICSIR-**Central Electrochemical Research Institute (CSIR-CECRI)** in Karaikudi.
Source: Dtnext

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.
Source: Pib

CSIR Foundation Day Celebrations held in Chennai

The foundation day of **Council of Scientific & Industrial Research (CSIR),** New Delhi, an autonomous organization under Ministry of Science & Technology, Govt. of India, was celebrated with great enthusiasm on 26 September 2024, at the **CSIR** Campus in Taramani, Chennai by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). As a part of the foundation day celebrations Open Day was observed at **CSIR** Campus, Taramani, Chennai, and at TTRS (Tower Testing and Research Station) Campus, Tirusulam, Chennai, **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and Regional Units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML**. All laboratories in the **CSIR** Campus and TTRS were kept open for the general public between 9.30 am and 3:00 pm. Elaborate arrangements were made to receive the visitors. State-of-the-art facilities, Technologies and products were showcased and demonstrated for the benefit of the visitors. More than

9200 people including school and college students, teachers, professionals from the industry, entrepreneurs and the general public visited the campus with great enthusiasm.
Source: Pib

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.
Source: Pib

Media works like a bridge between Science and Society

Science & Technology and Communicators Conclave inaugurated by Dr. Shri Shiv Kumar Sharma, National Organising Secretary, Vijnana Bharati in presence of Dr. Manoj Kumar Patairiya, former Director, **CSIR-NISCAIR** and Dr. K. Ramesha, Director, **CSIR-CECRI.** Issues of the Employment News periodical and Science India magazine released by these guestsin the S&T Media Conclave, an event of India International Science Festival 2024. This largest science festival of India is being organized at IIT Guwahati during 30th Nov to 3rd Dec 2024. Introduction of Media conclave was given by Debobrat Ghose and a Brief on the 2 day event was presented by Dr. Rajeev Singh. Dr. K. Ramesha, Director, **CSIR-Central Electro-Chemical Research Institute**, in his address said “IISF is a science festival is celebrated with people of the country. Media helps to take research into the people. Research done by scientists is mostly understood by research people IISF request media to take the research into the public in the creative ways possible such that public understand the research work. Media is the key to communicate the research to the public. I request every media person to take these things into the public. Dr. Manoj Kumar Patairiya, former Director, **CSIR-NISCAIR** said, “Science Works as Method (methods of science) which includes curiosity, analysis, experimentation and verification. Same applies to Media, and in this way, the process of Media and science is same.
Source: Pib

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: Pib

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CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI)

सीएसआईआर-सीरी में 'सेमिकंडक्टर हाई इम्पैक्ट लर्निंग प्रोग्राम 'शिल्प' के 7वें बैच का प्रशिक्षण संपन्न

केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान (सीएसआईआर-सीरी) में इंजीनियरिंग और विज्ञान विद्यार्थियों के लिए आयोजित महत्वाकांक्षी कार्यक्रम 'सेमिकंडक्टर हाई इम्पैक्ट लर्निंग प्रोग्राम (शिल्प)' के 7वें सत्र का आज समापन हुआ। बैच में गुजरात के गणपत विश्वविद्यालय के एमटेक (वीएलएसआई) के 15 विद्यार्थियों ने प्रशिक्षण प्राप्त किया। सीएसआईआर द्वारा यह महत्वाकांक्षी प्रशिक्षण कार्यक्रम देश में सेमिकंडक्टर उद्योग के लिए कुशल जनशक्ति उपलब्ध कराने के लक्ष्य को ध्यान में रखते हुए 2021 में आरंभ किया गया था।

Source: Samacharjhunjhunu24

नई चीजें सीखने के लिए सदैव इच्छुक रहें और लक्ष्य प्राप्ति के लिए अथक परिश्रम करें- डॉ पंचारिया

सीएसआईआर -केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान (सीएसआईआर-सीरी) में राष्ट्रीय विज्ञान दिवस के अवसर पर "पीएमश्री इंटर्नशिप कार्यक्रम का शुभारंभ किया गया। यह कार्यक्रम **3** मार्च तक चलेगा जिसमें विद्यालयों एवं अन्य शिक्षण संस्थानों के विद्यार्थियों को संस्थान के शैक्षणिक भ्रमण का अवसर दिया जाएगा। राष्ट्रीय विज्ञान दिवस के अवसर पर आयोजित किए गए कार्यक्रम में पीएमश्री जवाहर नवोदय विद्यालय **–** काजड़ा, बिरला पब्लिक स्कूल **–** पिलानी तथा जवाहर नवोदय विद्यालय **–** महेन्द्रगढ़ के **300** से अधिक विद्यार्थियों एवं शिक्षकों ने **सीएसआईआर-सीरी** का शैक्षणिक भ्रमण किया।

Source: The Indian Daily

हीरा आधारित सेमीकंडक्टर प्रयोगशाला स्थापित करने पर करें विचार

सीएसआईआर की महानिदेशक डॉ. **(**श्रीमती**)** एन. कलैसेल्वी**,** सचिव**,** डीएसआईआर**,** विज्ञान एवं प्रौद्योगिकी मंत्रालय**,** भारत सरकार ने **सीएसआईआर-सीईईआरआई(सीरी**), जयपुर परिसर का दौरा किया। परस्पर चर्चा के दौरान डॉ कलैसेल्वी ने सीरी के निदेशक डॉ. पी सी पंचारिया से हीरा आधारित सेमीकंडक्टर प्रयोगशाला स्थापित करने पर विचार करने का आग्रह किया**,** जो भविष्य के सेमीकंडक्टर उद्योग में महत्वपूर्ण भूमिका निभाएगी।

Source: theindiandaily

RU, CSIR CEERI sign MoU for research on semiconductors

With the aim of developing Rajasthan University (RU) as a semiconductor hub, the university on Friday signed a memorandum of understanding (MoU) with **CSIR-CEERI** Pilani. Officials said that RU has decided to start different national skill development courses to promote semiconductor research, training and efficiency in the field of physics and electronics through this joint agreement. Both the institutes are going to start courses like credit, certificate, diploma, faculty training as part of the initiative. The institutes are working to develop lakhs of skilled manpower as semiconductors are used in most electronic devices which are used in the fields of agrotech, biotech, biophysics among others. The course will focus on developing skills to provide employment to the youth of the country.

Source: Times of India

सीएसआईआर-वन वीक, वन थीम कार्यक्रम का हुआ उद्घाटन, जल परीक्षण किट और हिमोग्लेबिन मापन टेक्नोलॉजी को किया ट्रांसफर

सीरी के वैज्ञानिकों द्वारा विकसित हैंड-हेल्ड आईओटी-सक्षम फील्ड-तैनाती योग्य जल परीक्षण किट और हीमोग्लोबिन मापने की हैंड-हेल्ड न्यूनतम इनवेसिव प्रणाली की तकनीकी जानकारी का ट्रान्सफर मेसर्स प्लास्टी सर्ज इंडस्ट्रीज प्रा. लिमिटेड, अमरावती, महाराष्ट्र को किया गया. इस अवसर पर विज्ञान और प्रौद्योगिकी राज्य मंत्री (स्वतंत्र प्रभार) डॉ. जितेंद्र सिंह और डॉ. एन कलैसेल्वी, सचिव, डीएसआईआर और महानिदेशक, सीएसआईआर भी मौजूद थे. सीएसआईआर-'एक सप्ताह, एक थीम' कार्यक्रम के शुभारंभ के अवसर पर सोमवार को इंडिया हैबिटेट सेंटर, नई दिल्ली में आयोजित कार्यक्रम में प्रौद्योगिकी का ट्रान्सफर किया गया. इस मौके पर डॉ. पीसी पंचारिया, निदेशक, सीएसआईआर-सीरी ने मैसर्स प्लास्टी सर्ज इंडस्ट्रीज प्रा. लिमिटेड के अधिकारियों के साथ समझौता ज्ञापन **(MoU)** का आदान-प्रदान किया. कार्यक्रम में सीएसआईआर-सीईईआरआई के प्रौद्योगिकी और व्यवसाय विकास समूह प्रमुख डॉ. मनीष मैथ्यू भी मौजूद रहे.

Source: News18

Chip Manufacturing Will Commence Soon: CM Patel

Gujarat has rolled out a dedicated policy for the semiconductor sector and chip manufacturing will commence soon in the state, Chief Minister Bhupendra Patel said on Friday, assuring that his government will provide necessary assistance to the industry. Patel was speaking after inaugurating the daylong Gujarat SemiConnect Conference 2024, covering various avenues of the semiconductor sector, at the Mahatma Mandir convention centre. Nirma inks MoU with **CSIR-CEERI** to boost semicon learning In a bid to enhance the learning experience of students while pursuing research in semiconductors, city-based Nirma University signed a Memorandum of Understanding (MoU) with **CSIR-Central Electronics Engineering Research Institute,** Pilani on Friday. University officials said the MoU aims to enhance the learning experience by

offering students from Gujarat access to world-class facilities and hands-on experience in cutting-edge semiconductor research.
Source: Ahmedabadmirror

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

Council Scientific and Industrial Research (CSIR)-National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the **NPL** campus, as part of its 'One Week One Theme' initiative with participating labs **CSIR-CSIO, CSIR-CEERI**, and **CSIR-IIP**. Prof. Venugopal Achanta, Director of **CSIR-NPL**, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of **CSIR-NAL** and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme. Dr. P. C. Panchariya, Director of **CSIR-CEERI,** highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.
Source: Pib

सीएसआईआर-सीरी में 72वां स्थापना दिवस: कार्यक्रम में वक्ताओं ने कहा "केवल सीएसआईआर प्रयोगशालाएं ही कर सकती हैं देश के समक्ष खड़ी चुनौतियों का समाधान"

भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के अधीन सेवारत **वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (सीएसआईआर)** की पिलानी स्थित राष्ट्रीय अनुसंधान प्रयोगशाला **सीएसआईआर-केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान (सीएसआईआर-सीरी)** के 72वें स्थापना दिवस पर आज समारोह का आयोजन किया गया। इस अवसर पर प्रोफेसर चंद्रभास नारायण (निदेशक, आरजीसीबी) मुख्य अतिथि थे। डॉ. कन्नन श्रीनिवासन (निदेशक, **सीएसआईआर-सीएसएमसीआरआई,** भावनगर) एवं डॉ ज़बीर अहमद (निदेशक, **सीएसआईआर-आईआईआईएम**, जम्मू) समारोह के विशिष्ट अतिथि थे। आयोजन की अध्यक्षता **सीएसआईआर-सीरी** के निदेशक डॉ पी सी पंचारिया ने की। इस अवसर पर मुख्य अतिथि प्रोफेसर चंद्रभास नारायण ने अपने उद्बोधन में देश के औद्योगिक, कृषि एवं वैज्ञानिक विकास पर प्रकाश डालते हुए **सीरी** संस्थान द्वारा कोर इलेक्ट्रॉनिक्स के साथ अन्य विभिन्न क्षेत्रों में किए जा रहे शोध कार्यों की सराहना की। उन्होंने **सीरी** और आरजीसीबी के शोध सहयोग की संभावनाओं की चर्चा करते हुए संस्थान के वैज्ञानिकों को इस नवीन शोध यात्रा का सहभागी बनने के लिए आमंत्रित किया। **सीएसआईआर** प्रयोगशालाओं की शोध विविधताओं पर प्रकाश डालते हुए उन्होंने कहा कि देश के समक्ष खड़ी चुनौतियों का समाधान केवल **सीएसआईआर** प्रयोगशालाएँ ही कर सकती हैं, आईआईटी जैसे शीर्ष

शिक्षण या शोध संस्थान नहीं। उन्होंने संस्थान के वैज्ञानिकों का आह्वान किया कि वे अपने नवाचारों से देश को लाभान्वित करें। उन्होंने सीरी के निदेशक व सभी कर्मचारियों को स्थापना दिवस की शुभकामना दी।

Source: **Samacharjhunjhunu24**

AI से होगी दूध में मिलावट और गुणवत्ता की जांच, राजस्थान में हुए इस इनोवेशन के बारे में आप भी जान लीजिए

अब एआई से दुध में मिलावट और गुणवत्ता की जांच संभव हो सकेगी। ऐसी तकनीक राजस्थान के झुंझुनूं जिलेे के पिलानी कस्बा में सन् 1953 में स्थापित केन्द्रीय **इलेक्ट्रोनिकी अभियांत्रिकी अनुसंधान संस्थान (Central Electronics Engineering Research Institute)** ने ईजाद की है। इसके लिए खास मशीन बनाई गई है, जिसे इंस्टीट्यूट ने जयपुर स्थित केआर इलेक्ट्रॉनिक्स इंडस्ट्रीज को दिया है। इस तकनीक को **सीएसआईआर-सीरी (CSIR-CEERI)** ने तैयार किया है। बताया जा रहा है कि इन प्रौद्योगिकियों में एआई-सक्षम दूध घनत्व प्रणाली (AI-enabled Milk Density System) और एआई-सक्षम क्षीर स्कैनर (AI-enabled Ksheer Scanner) शामिल हैं। ये अत्याधुनिक प्रौद्योगिकियां आर्टिफिशियल इंटेलिजेंस की सटीकता के साथ डेयरी प्रोडक्ट्स के गुणवत्ता नियंत्रण को बेहतर बनाने की दिशा में एक क्रांतिकारी कदम है। बताया यह भी जा रहा है कि यह आधुनिक तकनीक आर्टिफिशियल इंटेलिजेंस की सटीकता के साथ डेयरी प्रोडक्ट्स के गुणवत्ता नियंत्रण को बेहतर बनाने की दिशा में एक कदम साबित होगी।

Source: **Navbharattimes**

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.

Source: **Pib**

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक, शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.

Source: **Indias.news**

सीएसआईआर-सीरी में आयुर्वेद चिकित्सा शिविर का आयोजन:125 लोगों को परामर्श दिया, औषधियां भी वितरित की

9वें राष्ट्रीय आयुर्वेद उत्सव के उपलक्ष्य में **सीएसआईआर-सीरी,** पिलानी में आज आयुर्वेद विभाग, झुंझुनू के सहयोग से नि:शुल्क आयुर्वेद चिकित्सा परामर्श शिविर और औषधि वितरण शिविर का आयोजन किया गया। शिविर में राजस्थान आयुर्वेद विभाग, झुंझुनूं के उपनिदेशक डॉ. रमेश कुमार शर्मा, ब्लॉक आयुर्वेद चिकित्सा अधिकारी डॉ. जगदीश चौधरी, एवं डॉ. निशा ने अपनी टीम के साथ सेवाएं दीं। इस अवसर पर डॉ. रमेश पी जाजू ने भी शिविर में रोगियों को परामर्श दिया। **सीएसआईआर-सीरी** निदेशक डॉ. पीसी पंचारिया ने चिकित्सा शिविर का उद्घाटन किया। **सीरी** संस्थान परिसर के गांधी हॉल में आयोजित इस आयुर्वेद चिकित्सा शिविर में 125 से अधिक कर्मचारियों, उनके परिजनों एवं सेवानिवृत्त कर्मचारियों व अन्य लोगों ने चिकित्सा परामर्श के साथ औषधियां प्राप्त की। इस अवसर पर डॉ. पीसी पंचारिया ने आयुर्वेद चिकित्सा पद्धति के महत्व एवं आयुर्वेद के क्षेत्र में शोधरत सीएसआईआर प्रयोगशालाओं का उल्लेख किया। आयुर्वेदाचार्य डॉ. रमेश कुमार शर्मा ने आयुर्वेद के प्रचार-प्रसार पर प्रकाश डालते हुए कहा

कि न केवल सरकार इस दिशा में प्रयासरत है, बल्कि नवीन अनुसंधानों के बल पर यह पद्धति बहुत तेजी से आगे बढ़ रही है।

Source: Janmanasshekhawati

CSIR develops device to run health diagnostics, test adulteration

Institutions of the **Council of Scientific and Industrial Research (CSIR)** have designed 'FluoriPCR', a device which is expected to revolutionise health diagnostics and testing of food commodities. Developed by the **CSIR– Indian Institute of Toxicology Research (CSIR - IITR)** and **CSIR – Central Electronics Engineering Research Institute, Pilani (CEERI),** the FluoriPCR integrates four machines used for biochemical and molecular testing in health, diagnostics and food safety. **CSIR-IITR** director, Dr Bhaskar Narayan, said that the device has been developed as part of **CSIR-IITR's** Advancing Technological Leads for Assuring Safety of Food (ATLAS) under **CSIR's** Mission Mode Project. **CSIR-IITR** has tested FluoriPCR for identifying mixing in meat products and the authenticity of meat species. Buying equipment for carrying out these tests is generally expensive and costs about ₹35 lakh collectively. On the other hand, this device can be made available at ₹1-1.5 lakh, a scientist involved in the innovation process said. "Analysing samples with the machine developed, **CSIR-IITR** has detected contamination or mixing in meat products and the authenticity of four meat species. This helps us to find if the sample is mixed with undesired meat components," said a scientist from **CSIR-IITR.**

Source: Hindustantimes

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.

Source: Pib

C-DOT and CSIR-CEERI signs agreement for "Development of Multiport Switch with Tuneable Impedance Matching Network for a Single Broadband Antenna to Cover 2G, 3G, 4G and 5G Bands"

In alignment with the "Bharat 6G Vision", "Made in India" and self-reliant India, Centre for Development of Telematics (C-DOT), the premier Telecom R&D centre of the Department of Telecommunications (DoT), Government of India has signed an agreement with **CSIR-Central Electronics Engineering Research Institute (CEERI),** Pilani for the development of "Multiport Switch with Tuneable Impedance Matching Network for a Single Broadband Antenna to Cover 2G, 3G, 4G and 5G Bands." The project is funded under the Telecom Technology Development Fund (TTDF) scheme of the Department of Telecommunications, Government of India This scheme, designed to fund Indian startups, academia, and R&D institutions, is a crucial enabler for designing, developing, and commercializing telecommunication products and solutions. and will focus on developing a Microelectromechanical technology-based switching network to cover multiple communication bands with enhanced antenna performance. The agreement was signed during a ceremony attended by the Director of C-DOT - Dr. Pankaj Kumar Dalela, Dr. Deepak Bansal, the principal investigator from **CSIR-CEERI**, Pilani. At the event, Dr. Bansal appreciated DOT and C-DOT for the collaborative opportunities and their effort in building modern infrastructure and advanced research capabilities in the telecom sector across the country.

Source: Pib

हो गया समझौता 2जी, 3जी, 4जी और 5जी बैंड को कवर करेगा एकल ब्रॉडबैंड एंटीना, जानें क्या है मल्टीपोर्ट स्विच

भारत सरकार के प्रमुख दूरसंचार अनुसंधान एवं विकास केंद्र, टेलीमेटिक्स विकास केंद्र (सी-डॉट), ने **केंद्रीय इलेक्ट्रॉनिक्स इंजीनियरिंग अनुसंधान संस्थान (सीईईआरआई)**, पिलानी के साथ **2**जी, **3**जी, **4**जी और **5**जी बैंड को कवर करने वाले एकल ब्रॉडबैंड एंटीना के लिए ट्यूनेबल इम्पेडेंस मैचिंग नेटवर्क के साथ मल्टीपोर्ट स्विच का विकास करने के लिए समझौते पर हस्ताक्षर किए है. यह समझौता भारत **6**जी विजन और मेड इन इंडिया और आत्मनिर्भर भारत के अनुरूप हुआ है. इस परियोजना की स्पांसर भारत सरकार के दूरसंचार विभाग है. विभाग इसे दूरसंचार प्रौद्योगिकी विकास कोष (टीटीडीएफ) के तहत फंड कर रहा है. भारतीय स्टार्टअप, शिक्षाविदों और अनुसंधान एवं विकास संस्थानों को वित्त पोषित करने के लिए तैयार की गई यह योजना दूरसंचार उत्पादों और समाधानों के डिजाइन, विकास और व्यावसायीकरण के लिए एक महत्वपूर्ण कदम है. यह उन्नत एंटीना प्रदर्शन के साथ कई संचार बैंडों को कवर करने के लिए एक माइक्रोइलेक्ट्रोमैकेनिकल प्रौद्योगिकी-आधारित स्विचिंग नेटवर्क विकसित करने पर ध्यान केंद्रित करेगी.

Source: Etvbharat

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: Pib

Gujarat: 200 researchers to take part in 33rd Asian Test Symposium

Over 200 researchers will take part in the 33rd Asian Test Symposium (ATS-2024) — an event in the field of semiconductor design, fabrication, and testing — to be organised by the Nirma University, Ahmedabad, from December 17 to 20. Researchers from countries such as the USA, Germany, Japan, France, Singapore, and Taiwan, along with industry giants such as Cadence, Texas Instruments, Synopsys, QuantumAI, and eInfochips, will take part in the event. Indian research organisations such as **CSIR, CEERI,** SAC, and ISRO will also showcase their advancements in the semiconductor domain. The symposium boasts a rich technical programme, including eight pre-conference tutorials, 12 keynote speeches by global experts, a panel discussion, special sessions, fireside chats, industry forums, and over 60 paper presentations. During the symposium, contributors to the semiconductor field will also be felicitated.

Source: Indianexpress

Go Back

CSIR-Central Food Technological Research Institute (CSIR-CFTRI)

Study on cardiometabolic health status of CSIR-CFTRI employees undertaken

Phenome-India and **Council of Scientific and Industrial Research (CSIR)** Cohort Knowledge base (PI-CheCK) multi-institutional project on health status of employees of **CSIR-CFTRI,** Mysuru, was held here.Inaugurated by **CSIR-CFTRI** director Sridevi Annapurna Singh, the six-day comprehensive health check-up camp at the **CFTRI** campus was conducted from February 22 and 27.
Source: **The Hindu**

Health camp held at CFTRI

Mysuru: A multi-institutional project on health status of the employees of CFTRI, Mysuru, was inaugurated by the CFTRI director Sridevi Annapuna Singh. The six-day comprehensive health checkup camp at the CFTRI campus concluded on Tuesday.
In order to study the cardiometabolic health status and predicting possible risk of communicable and non-communicable diseases of employees and their spouses, this project is being implemented across all the 37 laboratories of CSIR.

Role of higher education in nation-building, scientific mindset in youth emphasised

The **CSIR-Central Food Technological Research Institute (CSIR-CFTRI)** in Mysuru celebrated National Science Day recently. It is celebrated in honour of Nobel laureate Sir C.V. Raman on February 28 every year to commemorate the discovery of Raman Effect by Sir C.V. Raman in 1928. This discovery earned him the Nobel Prize in Physics in 1930, the institute said. The theme of this year's National Science Day was "Indigenous Technologies for Viksit Bharat". The theme underscores the critical role Science and Technology plays in tackling global challenges and creating a more sustainable future for all. The theme focuses on areas like climate change, resource depletion, environmental degradation and sustainable development. The event, was inaugurated by S.R. Niranjana, Vice-Chairman, Karnataka State Higher Education Council.
Source: **The Hindu**

Guyanese delegates learn rice milling tech at CFTRI Mysuru

CSIR-CFTRI successfully organised the training programme on "Rice Milling and Value Addition to Rice" for the Guyanese delegation under the Indian Technical and Economic Co-operation (ITEC) programme sponsored by the Ministry of External Affairs (MEA), Government of India during February 27 to March 18. India has a long tradition of sharing knowledge and in 1964 it formally launched the ITEC programme which is the flagship programme for capacity building of our partner countries. Through this, India, with a sense of solidarity, would share her experiences of learning with other developing nations, building partnerships to fight poverty and backwardness and thus progress together.

Building on India's vast and rich network of governance and development related expertise available in higher educational institutions and training facilities, ITEC offers nearly 10,000 fully-funded in-person training opportunities through nearly 400 courses offered at 100+ eminent institutes in India each year along with a chance to experience the culture and hospitality of India, a press release said here.
Source: The Hindu

CFTRI Celebrates Women Achievers

As part of International Women's Day 2024, **CSIR-Central Food Technological Research Institute (CFTRI),** Mysuru, celebrated "She Leads: Celebrating Women Achievers" function recently. International Women's Day theme for 2024 is 'Invest in Women: Accelerate progress." Also, 'Inspire inclusion" is the campaign theme for Women's Day, which emphasises the importance of diversity and empowerment in all aspects of society. Dr. S. Rathnamma, Research Associate, JSS, Mysuru and Prema N. Mahendrakar from Mysuru, were the chief guests. Dr. Sridevi Annapurna Singh, Director, **CSIR-CFTRI,** presided. Dr. Poornima Priyadarshini, Principal Scientist, **CFTRI**, welcomed. One of the chief guests Dr. Rathnamma is the first woman from Soliga community in Karnataka to earn a Ph.D. She works with Sai Pragathi Foundation to educate tribals, empower women and organise vocational training for women.
Source: Starofmysore

CFTRI's courses to enhance skills, aid start-up ventures

CSIR-Central Food Technological Research Institute (CFTRI), Mysuru has announced the calendar for short-term courses for 2024-25. The institute is organising 27 regular training programs, skill development programs, and short-term courses this financial year under **CSIR** Integrated Skill Initiative, encompassing all the major areas in food science and technology. The major attraction of these courses is their short duration, but it is intensive and packed with lectures and demonstrations. Due to its short duration and condensed, focused, and capsulated syllabus, the short-term courses are well received by students, academicians, employed, and entrepreneurs who cannot spare much time. At the same time, these programs are extremely beneficial for unemployed youth to enhance their employability skills or entrepreneurial aspirants to establish their startup venture based on food processing, a press release said here.
Source: The Hindu

Natl. Technology Day At CFTRI On May 13

CFTRI has organised National Technology Day celebrations at its Cheluv-amba Hall on May 13 at 4 pm. Arjun Ranga, CEO & Managing Director of N. Ranga Rao & Sons, Mysuru, will be the chief guest. Dr. Sridevi Annapurna Singh, Director, **CSIR-CFTRI,** will preside. Dr. Aashitosh A. Inamdar, Head, Technology Transfer & Business Development (TTBD) Department, CFTRI, will speak on Technology Day.
Source: Starofmysore

More women turning entrepreneurs to commercialise CFTRI technologies

The National Technology Day was observed at the **CSIR-Central Food Technological Research Institute (CFTRI)** here on Monday. Arjun Ranga, partner of NR Groups – the makers of Cycle Pure Agarbathi and CEO and Managing Director, N. Ranga Rao, and Sons Pvt Ltd., Mysuru was the chief guest. **CSIR-CFTRI** director Sridevi Annapurna Singh presided over the event and Aashitosh A. Inamdar, Head, TTBD Department, **CFTRI** was present. The event also witnessed the exchange of project and technology agreements, distribution of appreciation certificates to Science and Technology team of the institute for their outstanding work last year, and distribution of certificates to licensees who have availed the **CFTRI** technologies for commercialisation. Speaking on the occasion, Ms. Sridevi Annapurna Singh said 122 technologies had been transferred to 83 licencees last year by the **CSIR-CFTRI.**
Source: The Hindu

12 new technologies developed at CSIR-CFTRI

On the occasion of the National Technology Day, **CSIR-CFTRI**, Mysuru on Monday announced that it has developed 12 new technologies during the year 2023-24. With this, the number of technologies developed by the premier food technological institute has gone to 432. The new technologies include ragi-based malt hydrolysate, malted ragi-based ready-to-eat weaning food, a process for production of multigrain waffles, and multigrain pizza base. The focus of the technologies was on millets since 2023 was the International Year of Millets. Other technologies are finger-millet semolina, instant finger-millet ragi rava idli mix, instant finger-millet halwa mix, instant finger-millet upma mix, millet and multi millet puttu podi mix, cleaner process for biotechnological production of spirulina, and ready-to-use multigrain idli and dosa batter in retail packs.
Source: The Hindu

CSIR-CFTRI Short-Term Courses for 2024-25

CSIR-Central Food Technological Research Institute (CFTRI), Mysuru, has announced the calendar for Short Term Courses for the year 2024-25.The Institute is organising 27 regular training programmes/Skill Development Programmes/Short Term Courses in this financial year under **CSIR** Integrated Skill Initiative, encompassing all the major areas in Food Science and Technology.The major attraction of these courses is of its short duration, but intensive and packed with lectures and demonstrations. Due to its short duration and condensed, focused and capsulated syllabus, the short-term courses are well received by students, academicians, employed and entrepreneurs who are unable to spare more time. At the same time, these programmes are extremely beneficial for unemployed youth to enhance their skill towards employability or entrepreneurial aspirants to establish their start-up venture based on food processing.
Source: Starofmysore

CSIR-CFTRI ups attention to role of biochemistry, food science and nutrition as food for future

CSIR-CFTRI is reinforcing its focus on the role of biochemistry, food science and nutrition as the food for future. In food preservation and safety biochemistry plays a crucial role. This has led the Mysuru-based institute shore up its attention to specific areas such as spices, carbohydrate chemistry and novel enzymes. It also makes it imperative to develop effective preservation methods because biochemical reactions are involved in food spoilage and degradation. For instance, canning relies on the principles of heat processing to destroy harmful microorganisms such as bacteria, yeasts, and moulds that can spoil food and cause foodborne illnesses. The heat disrupts the cellular structures of microorganisms, rendering them inactive and preventing spoilage. Freezing too slows down biochemical reactions by lowering the temperature, thus reducing the rate of microbial growth but it may not completely halt enzymatic reactions, which can still lead to quality deterioration over time, according to experts.
Source: Fnbnews

CFTRI ready to take up industrial-funded projects, says director

CSIR-CFTRI Director Sridevi Annapurna Singh said that the linkage between past, present and futuristic research should not be forgotten and added that **CSIR-CFTRI** has been always been at the forefront with respect to basic, technological and translational research in various facets of food science and technology. She was speaking at a symposium on 'Food for our Future: The Role of Biochemistry, Food Science and Nutrition' on the **CSIR-CFTRI** campus here recently. She said **CSIR-CFTRI** is ready to take up industrial-funded projects and added that the know-how of many bioactive molecules isolation and their associated technologies are ready for industrial transfer. "**CSIR-CFTRI** is not only doing intra-institutional research but also inter-institutional work both on the national and international fronts," she said.
Source: The Hindu

Symposium on biochemistry, food science and nutrition conducted at CFTRI

The Society of Biological Chemists (India), Mysuru Chapter, in association with **CSIR-CFTRI,** Mysuru, and AFST (I), conducted a symposium on 'Food for our Future: The Role of Biochemistry, Food Science and Nutrition' at IFTTC auditorium on the CSIR-CFTRI campus here recently. It was organised on the occasion of the birth centenary year {1924-2024} of late Dr. M.R. Raghavendra Rao, late Dr. H.S.R. Desikachar, late Dr. M.S. Narasinga Rao, formerly deputy directors. G. Muralikrishna, former Chief Scientist and Head, Department of Biochemistry, spoke about the event and the scientists in whose honour it was held. The symposium was inaugurated by V. Prakash, former director of **CSIR-CFTRI** and former distinguished scientist of **CSIR.** Former Chief Scientists and Heads of Biochemistry, Grain Science Technology and Protein Chemistry and Technology of **CSIR-CFTRI** spoke about their close rapport with the centenarian scientists, a press release said here.
Source: The Hindu

CFTRI campus in Mysuru may soon become a 'zero-waste' campus

Sridevi Annapurna Singh, Director, **CSIR-CFTRI,** Mysuru, on Wednesday said efforts are on to make the CFTRI a “zero-waste campus” and develop alternatives to plastic for food packaging as a measure to address plastic pollution and climate change. While speaking on the effects of microplastics on the body, food chain, carbon footprint, waste generation, and implementation of solar energy on the campus, Dr. Singh, during the World Environment Day celebrations, said the **CSIR-CFTRI** campus has a large tree cover which makes it cooler, with the temperature lower by around two to three degrees when compared to that outside the campus. The management has commended all the agri-horticulture staff and the others associated with the institute for keeping the **CFTRI** campus neat and green through their hard work, she said. The Director spoke on climate change, biodiversity, pollution control, and the dangers of conversion of productive land into deserts, and said the p
Source: The Hindu

India loses 25 to 50 pc of fruits and vegetables and 10 to 30 pc of grains worth Rs 60k crore per year : CFTRI Expert

Central Food Technological Research Institute (CFTRI) Senior Principal Scientist K. Sathiyamala, on Thursday, said India loses 25 to 50 percent of the fruits and vegetables, 10 to 30 percent of the grains and oil seeds in the post-harvest chain. These losses translate to a whopping monetary loss worth Rs 60,000 crore per year Sathiyamala said while addressing a Workshop on "Opportunities in Food Processing" organized by FTCCI here. In India, the annual consumption of value-added food alone is greater than Rs 2.25,000 crore per year, she said. **CFTRI** has introduced many innovative food products such as sugar cane powder, egg cubes similar to paneer, millet noodles, chicken, mutton, and fish wafers, the Scientist said. The workshop was inaugurated by FTCCI President Meela Jayadev and Dr. S.V.N. Vijayendra, Head & Sr. Principal Scientist, **CFTRI**.
Source: Uni India

Students from Karnataka, Gujarat, Tamil Nadu get lessons on food safety in Mysuru

CSIR-Central Food Technological Research Institute (CFTRI), Mysuru, observed World Food Safety Day by organising interactions and demonstrations for the benefit of students. The theme of World Food Safety Day-2024 is ‘Food Safety: Prepare for the Unexpected’. This year’s theme emphasises the significance of being ready for food safety incidents, regardless of their severity, the institute said. World Food Safety Day was announced by the United Nations General Assembly in December 2018. It was first celebrated on June 7, 2019. The day aims to raise awareness about the importance of food safety and to encourage actions that help prevent, detect, and manage food-borne risks, it stated. In view of this, **CSIR-Central Food Technological Research Institute**, which is a constituent laboratory of Council of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, observed the day on its campus recently.
Source: The Hindu

Mysuru, the yoga hub, celebrates Yoga Day with exuberance

The Mysuru railway division and the **CSIR-CFTRI** join the celebrations, giving a call for practising yoga daily for various health benefits The International Day of Yoga (IDY-2024) was celebrated across Mysuru city with exuberance, promoting the ancient art for establishing a healthy living. The Mysuru division of South Western Railway marked International Yoga Day with great enthusiasm, aligning with this year's theme, "Yoga for Self and Society." The event, aimed at promoting global peace, harmony, and progress, was held at the Railway Kalyana Mantap in Yadavagiri here. The celebration was inaugurated by Divisional Railway Manager, Shilpi Agarwal. In her address, Ms. Agarwal outlined the numerous benefits of yoga, urging railway employees and their families to integrate regular yoga practice into their lives. She elaborated on the relevance of yoga in today's fast-paced world, emphasising the necessity of continuous practice to achieve holistic well-being.

Source: The Hindu

Australian Delegation Visits CSIR-CFTRI

A delegation from Australian Consulate-General, Bengaluru, headed by Hilary McGeachy, Consul General; Andrew Collister, Consul and Steffi Cherian, Strategic Communication & Public Diplomacy Officer, visited **CSIR-CFTRI** here on June 19. The team interacted with scientific staff for exploring collaborations in the areas of Agro-Food Processing Technologies, Infestation control, Food Security and HRD activities. The Consul General appreciated **CFTRI's** role in Food Technology and Food Processing sectors and its efforts to reach out to society in large and common man in particular. The team also visited some of the facilities in the Campus such as **CFTRI** Showcase and Millet Showcase, according to a press release from Dr. Parigi Ramesh Kumar, Senior Principal Scientist, Technology Transfer & Business Development Coordinator (ISTU), **CSIR-CFTRI.**

Source: Starofmysore

Ensuring Food Security: India and Australia Spearhead Innovations in the Global Wheat Industry

Global wheat leaders convened at the Global CEO Conclave on wheat to address pressing challenges and forge strategic partnerships in the wheat industry. Highlighting the pivotal roles of India and Australia, Mr. John Southwell, Trade and Investment Commissioner at the Australian Trade and Investment Commission, emphasized collaborative efforts to bolster food security through sustainable practices and technological advancements. The conclave, inaugurated by Mr. Pramod S Jain, President of the Roller Flour Millers' Federation of India (RFMFI), showcased advancements in food technology, emphasizing innovations in milling, baking, and food fortification. Dr. Sridevi Annapurna Singh of **CSIR-Central Food Technological Research Institute,** Mysuru, underscored the transformative impact of these technologies on wheat products' quality and nutritional value. Mr. Preet Pal Singh, IFS, Joint Secretary at the Ministry of Food Processing Industries (MoFPI), Government of India, outlined governmental initiatives to

bolster the food processing sector, reinforcing India's commitment to sustainable agriculture and enhanced food security.
Source: Taasir

CSIR funds Rs. 100 crore for Phenome India Health Cohort Knowledge base project

The **Council for Scientific and Industrial Research (CSIR)** will soon launch the Phenome India Health Cohort Knowledge base multi-institutional project on health status for the employees of **CSIR-CFTRI (Centre for Food Technological Research Institute)** which is open to join hands to take up a collaborative project with its sister laboratories under the **CSIR** umbrella in the frontier area of science & technology. This project of **CSIR** funded with Rs. 100 crore for five years is coordinated by **CSIR-Institute of Genomics & Integrative Biology (IGIB)** under the leadership of Dr. Shantanu Sengupta, chief scientist and project coordinator. This is a first-of-its-kind initiative aimed to establish baseline data on the prevalence of various disorders and lifestyle diseases in the Indian population. By doing so, the study will provide valuable insights into the health status of different individuals within this demographic. The baseline data is crucial for understanding the current health challenges and trends, which can then inform public health policies, interventions, and healthcare strategies tailored to the specific needs of the population.
Source: Pharmabiz

CFTRI Promotes Farmer Products

CSIR-CFTRI Director Dr. Sridevi Annapoorna Singh said that the **CFTRI** has 432 different types of technologies and the Institute has been promoting farm produces and products over the years. She was speaking after inaugurating 'Nam Company', an Akashavani serial broadcast on empowerment of Farmer Producers Organisations, at a programme jointly organised by **CFTRI**, Department of Journalism and Mass Communication, University of Mysore (UoM) and Mandya based Vikasana Grameena Mathu Nagaraabhivruddhi Samsthe, at B.N. Bahadur Institute of Management Sciences on Hunsur road here recently. Pointing out that farm products promoted by the **CFTRI** are now available at Amazon and Flipkart, Dr. Annapoorna Singh said that the **CFTRI** has been introducing newer technologies to farmers and it has trained over 700 farmers in this regard thus far, who in turn, have trained thousands of other farmers.
Source: Starofmysore

Networking meeting for food start-ups at CFTRI

The Atal Incubation Centre of Coffee Board (AIC-CCRI-CED) and BioNEST Incubation Center of **CSIR-CFTRI**, Mysuru, are jointly organising a networking meeting for food start-ups, entrepreneurs, and investors. The meeting will be held on July 26 on the **CFTRI** campus from 9.30 a.m. and 12.30 p.m. Interested startups, incubators, industry experts, investors, and startup ecosystem enablers in the food and beverage domain can attend the meeting. The event is free of cost, but registration is mandatory. For more details and registration, contact: +91-9738342249/+91-9741290109. BioNEST incubation Also, the

CSIR-CFTRI is inviting applications from food startups for its BioNEST incubation center. Startups working in food formulation, biotechnology, bioprocessing, and related domains are encouraged to apply. Supported by BIRAC, **CSIR-CFTRI** Bio-NEST is dedicated to nurturing and supporting food startups, providing access to mentorship, instrumentation, pilot plant facilities and other resources, a press release said here.
Source: **The Hindu**

Wayanad landslides: CFTRI sends nutri-rich food products for survivors, rescuers

The Mysuru-based **CSIR-Central Food Technological Research Institute (CFTRI)** has extended its helping hand to the survivors and rescuers of the devastating landslides that hit Wayanad district in Kerala. The institute said heavy rains and flash floods triggered multiple landslides in Wayanad July 30, washing away three villages of Wayanad - Punjirimattom, Mundakkai, and Chooralmala and affecting nearby villages Meppadi, Attamala and Kunhome. Quoting the statement of Kerala Chief Minister Pinarayi Vijayan, it said over 9,300 people are staying in 91 relief camps. Under the leadership of Director Sridevi Annapurna Singh, **CSIR-CFTRI** has sent three batches of nutritionally-rich food products to the relief camps of Wayanad - first batch was sent on August 2, and the subsequent batches were sent on August 5 and 7, respectively.
Source: **The Hindu**

Mysuru's CSIR-CFTRI sends nutritionally rich food products to Wayanad survivors and rescuers

CSIR-Central Food Technological Research Institute (CFTRI) of Mysuru has extended its helping hand for the landslide survivors and rescuers of Wayanad in Kerala, by sending nutritionally rich food products to the relief camps there.
Based on requests for foods with longer shelf life and those which provide immunity, they have sent various food items including Nutra Spirulina Chikki, Fortified Mango Bar, Energy and Protein rich Burfi for children, Gluten-free Ragi biscuits, Ragi Beverage Mix, Millet Upma Mix, Kokum fruit bar, Amla candy, Tamarind candy, High-protein rusks, Sambar mix, Instant sambar powder, Infant food formula for 6 to10 months old babies and more. These food products are indigenously developed using **CSIR-CFTRI** technologies. They are enriched with higher concentrations of beneficial proteins, and fortified with vital vitamins and minerals, which will help in avoiding malnutrition and improve immunity among the affected. Some of the food products were ready-to-eat and ready-to-cook.
Source: **Deccanherald**

Independence Day celebrations at Cheluvamba Mansion in CFTRI

On the occasion of the 78th Independence Day celebrations at the **CSIR-CFTRI** here on Thursday, Sridevi Annapurna Singh, director, **CSIR-CFTRI** hoisted the national flag in front of the Cheluvamba Mansion in the campus. After unfurling the tricolour, the **CFTRI** school students took part in a march past and rendered a guard of honour. Addressing the gathering of students, staff, and retirees, Dr. Singh spoke on the role of people in the

freedom movement, especially freedom fighters, and also the importance of science and technology in building the nation after independence. She also spoke about the achievements of **CFTRI** in the years 2023-2024 and they included R&D projects, collaboration with industries, MoU agreements, corporate social responsibility (CSR), and also societal role in serving the nation. She commended the entire staff of **CFTRI** for extending a helping hand, preparing and supplying relief supplies like food materials and sanitizers to the people in landslide-hit Wayanad.
Source: The Hindu

CSIR talk on AIR by Dr. Prakash

CSIR-CFTRI's Akashavani series on Food Science (in Kannada language) titled "**CFTRI** Shodha Anushodha" is a very popular AIR programme from Mysore Akashavani. Dr. V. Prakash, former Director, **CFTRI** & Distinguished Scientist, **CSIR**, will be delivering a talk in the 57th episode of "**CFTRI** Shodha Anushodha" series on Aug. 17 (Saturday) at 6.35 am and repeat at 6.10 pm under FM 100.6 frequency of All India Radio, Mysuru.
Source: Starofmysore

Women in rural areas show exceptional resilience: Rathnaprabha

Extraordinary resilience among rural women, who manage multiple responsibilities despite numerous challenges, was praised by former Chief Secretary K Ratnaprabha at the Global Conference on Women in Agribusiness, part of Agritech India 2024, held at the Bangalore International Exhibition Centre (BIEC) on Thursday. DrSridevi Annapurna Singh, Director of the **Central Food Technological Research Institute (CFTRI),** spoke on the increasing influence of women in the food industry. She discussed the potential of modern food technology to bridge the gap between traditional preservation methods and contemporary demands, enhancing both shelf life and product quality. Singh pointed out that India's expanding food processing industry offers significant opportunities for women, stressing the importance of understanding trends like convenience, nutrition, health, and circular economies to thrive in this field. Ewout de Wit, Consul General of the Kingdom of The Netherlands for South India in Bengaluru, provided a global perspective on gender dynamics in entrepreneurship.
Source: The Hand India

Experts call for minimising nutrient loss during processing of foods

Professor of Food Science and Nutrition from Avinashalingam Institute, Coimbatore, S. Kowsalya has emphasised the need for food scientists to focus on technology that minimises nutrient loss during processing. Participating in the inaugural function of National Nutrition Week 2024 and Global Bio India Roadshow 2024 at **CSIR-CFTRI** in Mysuru on Monday, Prof. Kowsalya referred to a study on 111 food items taken from across India that were "totally deficient" of 11 nutrients while making out a case for preferring traditional food over fast food. She also called for policy interventions and behavioural change to increase the intake of fruits and vegetables. Even though cost may be involved in the transformation towards consumption of fruits, Prof. Kowsalya said at

least seasonal fruits need to be consumed. She also pointed out that over-dependence on processed foods, energy drinks, artificial sweeteners and fast foods had become one of the causes for lifestyle diseases. On the occasion, Prof. Kowsalya also brought up a 1964 journal authored by **CFTRI's** founder director V. Subraymanyam emphasising the need for greater collaboration between food technologists and nutritionists.
Source: **The Hindu**

McDonald's India to offer multi-millet bun burgers, co-created with Mysuru-based CSIR-CFTRI

Burger lovers can soon have buns made of nutrition-rich millets at their favourite outlets, across South and West India. As part of the National Nutrition Week, Mysuru-based **CSIR-Central Food Technological Research Institute (CFTRI),** launched a multi-millet bun in collaboration with McDonald, taking a step towards enhancing the health and nutrition profile. This partnership marks the first-ever collaboration of its kind, combining **CFTRI's** scientific expertise with a multi-national company as an industry partner. The nutritional buns are made of five nutrient-rich millets like bajra, ragi, jowar, proso and kodo. The millets are sourced locally, from various regions including Gujarat, Maharashtra, Karnataka, Rajasthan, Tamil Nadu, Madhya Pradesh and Chhattisgarh. Speaking to DH, **CFTRI** Director Sridevi Annapurna Singh said, the multi-millet bun combines nutrition, taste and innovation. "Millets, a traditional superfood of India, were once a staple in our diets and are now making a significant comeback, due to their impressive health benefits," she said.
Source: **Deccanherald**

McDonald's इंडिया CSIR-CFTRI के साथ मिलकर बर्गर पेश करेगा

मैकडॉनल्ड्स इंडिया, जो अपनी फ्रैंचाइज़ वेस्टलाइफ़ फ़ूडवर्ल्ड के ज़रिए पश्चिम और दक्षिण में क्यूएसआर श्रृंखला संचालित करता है, मल्टी-मिलेट बन के साथ बर्गर पेश करेगा, जिसे प्रीमियर फ़ूड टेक्नोलॉजी रिसर्च इंस्टीट्यूट **सीएसआईआर-सीएफटीआरआई** के साथ मिलकर बनाया गया है।कंपनी ने इस मल्टी-मिलेट बन के लिए विज्ञान और प्रौद्योगिकी मंत्रालय के तहत काम करने वाले **सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिकी अनुसंधान संस्थान (सीएफटीआरआई)** के साथ साझेदारी की है और यह किसानों से सीधे बाजरा प्राप्त करेगा। यह क्यूएसआर (त्वरित सेवा रेस्तरां) क्षेत्र में पहला सहयोग है, जो पौष्टिक भोजन विकल्प विकसित करने के लिए **सीएसआईआर-सीएफटीआरआई** की विशेषज्ञता को मैकडॉनल्ड्स के जोर के साथ जोड़ता है। मैकडॉनल्ड्स इंडिया के कार्यकारी निदेशक अक्षय जटिया ने पीटीआई को बताया, "इसका उद्देश्य हमारे भोजन की पोषण गुणवत्ता में सुधार करना है, ताकि लंबे समय में ग्राहक इसका लाभ उठा सकें। यह निश्चित रूप से हमें आगे ले जाएगा क्योंकि हम क्यूएसआर क्षेत्र में सबसे आगे हैं।
Source: **Jantaserishta**

CFTRI Mysuru to host technology showcase, networking meet on September 19-20

To showcase the technologies developed by **CSIR-CFTRI,** Mysuru, a technology demonstration event titled "Technology Showcasing and Networking Meet of **CSIR-CFTRI** Food and Millet Technologies" is being jointly organised by **CSIR-National Institute of Science Communication and Policy Research (NIScPR), CSIR-Central Food Technological Research Institute (CFTRI),** Unnat Bharat Abhiyan (UBA) — National Coordinating Institute, IIT-Delhi and Vijnana Bharati (VIBHA), on the **CFTRI** campus here on September 19 and 20 (Thursday and Friday). The objective of the event is to showcase and demonstrate the food technologies developed by **CSIR-CFTRI** for the benefit of stakeholders from rural areas of the country and how they can be leveraged to create livelihood opportunities in rural areas and promote sustainable development. Innovative food tech to meet rural challenges The **CFTRI** has developed a range of food technologies aimed at enhancing livelihood in rural areas. These technologies address critical challenges related to food processing, agricultural productivity, and value addition, enabling rural communities to improve their economic prospects, ensure food security, and enhance overall well-being, according to the institute.
Source: **The Hindu**

Unnat Bharat Abhiyan, CSIR-CFTRI aim to empower rural women

Ranjana Agarwal, director, **CSIR-National Institute of Science Communication and Policy Research (NIScPR),** New Delhi on Thursday said the empowerment of rural women of India through the Science and Technology initiatives was behind the launch of Unnat Bharat Abhiyan (UBA). "Through the UBA, we are hoping for more transfers of technologies from the **CSIR** labs, including the Mysuru-based **CFTRI**, for achieving rural development," she added. She was speaking at the inaugural technology demonstration—"Technology Showcasing and Networking Meet of **CSIR-CFTRI** Food and Millet Technologies—" organised jointly by **CSIR-NIScPR, CSIR-Central Food Technological Research Institute (CFTRI),** Unnat Bharat Abhiyan (UBA)—National Coordinating Institute, IIT-Delhi and Vijnana Bharati (VIBHA)—on the **CFTRI** campus here. She said the larger idea of the programme is to make villages sustainable, encouraging entrepreneurship and providing opportunities for livelihood in villages. If livelihood opportunities are created in villages, the people need not have to migrate to cities in search for livelihood, thereby turning the villages self-sustainable, she felt.
Source: **The Hindu**

CSIR-NIScPR, CSIR-CFTRI, UBA, and VIBHA organised Two day "Technology Showcasing and Networking Meet"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with **CSIR-Central Food Technological Research Institute (CFTRI),** Unnat Bharat Abhiyan (UBA), and Vijnana Bharati (VIBHA), jointly organized a two-day "Technology Showcasing and Networking Meet of **CFTRI** Food and Millet Technologies" at **CSIR-CFTRI,** Mysuru from 19-20 September 2024. This event showcased **CSIR-CFTRI's** innovative food technologies aimed at enhancing rural livelihoods. As a pioneer in food science research, **CSIR-CFTRI** focuses on food processing, post-harvest

technology, food safety, and nutraceuticals. Their technological advancements encompass a wide range of food products, including cereals, pulses, fruits, vegetables, dairy, meat, and fish. The primary objective of the event was to showcase and demonstrate the food technologies developed by **CSIR-CFTRI** for the benefit of stakeholders from rural areas of the country and how these technologies can be utilized to create livelihood opportunities in rural areas and promote sustainable development; to identify key challenges in food processing and agricultural productivity, and strategies to foster economic growth and food security in rural areas.
Source: Pib

CFTRI senior scientist gets Kalpana Chawla award

Pushpa S. Murthy, senior principal scientist and head, Plantation Products, Spices and Flavour Technology (PPSFT) Department at the Mysuru-based **CSIR-Central Food Technological Research Institute (CSIR-CFTRI)** has been conferred Dr. Kalpana Chawla Young Women Scientist State Award-2022, instituted by the State government. The award was given in recognition of her outstanding contribution to the field of Science and Technology in the State. To encourage female scientists and engineers in the State, the Karnataka government instituted the award in the name of Dr. Kalpana Chawla in the year 2003. This award is given to a female scientist/engineer who has made outstanding contributions in her field for the development of Science and Technology in the State. The criteria for the award is, any eminent and senior scientists of the State who has contributed towards the development of science and technology in the last few decades, a press release said here.
Source: The Hindu

Gandhi Jayanthi celebration, Swachhata Hi Seva- 2024 held at CFTRI

The 155th Gandhi Jayanthi celebration and “Swachhata Hi Seva 2024″ (September 17-October 2) with the theme Swabhav Swachhata, Sanskar Swachhata was conducted on October 2 at **Central Food Technological Research Institute (CFTRI)**, Mysuru campus. Dr Sridevi Annapurna Singh Singh, Director, **CSIR-CFTRI** paid floral tributes to Mahatma Gandhiji and gave Presidential remarks to the staff and students who hsd gathered in Cheluvamba Hall. In her address, Singh said Gandhi Jayanti reminds us that, each one of us can make a positive impact and all of us must work towards building a better world. On this auspicious occasion, let’s renew our dedication to the ideals of truth, transparency, humility, and service to humanity. She also informed we have to look back this auspicious day, remember Mahatma Gandhi, and promise ourselves to work towards the progress and development of India. Gandhiji promoted non-violence and truth, bringing us together to fight for independence. Dr Sukumar Debanth, Chief Scientist and Coordinator “Swachhata Hi Seva 2024 Campagin (September 17-October 2) informed the objectives and importance of this drive and the various awareness activities that were carried out in **CFTRI** as part of it.”
Source: Mysoorunews

Tableaux of Indian railways, CFTRI to debut this procession

This year's Dasara procession, which will be held on Saturday, will tell the story of several milestones our state and country have achieved in the recent past. From the Vande Bharat Express to the contribution of the city-based **CFTRI**, and the world of the late Poornachandra Tejaswi, a legendary Kannada writer, the procession will feature 46 tableaux. The tableau of Chamarajanagar district will depict the lifestyle of Soliga tribal families. The Indian Railways tableau tells the story of the evolution of Indian Railways from wooden coaches to modern Vande Bharat coaches. "Our tableau will tell the story of how we evolved over the years from wooden coaches to ICF coaches, LHB coaches, and the Vande Bharat Express," said Bhesh Dutt, senior divisional mechanical engineer, SWR, Mysuru. The tableau will also feature several major railway stations, including the Mysuru station. The **CFTRI** tableau will be another attraction. It will highlight the contribution of the institute to society and the country.

Source: **Times of India**

Yaduveer, CSIR DG to attend CFTRI's 75th Foundation Day

This premier food research laboratory located in an imperial palace in the 'city of palaces' – Mysuru – and whose innovations in the area of food science and technology are remarkable and crucial for nutritional security is entering its 75th year of formation on Monday. Situated on the premises of the Cheluvamba Vilas Mansion, on the sprawling 150-acre campus in the heart of Mysuru that was donated for housing the institute by the then Maharaja of Mysore, Jayachamarajendra Wadiyar, the **Central Food Technological Research Institute (CFTRI),** a **Council of Scientific and Industrial Research (CSIR)** lab, which was established on October 21, 1950, is basking in the glory of its successes over the decades. The institute has to its credit over 400 technologies, and its scientists have also launched more than 20 new technologies on millets. The number of technologies developed by it may soon cross 500, considering the pace of its research in 14 R&D departments and six supportive departments. According to the scientists, the institute has delivered significant technologies in the form of products, processes or equipment design in the last seven decades. The **CFTRI**, on average, develops 15 to 20 technologies yearly, and many get transferred to interested entrepreneurs every year. Its research revolves around four themes — engineering sciences, technology development, translational research and food protection and safety.

Source: **The Hindu**

CSIR-CFTRI celebrates 75th Foundation Day

There was a festive ambiance on the sprawling campus of the **CSIR-Central Food Technological Research Institute (CFTRI)** on Tuesday as it celebrated its Platinum Jubilee Foundation Day. N. Kalaiselvi, Director General, **CSIR** and Secretary, DSIR, Ministry of Science and Technology, Government of India, inaugurated the 75th Foundation Day celebrations in the presence of CSIR-**CFTRI** Director Sridevi Annapurna Singh, former directors of **CSIR-CFTRI**, some of the directors of the **CSIR** institutions, eminent scientists, and dignitaries. Mysuru MP Yaduveer Krishnadatta Chamaraja

Wadiyar, who was the chief guest at the event, could not make it to the function but sent his message on the momentous occasion of the country's premier food technology lab. Former directors of **CSIR-CFTRI** V. Prakash, Ram Rajashekaran, and K.S.M.S. Raghava Rao were present. The **CSIR** DG unveiled the logo of the **CSIR-CFTRI** marking the 75th Foundation Day. A photo journey of the **CSIR-CFTRI** since its inception to the present times was showcased, chronicling the glorious journey of the institute whose innovations in the area of food science and technology are renowned across the globe.
Source: The Hindu

CSIR-CFTRI develops biodegradable plates

The Biodegradable Cutlery Research and Innovation Centre, which has been set up at the **CSIR-Central Food Technological Research Institute (CFTRI)** in Mysuru under the project 'SHREE ANNA – the Millet Mission' of CSIR, has developed biodegradable plates. The initiative of the **CSIR-CFTRI** aims to address the environmental challenges posed by plastic waste while capitalising the vast potential of millet processing by products and wastes. The centre hosts the pre-processing, manufacturing, and analytical equipment for the development of the biodegradable cutlery and tableware. At the 75th Foundation Day celebrations of the **CSIR-CFTRI** here on Tuesday, the high tea that was served to the guests was in the biodegradable plates made at the centre on a trial basis. "The journey in innovation will continue with research efforts focussing on developing edible alternatives of the cutlery and tableware, offering opportunity to enjoy the meal and even eat the utensils in which it is served," the **CFTRI** said.
Source: The Hindu

Future research activities of CFTRI to focus on AI-based technologies

Sridevi Annapurna Singh, Director, **CSIR-CFTRI,** Mysuru, said that the future research activities of **CFTRI** includes AI-based technologies to provide solutions to the industry, personalised nutrition, mobile processing, 3D printing and Ayur Ahar, she said. She was speaking at the **CSIR-CFTRI** Platinum Jubilee Foundation Day event held at IFTTC Auditorium at **CFTRI** in Mysuru on Tuesday. Sridevi said, "**CFTRI** has led to an increase in the output of the Indian food industry multiple fold, in its 74-year journey, ever since the Institute was established on October 21, 1959. It has become one-stop center for globally competitive research, technological and industrial services in food science and technology." "Thanks to its multi-disciplinary approach to food research, since its inception, **CSIR-CFTRI** has developed more than 1000 technologies reaching different food industries. It now has 400 technologies for transfer to industry. **CFTRI** has more than 4100 licensees for its technologies," she said. She added that, the Institute's activities are spread across five verticals- training, technology, translational research, testing and engineering. **CFTRI** has linkages and MOUs with several national and international agencies for its activities.
Source: Deccanherald

CSIR-CFTRI aiding industries for CSR projects

The Mysuru-based **CSIR-CFTRI** is aiding industries that are looking to implement projects with the highest societal impacts under their Corporate Social Responsibility (CSR) initiatives. The Institute, which celebrated its 75th foundation day on Tuesday, is currently running CSR projects worth ₹3.28 crore (exclusive of GST), of which ₹1.72 crore - the highest ever in a financial year in **CFTRI** - received in this financial year for the four new projects. M/s. Milltec Machinery Private Limited, Bengaluru (AGI Milltec) - producer of food processing machinery to facilitate rice milling, pulses, seeds, maize, and multi-commodity processing; Central Electronics Limited (CEL), New Delhi - a government of India enterprise under the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology and the Financial Advisor of **CSIR** Chetan Prakash Jain is the chairman and managing director of CEL; M/s. Lapp India Pvt. Ltd., Bengaluru designs and manufactures wires, cables, connectors, glands and other networking solutions and M/s. Bank Note Paper Mill India Private Limited (BNPM), situated in Mysuru and engaged in the production of banknote papers for Reserve Bank of India has been supported by the **CSIR-CFTRI** for implementing their CSR projects, a note said here.
Source: **The Hindu**

CFTRI comes up with probiotic carrot nectar, gluten free bread mix

In order to serve the growing consumer demand for healthy yet convenient foods **CSIR-CFTRI** has launched several new products and technologies to mark its Platinum Jubilee Foundation Day. They have come up with Probiotic carrot nectar, developed gluten free bread premix, instant masala tea premix, process for multigrain waffle and an Ethylene scavenger technology. According to **CFTRI** experts, Probiotic carrot nectar is a vegetable-based beverage developed by incorporating the probiotic bacterium Lactiplantibacillus plantarum MCC5231 in carrot nectar. This can help those who face issues due to dairy-based products like lactose intolerance, milk allergies and so on. This meets the FSSAI's nectar specification criteria and fulfills more than 50% of daily requirement of Vitamin A. The product was developed by Aditi Goel under the guidance of Attar Singh Chauhan and Prakash M Halami and was funded by DBT, New Delhi. In order to cater to to the growing demand for gluten free products as well as promoting millet utilization, they have developed a process for production of gluten free bread premix with all essential ingredients using 100% minor millets including proso, foxtail and barnyard.
Source: **Deccanherald**

CSIR-CFTRI has awarded PhDs to its six students for their in-depth research efforts in food sciences

CSIR-CFTRI (Council of Scientific and Industrial Research- Central Institute of Food Technological Research Institute) has awarded six PhDs to its students for their in-depth research efforts in food sciences. The doctorates were awarded this between July 1 to 30 September, from the **Academy of Scientific and Innovative Research (AcSIR).** The six students are Sangeetha Sher Bahadur Singh whose thesis title was Trans-Ferulic acid and sugar beet pulp-phenolic extract as a potential activator of AMPK: Molecular mechanism and implications in amelioration of hyperglycemia. Her supervisor was Dr

Neelakanteshwara Patil K, Principal Scientist, Department of Microbiology & Fermentation Technology, **CFTRI**. She received her PhD on July 25, 2024. The second student was Sruthi P with her thesis titled as Studies on Phenolic compounds from cashew nut (Anacardium occidentale L.) test and its value addition worked under her supervisor Dr M Madhava Naidu, chief scientist, Department of Plantation products, Species and Flavour Technology, **CFTRI**. He was awarded the doctorate degree on August 23, 2024. The third student was Raghavakumari Ramesh Sunagar and the title of the thesis: Impact of milling on phenolic profiles of brown top millet and its antidiabetic potential.
Source: Fnbnews

The CSIR-CFTRI has been Active in Developing a Range of Innovative Products

The **CSIR-CFTRI (Council of Scientific and Industrial Research – Central Food Technological Research Institute)** has been active in developing a range of innovative products tailored for industry applications. These developments often focus on food processing, preservation, and nutrition enhancement. These innovations not only support industry needs but also contribute to public health and sustainability goals. Recently the Mysuru-based **CFTRI** unveiled its probiotic carrot nectar which is a vegetable-based beverage developed by incorporating the probiotic bacterium Lactiplantibacillus plantarum MCC5231 in carrot nectar. Delivery of the probiotics through a non-dairy-based food system is a favourable option due to the problems associated with dairy-based products, such as lactose intolerance and milk allergies. This vegetable-based carrot nectar supplemented with L. plantarum is a novel concept meeting the FSSAI's nectar specification criteria and fulfils more than 50% of daily requirement of Vitamin A. The product was developed by Aditi Goel under the guidance of Attar Singh Chauhan and Prakash M Halami and was funded by DBT, New Delhi. For the development of gluten-free bread premix with a combination of proso millet, foxtail millet and barnyard millet, the institute targeted small- and large-scale bakeries.
Source: Fmtmagazine

CSIR-CFTRI introduces biodegradable plates and expands innovation in food technology

In a remarkable step towards sustainable practices, the **CSIR-Central Food Technological Research Institute (CFTRI)** in Mysuru has developed biodegradable plates under the project 'SHREE ANNA – the Millet Mission.' This initiative aligns with India's growing focus on reducing plastic waste and utilising agricultural by-products. The Biodegradable Cutlery Research and Innovation Centre, established as part of this effort, plays a pivotal role in spearheading this innovation, leveraging the benefits of millet processing waste. Addressing environmental concerns with millets The biodegradable plates are designed to tackle the increasing environmental challenges posed by plastic waste. By repurposing by-products of millet processing, **CSIR-CFTRI** offers an eco-friendly solution that aligns with sustainable practices. The research centre is equipped with advanced facilities for pre-processing, manufacturing, and product analysis, ensuring

high standards in the development of biodegradable tableware. During the 75th Foundation Day celebrations of **CSIR-CFTRI,** guests were served refreshments on these biodegradable plates as part of a trial run.
Source: Theorganicmagazine

Indian food scientists of CSIR-CFTRI meets NICCI President KC

An Indian Delegation led by Dr Umesh Hangalore Hebbar, Chief Scientist & Head of Food Engineering Department **CSIR** to Nepal met NICCI President Sunil KC at NICCI Secretariat, Ace Apartments, Narayan Chaur, Naxal in Kathmandu on Wednesday. NICCI President KC welcomed the Indian delegation at NICCI Secretariat and briefed about the NICCI as it is the Non-profit Making Binational Chamber of Commerce in Nepal which is particularly working on the area of enhancement of Nepal-India Bilateral Economic relation, Promotion of Indian Investment to bring in Nepal. The three-member delegation was accompanied by Garima Nautiyal, Second Secretary (Political & Development Partnership) at Embassy of India, Kathmandu. Dr Hebbar shared the purpose of visit to NICCI was to apprise about **CSIR-CFTRI's** expertise and contributions in the area of Food Science and Technology focusing on the areas of development of food processing technologies, products and machineries for processing; capabilities and Human Resource Development, Skill development and Training, especially for farmers, FPOs and MSMEs, reads a statement issued by NICCI.
Source: Theannapurnaexpress

On Children's Day specially abled kids visit CSIR-CFTRI

Ranga Rao Memorial School for Differently Abled (RMSD), a special school in Mysuru run by the NR Foundation on Thursday organised a visit for its students to the Mysuru-based **CSIR-Central Food Technological Research Institute (CFTRI),** a premier food technology research institute on the occasion of Children's Day. A total of 35 students from class 8 to 10 were given this opportunity to expand their learning boundaries by visiting and observing the findings of the **CSIR-Central Food Technological Research Institute (CFTRI).** According to a press release from RMSD, the **CFTRI**, a constituent laboratory of the **Council of Scientific and Industrial Research (CSIR)**, New Delhi, comprises inspiring and dedicated scientists who are pursuing in-depth research and development in the areas of food science and technology. Parigi Ramesh Kumar, Senior Principal Scientist explained and facilitated the entire visit to the students on the occasion of Children's Day. Speaking about the visit, R. Guru, chairman, NR Group said, "We think that a child learns better when they have real-world experiences, thereby we make sure that at Ranga Rao Memorial School for Differently Abled they get the chance to actually go through the experiential learning process.
Source: The Hindu

CFTRI Announces 24 New Courses for 2023-24

CFTRI announces 24 new courses for year-long training under **CSIR** Integrated Skill Initiative, the courses are run encompassing all the major areas in food science and

technology. Under the **CSIR** Integrated Skill Initiative, the **CSIR-Central Food Technological Research Institute (CFTRI**), Mysuru, has recently announced approximately 25 regular training programmes, skill development programmes, and short-term courses for this fiscal year that cover all the key areas of food science and technology. The 24 course schedule for 2023–2024 is available on the institute's website (www.cftri.res.in). These courses are brief yet intense, jam-packed with lectures and practicals. The course instructors are experts in their respective fields of food science and technology. The demonstrations and practical classes are conducted in the state-of-the-art laboratories and pilot plants of **CSIR-CFTRI.** Training includes theory and hands-on practical sessions on Food Safety Issues; Paddy and Rice Processing; Animal Cell Culture; Liquid Chromatography – Mass Spectrometry (LC -MS); Flour Milling Baking and Confectionery Technology; Fumigation and Pest management; Rodent management; Electrical Safety in Food Processing Industry; Molecular Biology; Post-Harvest Technologies for Fruits and Vegetables; Grain Processing; Spice processing; Sensory analysis; Probiotic Dairy Product Development; Food analysis; Food Packaging; and Edible Oil Extraction.
Source: Pfionline

Ph.D awardees from CFTRI

The following students, who carried out their research at **CSIR-CFTRI** this year between July 1 and Sept. 30, have been awarded Ph.D degrees from **Academy of Scientific and Innovative Research (AcSIR):** Sangeetha Sher Bahadur Singh – Thesis: trans-Ferulic acid and sugar beet pulp-phenolic extract as a potential activators of AMPK: Molecular mechanism and implications in amelioration of hyperglycemia; Supervisor: Dr. K. Neelakanteshwara Patil, Principal Scientist, Department of Microbiology & Fermentation Technology, **CFTRI**. P. Sruthi – Thesis: Studies on Phenolic compounds from cashew nut (Anacardiumoccidentale L.) testa and its value addition; Supervisor: Dr. M. Madhava Naidu, Chief Scientist, Department of Plantation products, Spices and Flavour Technology, **CFTRI.** Raghavakumari Ramesh Sunagar – Thesis: Impact of milling on phenolic profiles of browntop millet and its anti-diabetic potential; Supervisor: Dr. Y.N. Sreerama, Sr. Principal Scientist, Department of Grain Science and Technology, **CFTRI.** Sandesh Suresh – Thesis: Production and characterization of bio-diesel from fish discards; Supervisor: Dr. Tanaji Kudre, Principal Scientist, Department of Meat and Marine Science, **CFTRI**.
Source: Starofmysore

Science and techniques behind DNA fingerprinting, profiling explained

The Department of Microbiology, in association with IQAC, organised a session titled "The DNA Detective" at SBRR Mahajana First Grade College, Jayalakshmipuram recently. Dr. T. Shivanandappa, Former Scientist 'G,' **CSIR-CFTRI** was the resource person, delivering an insightful lecture on the history, methodology and diverse applications of DNA fingerprinting. In his talk, Dr. Shivanandappa provided a comprehensive overview of the technique, beginning with its discovery by Sir Alec Jeffreys in 1984. He explained

how DNA fingerprinting enables the identification of unique DNA patterns, revolutionising fields like forensic science, crime detection, and species classification. He spotlighted a landmark case in India solved by Prof. Lalji Singh, hailed as the "Father of Indian DNA Fingerprinting." This breakthrough demonstrated the technique's potential in resolving complex cases where traditional evidence fell short. He elaborated on the science behind DNA fingerprinting, emphasising that although 99.9 percent of human DNA is identical, slight variations in specific regions render every individual genetically unique. These differences form the foundation for creating precise DNA profiles.
Source: Starofmysore

43rd batch of flour milling students pass out from CSIR-CFTRI

International School of Milling Technology (ISMT), which was established as a joint Indo-Swiss venture and Roller Flour Millers' Federation of India project during 1981 at the **CSIR-Central Food Technological Research Institute (CFTRI)** in Mysuru, has been serving the needs of flour milling industry in India and other developing countries with regard to training in flour milling technology. On Friday, the candidates of the 43rd batch of ISMT course successfully passed out from the international school, completing the training in the flour milling technology. **CSIR-CFTRI** director Sridevi Annapurna Singh presided over the function where the students received their course certificates. Phaneendra K., operations manager, Manikchand Group was the chief guest. Ashutosh A. Inamdar, senior principal scientist, **CFTRI** gave a brief introduction of the ISMT course. On the occasion, the meritorious students of the ISMT course received gold and silver medals from the dignitaries. The course is aimed at bringing out the best technical personnel cum Managers equipped with the necessary skills and capabilities to take up the challenges of managing modern roller flour mills, said Dr. Sridevi, in her speech.
Source: The Hindu

Millet Excellence and Incubation Centre opens at CFTRI in Mysuru

The Centre of Excellence for Millets and Incubation Centre was launched at the **CSIR-CFTRI** here. Minister for Agriculture N. Cheluvarayaswamy inaugurated the facility on the **CFTRI** campus on Friday. The facility has come up with the support from the State government. **CSIR-CFTRI** director Sridevi Annapurna Singh, Ramesh Bandisidde Gowda, K. Harish Gowda, MLAs, former council chairman V.R. Sudarshan, Commissioner for Agriculture Y.S. Patil, and scientists from the institute were present.After the launch, the Minister went around the facility and got the details from the scientists on the millet-based products and the technologies developed by the institute over the years that can be transferred for commercial production. The scientists explained the initiatives taken up for promoting millets, especially after the year 2023 was declared as the International Year of Millets. Established at a cost of ₹20 crore with funding from the Karnataka government, the **CFTRI**, which has been working on millets since past 17 years, developing over 60 technologies till date, aims to reach out or transfer its technologies to farmers, entrepreneurs, women SHGs and others to market the products,

focussing on the longer shelf life of the products without compromising on the taste and nutritional value.

Source: **The Hindu**

Go Back

CSIR-Central Glass and Ceramic Research Institute (CSIR-CGCRI)

Students develop solution for arsenic-free drinking water

A group of Bihar-based students through Navmarg Research and Innovation Private Limited have developed Magnetic Arsenic Removal Technology, a device, that is ready for installation in arsenic-affected regions of the country.The research-based startup is supported by the Kilkari Bihar Bal Bhawan, department of education, Bihar. Currently, it operates from Manipal Academy of Higher Education, where two core members Arpit Kumar and Shambhavi are students. "The novel technology works on the principle of molecular magnetism, repelling the diamagnetic arsenic ions and making them adhere to the device. It was developed in collaboration with research and development labs, the Science Department of Bihar Bal Bhavan Kilkari, the education department, and the Training-cum-Research Center Pranjal of the Bihar government." Other students in this project, include Abhijeet Kumar, a class 12 student in Bihar and Akshat Adarsh, a postgraduate geology student at TERI, New Delhi. "The technology has secured five patents at the national and international levels. Further, Bihar's public health and engineering department, Unicef Bihar, and the ICICI Foundation supported the research studies. The technology's minimal sludge and waste generation and its environment-friendly approach underscore its potential as a cost-effective and eco-conscious solution. This innovative solution has been approved by the department of drinking water and sanitation, Ministry of Jal Shakti, India for use in centrally governed regions and other states. It is validated by **CSIR-IICT** and **CSIR -CGCRI** in field trials. The technology will soon be available on the GeM portal for procurement through outsourcing. The pilot trials were conducted in arsenic- affected villages in Bihar, treating 29 lakh litres of water," said Arpit.

Source: **The Times of India**

CSIR-CGCRI Hosts National Conference on Indian Standards for Glass and Glazing

The First National Conference on Indian Standards for Glass and Glazing was organised by Bureau of Indian Standards (BIS), **CSIR – Centre for Glass and Ceramic Research Institute (CGCRI)** and Glazing Society of India (GSI) on March 18, 2024 at **CSIR – CGCRI** in Kolkata. The objective of the conference was to make aware and train the entire construction value chain on the new and revised Indian Architectural Glass standards and to support them for the implementation of these standards in the buildings. Dr (Smt) Suman K. Mishra, Chairperson, Sectional Committee of Glass and Glassware (CHD 10), BIS and Director, **CSIR – CGCRI,** during her Chief Guest address noted that standards played a crucial role nurturing our economic and sustainability goals; and that new standards on glass and glazing would support industry (particularly construction), academia and other technical organisations to enhance performance. She also highlighted the collaborative efforts of various players in implementing the goals.

Source: **Pib**

Go Back

CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP)

Two-day Kisan Mela To Be Organized In CIMAP Lucknow On January 30-31

CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP) is one of the premier research institutes in the country. The institute is functioning under the Ministry of Science and Technology, Government of India. The institute has been engaged in research and development and technology dissemination in the field of medicinal and aromatic plants for the last about 65 years. To increase the income of farmers qualitatively, the institute is constantly developing new technologies and developing and conserving medicinal and aromatic plant species. **CSIR-CIMAP** has developed more than 150 improved varieties of medicinal and aromatic plants and their agronomic and processing technologies. To make these improved varieties and agricultural and processing techniques easily accessible to the farmers, a medium was created which is called Kisan Mela.

Source: The News Agency

5,000 farmers likely to attend CIMAP's Kisan Mela from Jan 30

About 5,000 farmers from 21 states are expected to participate in the Kisan Mela on January 30 and 31 to be hosted by **Central Institute of Medicinal and Aromatic Plants (CIMAP),** a frontier plant research laboratory of **Council of Scientific and Industrial Research (CSIR).**

Source: hindustantimes

किसानों के लिए संजीवनी साबित होगा Aroma App, 31 जनवरी को होगी लॉन्चिंग, जानिए इसके फायदे?

देश में औषधीय व सगंध पौधों की खेती से किसानों की आमदनी बढ़ाने के लिए **CSIR** एरोमा एप (**CSIR** Aroma App) की शुरुआत होने जा रही है. इस एप को 31 जनवरी को लांच करने की तैयारी हैं. इस प्रोजेक्ट को लखनऊ स्थित **सीएसआईआर-सीमैप (CSIR-CIMAP)** के वैज्ञानिकों द्वारा तैयार किया गया है. **सीएसआईआर-सीमैप** के निदेशक डॉक्टर प्रबोध कुमार त्रिवेदी ने बताया कि एरोमा एप सीएसआईआर.ऐरोमा मिशन के अंतर्गत की गई सगंध फसलों के बारे में व्यापक जानकारी प्रदान करेगा. जिसमें फसल की खेती, कटाई, उपज गुणवत्ताए लोकप्रिय किस्में और आसवन प्रक्रियाएं शामिल हैं. कीट

और रोग संबंधी जानकारी के साथ-साथ उनके लक्षण और प्रबंधन भी प्रदान किया गया है. इस एप को Play Store पर जाकर आसानी से डाउनलोड किया सकता हैं.

Source: Kisantak

Researchers find cure to liver cancer through target therapy

Liver cancer, a growing health challenge often diagnosed in its advanced stages, can be prevented by changing the metabolic programming of cells as a target therapy, a research has concluded. The research, conducted over six years, is a collaborative effort of scientists from **CSIR-Central Drug Research Institute (CSIR-CDRI), Central Institute of Medicinal and Aromatic Plants (CIMAP)**, and Centre of Biomedical Research (CBMR), SGPGIMS, Lucknow. Led by CDRI scientist Madhav Nilakanth Mugale, the research concludes that cancer cells change metabolic programming, and it can be used as a diagnostic tool for cancer prevention.

Source: Times of India

Two-day Kisan Mela Begins at CSIR-CIMAP

A two-day Kisan Mela was inaugurated on Tuesday at **CSIR-Central Institute of Medicinal and Aromatic Plants,** Lucknow. The chief guest, Dr Ajit Kumar Shasany, Director, **CSIR-NBRI** inaugurated the program. Dr. Sanjay Kumar, the conveyor of the Kisan Mela briefed the activities for the two-day program of Kisan Mela to the dignitaries and the audience. During the Kisan Mela, Dr Prabodh Kumar Trivedi, Director, **CSIR-CIMAP** welcomed the chief guest and guest of honour, industry representatives, media personnel, farmers, etc. On this occasion, he said that **CSIR-CIMAP** under its flagship program, Aroma Mission enabled the self-sufficiency of India in lemongrass essential oil, formerly which was imported from other countries.

Source: The News Agency

CSIR-CIMAP Celebrates Foundation Day

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) celebrated its Foundation Day on Friday at Utsav Hall, **CSIR-CIMAP**, Lucknow. On this occasion, Dr. Ajit Kumar Shasany, Director, **CSIR-NBRI** was the chief guest, Dr. Radha Rangarajan, Director, **CSIR-CDRI** was the guest of honor and Dr. Gopaljee Jha, Scientist-V, NIPGR was the special guest. Dr. Prabodh Kumar Trivedi, Director, **CSIR-CIMAP**, welcomed the Chief Guest in his welcome address, he apprised the audience about the contribution of the Institute in last 6 decades. He also mentioned the important achievements of the Institute, in particular, the **CSIR** – Aroma Mission. In the last 65 years **CSIR-CIMAP** has always been in the fore front and has played a vital role in services towards the nation building. **CSIR-CIMAP** contribution has made India a leading essential oil exporter in methanol mint and lemongrass. **CSIR-CIMAP** has played a prominent role in serving the society, industry.

Source: Thenewsagency

CM launches CIMAP's herbal gel, farmer app

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) has come up with a farmer's friendly **CSIR-Aroma android mobile app,** offering solutions to all crop related problems, a herbal skincare product 'Aloe Roma' gel and a souvenir 'Aus Gyana'. The mobile app, herbal product and the souvenir were launched by Chief Minister Yogi Adityanath during annual Kisan Mela which culminated on Wednesday. "Our **CSIR-Aroma** android mobile-based app will help farmers to get guidance from experts of **CSIR** laboratories of the country. For example, they can upload a picture of their crop to learn ways to control weeds, insect infestation and diseases," said **CIMAP** spokesperson Manoj Semwal. He said that 100% pure aloe vera gel with essential oil named 'Aloe Roma' for skincare and 'Aus Gyanya', a book containing 164 varieties of medicinal and aromatic plants developed by **CSIR-CIMAP,** were also released
Source: Times of India

Phytomolecules for med use to be developed at CIMAP unit

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP), which is known for retrieving natural compounds from aromatic and medicinal plants, will soon set up a unit for the development of a synthetic biology platform for high-value phytomolecules. Synthetic biology is a science where we change living things on purpose to make them useful, giving them new abilities through genetic engineering.
Source: The Times of India

How Mint Plants Adapt Their Roots to Flooded Conditions

Waterlogging presents a significant challenge for agriculture, particularly in low-lying, rainfed regions where excess water can severely impact plant growth and crop yields. This phenomenon affects a range of crops, including economically important ones like soybeans and cucumbers. Researchers from the **Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP)** have recently shed light on how certain plants adapt to these stressful conditions, focusing on Menthaarvensis, commonly known as wild mint[(1)].Menthaarvensis has demonstrated a remarkable ability to cope with waterlogged soils by developing adventitious roots (ARs). These roots, which form from non-root tissues, help the plant to survive by improving water and nutrient uptake when the main root system is compromised. The recent study aimed to delve deeper into this adaptive mechanism by analyzing the changes in gene expression that occur during AR development in response to waterlogging.
Source: Naturalsciencenews

CIMAP sets up 'plant chamber' to help facilitate research work

The **Central Institute of Medicinal and Aromatic Plants (CIMAP)** has set up a state-of-the-art 'Plant growth chamber' facility on its campus which will enable scientists and researchers to grow plants needing different climatic conditions. Specific temperature required for the growth of a plant or light can be maintained in the chamber. The 'Plant growth chamber' facility was inaugurated by director of the National Botanical Research Institute Ajit Kumar Shasany during the **CIMAP's** Foundation Day celebrations on Friday. "The chamber allows researchers to control environmental conditions. Our scientists can control humidity, temperature, light and other factors during their research work and experiments," said **CIMAP** director Prabodh Kumar Trivedi.

Source: Times of India

CSIR-CIMAP Celebrates Foundation Day

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) celebrated its Foundation Day on Friday at Utsav Hall, **CSIR-CIMAP**, Lucknow. On this occasion, Dr. Ajit Kumar Shasany, Director, **CSIR-NBRI** was the chief guest, Dr. Radha Rangarajan, Director, **CSIR-CDRI** was the guest of honor and Dr. Gopaljee Jha, Scientist-V, NIPGR was the special guest. Dr. Prabodh Kumar Trivedi, Director, **CSIR-CIMAP**, welcomed the Chief Guest in his welcome address, he apprised the audience about the contribution of the Institute in last 6 decades. He also mentioned the important achievements of the Institute, in particular, the CSIR – Aroma Mission. In the last 65 years **CSIR-CIMAP** has always been in the fore front and has played a vital role in services towards the nation building. **CSIR-CIMAP** contribution has made India a leading essential oil exporter in methanol mint and lemongrass. **CSIR-CIMAP** has played a prominent role in serving the society, industry.

Source: Thenewsagency

CSIR-CIMAP ने हेलॉन यूके के साथ किया समझौता, मेन्थॉल मिंट की खेती करने वाले किसानों के उत्थान में होगा सहायक

वैज्ञानिक व औद्योगिक अनुसंधान परिषद, नई दिल्ली ने डॉ. एन.कलैसेलवी, महानिदेशक, **सीएसआईआर** व सचिव, डीएसआईआर, भारत सरकार की उपस्थिति में साइंस सेंटर नई दिल्ली में हेलोन यूके ट्रेडिंग लिमिटेड के साथ एक समझौता ज्ञापन का आदान-प्रदान किया। इस समझौते के अंतर्गत सीमैप ने उत्तर प्रदेश के बाराबंकी में मेन्थॉल मिंट की खेती व प्रसंस्करण से आजीविका में सुधार, पर्यावरणीय प्रबंधन और सस्टैनबल मेंथोल आपूर्ति के लिए प्रयास किए जाएंगे। समझौते का आदान-प्रदान डॉ. प्रबोध कुमार त्रिवेदी, निदेशक, सीएसआईआर – केन्द्रीय औषधीय व सगंध पौधा संस्थान (सीएसआईआर-सीमैप), लखनऊ और वेदिका कपूर, निदेशक, गवर्नमेंट अफेयर तथा संचार – भारतीय उपमहाद्वीप, हेलोन इंडिया द्वारा किया गया। इस अवसर पर, सीएसआईआर के महानिदेशक डॉ कैलाइसेल्वी ने सीएसआईआर – सीमैप के प्रयासों की सराहना की। उन्होंने यह भी कहा कि यह परियोजना मेन्थॉल मिंट की खेती करने वाले किसानों की सामाजिक-अर्थव्यवस्था के उत्थान में सहायक होगी।

Source: Pardaphash

CIMAP-Haleon pact to help Barabanki farmers in mint farming

The **Central Institute of Medicinal and Aromatic Plants (CIMAP),** a top plant research laboratory of **Council of Scientific and Industrial Research (CSIR),** has inked pact with Haleon UK Trading Limited for economic betterment, livelihood improvement, environmental stewardship and develop sustainable supply chain in menthol mint farming and processing in Barabanki. CIMAP-Haleon pact to help Barabanki farmers in mint farming (File) CIMAP-Haleon pact to help Barabanki farmers in mint farming (File) The MoU was signed at the Science Centre, New Delhi, by the institute's director Prabodh

Kumar Trivedi and Vedika Kapoor, director, government affairs & communication – Indian subcontinent, Haleon India in presence of N Kalaiselvi, director general, **CSIR** and secretary, Department of Scientific and Industrial Research (DSIR).
Source: Hindustantimes

सुगंधित पौधों की खेती से महकेंगे आदिवासी इलाके, बरेली की कंपनी ने सीमैप और सीएसआईआर से किया करार

सुगंधित पौधों की खेती अब आदिवासी इलाकों में भी खुशबू बिखेरेगी। इससे वंचित समाज के लोगों को मुख्यधारा में जोड़ा जाएगा। उनकी आय में बढ़ोत्तरी होगी। बरेली की कंपनी एरोमैटिक एंड एलाइड केमिकल्स (पी) लिमिटेड ने सीएसआईआर (वैज्ञानिक अनुसंधान संस्थान परिषद) और लखनऊ में सुगंधित पौधों के संस्थान सीमैप के साथ अरोमा मिशन के तहत एक समझौता ज्ञापन पर हस्ताक्षर किए हैं। कंपनी के एमडी गौरव मित्तल का ये ड्रीम प्रोजेक्ट है। राष्ट्रीय प्रोद्योगिकी दिवस पर हुआ फिर करार, आठ वर्षों से काम कर रही कंपनी गौरव मित्तल ने बताया कि राष्ट्रीय प्रौद्योगिकी दिवस के मौके पर बरेली की हमारी कंपनी एरोमैटिक एंड अलाइड केमिकल्स (पी) लिमिटेड, बरेली ने सीएसआईआर -सीमैप के साथ लखनऊ में तीसरी बार फिर से इस एमओयू पर हस्ताक्षर किए हैं। पिछले आठ वर्षों और उससे अधिक समय से इस मिशन के तहत कंपनी काम कर रही है। जिससे की सुगंधित पौधों की खेती को और बढ़ाया जा सके। तीसरे चरण के तहत हम भारत के आदिवासी क्षेत्रों पर काम करेंगे और उनका विकास करेंगे तथा उस क्षेत्र के किसानों की आय बढ़ाएंगे।
Source: Patrika

This rice is a boon for diabetic patients…scientist gave this advice to the patients

Samba Mansoori rice is resistant to bacterial blight disease and also has a very low glycemic index, which is very beneficial for diabetic patients. It is worth noting that the Glycemic Index (GI) is a scale that ranks carbohydrate-rich food or drink on the basis of how much glucose increases in the blood after eating or drinking it. Sambha Mansuri paddy is an advanced variety from the regions of South India. Farmers cultivate this there. Its rice is tasty to eat and at the same time, due to the crop being harvested in less days, the farmer does not have to incur much cost. Today this species is being cultivated in more than 1.5 lakh hectares of land in various states like Uttar Pradesh, Karnataka, Tamil Nadu, Chhattisgarh, Jharkhand, Telangana. This is to say of Dr. Hitendra Patel, Senior Principal Scientist of **CSIR-CCMB**, who had come to participate in the program on the occasion of National Technology Day organized by **CSIR-CIMAP.**
Source: Anytvnews

Liver Cancer Drugs Market Size to Capture USD 9.94 Bn Leading at 14.2% of CAGR by 2032

Liver cancer, responsible for over 800,000 deaths annually, ranks as the fourth leading cause of death worldwide. Public health authorities are deeply concerned about liver cancer due to its increasing incidence and the low 30%–35% projected 5-year survival rate after diagnosis. Primary liver cancer occurs when malignant cells form in the liver tissues. It's important to distinguish primary liver cancer from metastatic cancer, which originates elsewhere in the body and spreads to the liver. **CSIR's** Latest Research Highlights on Liver Cancer Prevention, January 2024 In January 2024, the **Central Drug Research Institute (CDRI)** in India, in collaboration with **CIMAP**, CBMR, and **CSIR-CDRI**, released new findings suggesting that preventing liver cancer may involve targeting metabolic changes in cells. The study, led by Dr. Madhav Nilakanth Mugale of **CSIR-CDRI,** focused on hepatocellular carcinoma (HCC), the most common form of liver cancer. It revealed that cancer cells undergo metabolic reprogramming, which could be utilized for both preventive and diagnostic purposes.
Source: Biospace

सीएसआईआर-सीमैप : नारी सेनेटरी पैड की तकनीकी को किया किया हस्तांतरित

सीएसआईआर-केन्द्रीय औषधीय एवं संगन्ध पौधा संस्थान (सीमैप), लखनऊ द्वारा विकसित हर्बल उत्पादों को आम-जन मानस की पहुँच तक पहुँचाने तथा बृहद रूप से व्यापार उपलब्ध कराने के लिए राष्ट्रीय अनुसंधान विकास निगम (एनआरडीसी), नई दिल्ली के प्रतिनिधियों के साथ **सीएसआईआर-सीमैप** में बैठक आयोजित की गई। इस बैठक में एनआरडीसी के कोम्मोडोर अमित रस्तोगी, सीएमडी एनजी लक्ष्मीनारायण, डीजीएम अमिताभ मिश्रा व सीएसआईआर-सीमैप के निदेशक व वरिष्ठ वैज्ञानिकों ने भाग लिया। बैठक में डॉ. प्रबोध कुमार त्रिवेदी ने बताया कि सीएसआईआर-सीमैप द्वारा विकसित हर्बल उत्पादों की तकनीकियों को राष्ट्रीय अनुसंधान विकास निगम, नई दिल्ली के माध्यम से भी व्यवसायीकरण किया जाएगा।

Source: Telescopetoday

NRDC transfers herbal sanitary napkin tech

The National Research Development Corporation (NRDC) transferred the “NAARI-infection preventing and biodegradable herbal sanitary napkins” to SS creations (Femigiene). The technology was developed by the **CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP),** Lucknow. The technology transfer tripartite license agreements were signed and exchanged among NRDC CMD Cmde Amit Rastogi (retd.), **CSIR-CIMAP** director Dr Prabodh Kumar Trivedi and women entrepreneur Tanuja Bhatnagar of the SS creations in the presence of scientists of **CSIR-CIMAP** and other executives of NRDC and industries. NRDC Vizag head and senior manager Dr BK Sahu and scientist Dr Bhavya Manjeera participated in the programme. According to NRDC officials, this TLA exchange will be way forward in creating scope of collaboration and opportunities to honour planet and people to safeguard women’s health, environment, biodiversity and sustainable development goals. This technology aims to revolutionise

menstrual hygiene of women by offering a natural, eco-friendly and healthier alternative to conventional sanitary products. The technology is biodegradable, nontoxic, and safe to use with no side-effects.
Source: **Times of India**

CSIR-CIMAP लखनऊ ने की बड़ी पहल, औषधीय पौधों और फूलों के उत्पादन से किसानों की बढ़ेगी आमदनी

बाजार में औषधीय (Medicinal Plants) उत्पादों की मांग बढ़ गई है जो किसानों (Farmers) के लिए लाभकारी साबित हो रही है. उत्पादन कम और मांग अधिक होने के कारण किसानों को औषधीय फसलों के अच्छे दाम मिल रहे हैं. इसी कारण से किसान अधिक आमदनी की चाह में औषधीय पौधों की खेती की तरफ रुख कर रहे हैं. इसी क्रम में बिहार राज्य की कृषि प्रौद्योगिकी प्रबंधन अभिकरण (आत्मा) के द्वारा अपने किसानों को औषधीय, सगंध पौधों व फूलों की खेती के प्रति जागरूक करने के लिए एक प्रशिक्षण कार्यक्रम का आयोजन सीएसआईआर-केन्द्रीय औषधीय एवं सगंध पौधा संस्थान **(CSIR-CIMAP)** लखनऊ मे आयोजित किया गया. इस प्रशिक्षण कार्यक्रम में सीतामढ़ी जनपद, बिहार के 9 महिला किसान के साथ 26 प्रतिभागियों ने भाग लिया. किसानों को औषधीय, सगंध पौधों व फूलों के उत्पादन, प्राथमिक प्रसंस्करण व विपणन विषय पर प्रशिक्षित करने के लिए सीएसआईआर-केंद्रीय औषधीय एवं सगंध पौधा संस्थान में शुभारंभ किया गया था.
Source: **Kisantak**

Women on a mission to turn turmeric leaves into liquid gold in Telangana

While turmeric is no longer one of India's best-kept secrets anymore, with people across the world recognising its anti-inflammatory and antioxidant properties, among others, a women-led self-help group (SHG) from Gummiryal village in Ergatla mandal of the district, renowned for its turmeric production, has gone a step further in realising the potential of the turmeric plant and spreading its goodness. By extracting oil from the leaf of the plant, these women want to ensure that turmeric has another use case and motivates others to start a similar organisation. A major crop in the district, hordes of turmeric plants are destroyed or burned by farmers after the harvest season, leading to air pollution in the process. However, local farmers realised that the leaves of turmeric plants hold immense potential and approached the **CSIR-CIMAP** Research Centre in Boduppal, Hyderabad.
Source: **Indian Express**

Hindu College to launch skill training in fragrance formulations for Manipur women

The Hindu College, in collaboration with the Government of Manipur, is set to conduct an intensive Skill Training in Fragrance Formulations for Wellness Products under the mentorship of Justice Gita Mittal Committee. This initiative has been organized in partnership with Ultra International Limited and **CSIR-CIMAP,** Lucknow. The training program is designed to empower distressed women from Manipur by equipping them with

skill sets that help them look at self-employment avenues and become entrepreneurs in their state. Principal Hindu College Professor Anju Srivastava said that from June 24 to July 14, Hindu College will host a group of 30 women from Manipur for the Skill Training in Fragrance Formulations program. Chief Secretary of Manipur Vineet Joshi will inaugurate this event as the Chief Guest.
Source: Sentinel Assam

Bougainvillea Festival in Lucknow: 'Discovered in Brazil, bougainvillea requires minimal care'

Bougainvillea was first discovered by the French botanist Philibert Commerson in Rio de Janeiro, Brazil in the 1760s, said Radha Rangarajan, a scientist and director of **CSIR-CDRI**, Lucknow, on Sunday during the Bougainvillea Festival. "The name Bougainvillea was named after his friend sailor Louis de Bougainville," added Rangarajan while sharing interesting historical facts at the festival organised by **CSIR-NBRI** at its KN Kaul Block Lawn where she was the guest of honour. "The splashing colours of bougainvillea refresh our heart and mind. This plant requires very little care and maintenance. This virtue of the plant can provide us insights to explore climate-resilient features," said PK Trivedi, director, **CSIR-CIMAP**, who was also the guest of honour at the one-day flower festival.
Source: Hindustantimes

Tribal women learn to makeincense sticks

A group of tribal women were trained in making incense sticks from floral wastes and other material by the scientists of the **CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP)** on Friday. The training was part of the skill development programme on the production and value addition of essential oils for displaced women of Manipur. "The training was organised jointly by **CIMAP**, Manipur govt, Sanganeria Foundation, Ultra International, and Hindu College, Delhi. As many as 30 women from different districts of Manipur participated in the event," said **CIMAP** director PK Trivedi. Nenghoikin Changloi from Leimakhong expressed her gratitude to **CSIR-CIMAP** for providing training on the development of herbal products like incense sticks.
Source: Times of India

CSIR-CIMAP Student Internship Positions With Monthly Fellowship For Life Sciences, Microbiology, Biotechnology, Biochem & Botany

Student Internship positions (three number) are available at **CSIR-CIMAP**, Lucknow in three different SERB-sponsored projects under the Scientific Social Responsibility (SSR) policy, for two months starting from 1st August, 2024. The intern must be undergoing post-graduation in Plant Breeding / Microbiology / Biotechnology / Biochemistry / Life Sciences / Botany from a recognized University or equivalent. The intern will be entitled to receive a consolidated student assistantship of Rupees Five thousand (Rs. 5000/-) per month for two months. The intern would have to bear their TA/DA and accommodation cost on their own. Students fulfilling the above-mentioned criteria may apply in the prescribed format and a letter of interest (Lol), which includes a brief half-page (within

250 words) description of their research interest, through email along with a No Objection Letter from the Head of the Department (in a letterhead) to undergo the internship for the said period to the Principal Investigators [(1) Dr. Gunjan Tiwari, Scientist, gunjantiwari@cimap.res.in. GAP494; (2) Dr. Akanksha Singh, Scientist, akanksha@cimap.res.in, GAP495; and (3) Dr. Sumit Ghosh, Senior Principal Scientist; sumitghosh@cimap.res.in, GAP530) separately, latest by 22 July, 2024.
Source: Biotecnika

Tribals Shun Cotton Cultivation, Take To Lemongrass Farming

Singarika Kadraka of Elenwalsa village under Bandhugaon block in Koraput district of Odisha is now feeling easy and content. For, she now does not need to cover about four kilometres to extract oil out of her harvested lemongrass at the distillation plant of a private party at Kalpattu village. Government agency, Odisha Rural Development and Marketing Society (ORMAS), has installed a plant nearby at a cost of Rs. 12 lakh to offset her drudgery. During the weeklong training at **CIMAP**, farmers not only learned the process of oil extraction, but also the procedure of making by-products. The four trained tribals went back and motivated others to resort to lemongrass farming that is said to be more profitable than cotton farming, according to Prasant Kumar Rout, senior principal scientist of **CIMAP**.
Source: Theindiantribal

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Source: Times of India

Ernakulam Krishi Vigyan Kendra to revive lemon grass cultivation, distillation

The Ernakulam Krishi Vigyan Kendra (KVK) of Central Marine Fisheries Research Institute (CMFRI) has launched initiatives to revive the lost glory of lemon grass cultivation and distillation in Ernakulam district. KVK achieved a breakthrough for the project with successful testing of a reaper for harvesting the crop, addressing the critical issue of manpower shortage that had hindered the district’s once prosperous lemon grass cultivation. KVK plans to demonstrate the lemon grass varieties Sugandhi and Krishna from the KAU and the Lucknow-based **CSIR- Central Institute of Medicinal and Aromatic Plants (CIMAP**) initially in farmers’ fields, said Dr. Subramanian, head of the Ernakulam KVK. In addition, KVK would collaborate with the Bengaluru Research Centre

of **CSIR-CIMAP** to set up a lemon grass distillation unit under their Aroma Mission, a nationwide initiative by the **CSIR**.
Source: The Hindu

Develop tech that reduces human intervention in agri: Brajesh Pathak

Scientists and students associated with **Central Institute of Medicinal and Aromatic Plants (CIMAP)** were felicitated for conducting research in six fields, at the 46th Annual Day celebrations of the institute on Wednesday. The research activities were carried out in the fields of phytochemistry, bioprospection and product development, plant biotechnology, crop production and protection, plant breeding and genetic resource conservation, and technology dissemination and computational biology. **CIMAP** is a multidisciplinary research institute of **Council of Scientific and Industrial Research (CSIR)**. Deputy chief minister Brajesh Pathak was the chief guest on the occasion. He spoke about the improved varieties of medicinal and aromatic plants developed by **CSIR-CIMAP**, which not just provides a better yield but also benefits farmers. **CSIR-CIMAP** director Prabodh Kumar Trivedi, **CSIR-IITR** director Bhaskar Narayan and **CSIR-NBRI** director Ajit Kumar Shasany were present on the occasion.
Source: Hindustantimes

CSIR launches floriculture mission to aid Uttarakhand farmers

The **Council of Scientific and Industrial Research (CSIR)** has launched a floriculture mission to aid farmers, who were previously forced to abandon agriculture due to a lack of irrigation resources and threats from wild animals. Under this initiative, scientists from **Central Institute of Medicinal and Aromatic Plants (CIMAP)**, located at Pantnagar University in Udham Singh Nagar district, are providing a group of farmers with free technical training and high-quality plant materials, to revive farming activities in the region. RK Upadhyay, the lead scientist behind the project, is encouraging farmers to diversify their crops by cultivating roses, jasmine, and tuberose as primary crops. This would not only broaden the crop cycle but also significantly boost farmers' incomes. "The mission was launched last year and flower cultivation has already been initiated on 32.5 acres of land in Uttarakhand. Our goal is to establish model flower clusters across the country, creating self-reliant planting material production and fostering commercial farming," he said.
Source: Times of India

CIMAP MoU to help Odisha's tribal farmers

The **Central Institute of Medicinal and Aromatic Plants (CIMAP)** signed an MoU with Bromhon Solution Private Limited, Bhubaneswar, to expand lemongrass cultivation among tribal farmers in Odisha. On its 46th annual day on Wednesday, **CIMAP** also announced to transfer the technology for lutein production from marigold flowers to Sunfed Farm Private Limited, Varanasi. The event was inaugurated by deputy CM Brajesh Pathak. "The institute's ongoing research and development work in medicinal and aromatic plants, particularly in developing new plant varieties that offer higher yields are

directly benefiting farmers, leading to increased productivity and income. I recently visited Brazil, where I observed the integration of technology in agriculture. I urge Indian scientists to develop similar technologies that can reduce human intervention in farming processes, thus making agriculture more efficient and sustainable, ”he said. **CIMAP** director, Prabodh Kumar Trivedi said, “The institute’s efforts under the **CSIR** Aroma Mission have successfully expanded the cultivation of aromatic crops to more than 1,100 hectares across India.”
Source: Times of India

How deep-rooted vetiver could be a useful ally against climate change

Across a swathe of over 600 acres in New Chennai Township Private Limited (NCTPL) MARG Swarnabhumi, in Chengalpattu, a perennial grass has been pressed into service to lay the foundation of a net zero carbon campus of six industries and 1,300 homes. The plant in question is Vetiver (Chrysopogon zizanioides) whose roots tend to make headlines. Derived from the Tamil word that means ‘root that is dug up’, vetiver is also known as ramaccham in Malayalam and kuruveru in Telugu. The Mughals called it ‘khus’ (not to be confused with ‘khus-khus’ or poppyseed). “I started sharing information on vetiver on my social media handles, and, through that, was introduced to ND Yogendra and V Sundaresan, senior scientists at the Council of Scientific and Industrial Research **(CSIR)-Central Institute of Medicinal and Aromatic Plants (CIMAP)** in Bengaluru. They advised me to think of cultivating vetiver in Rameswaram, which is traditionally known for its jasmine crop,” says Shreeramnath. **CIMAP** gifted the foundation 4,000 slips of ‘Samriddhi’ and ‘Dharani’ strains of vetiver to reach out to the farming community in Rameswaram after the lockdown.
Source: The Hindu

CIMAP research finds new way to enhance nutritional quality of plants

A recent research by scientists at the **Council for Scientific and Industrial Research – Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP)** has chanced upon ways to enhance the nutritional quality of plants. Till now, if scientists wanted to overexpress a gene in any plant, it had to be made a transgenic plant (one which is altered to achieve higher nutritional value) . However, due to certain regulations imposed by the food safety authorities across the world, the transgenic plants are not directly accessible to the farmers and consumers. Now through the new research, the scientists have found that the nutritional quality of plants can be enhanced using ‘complementary peptides’ (complementary form of a short protein found in plants). As part of this research, complementary peptides, when sprayed on the plant, can enhance its nutritional value and properties. “This will enhance the protein accumulation in a plant without making it transgenic. We have worked with three peptides (short proteins found in plants) for proof of the concept. We tested it on thale cress, rose, grapes, tobacco and tomatoes and found the synthesis of molecules including – anthocyanin, flavonols and lignin,” said a scientist Ashish Sharma.
Source: Hindustantimes

पौधों की पोषण गुणवत्ता बढ़ाने का मिला तरीका, CSIR-CIMAP के वैज्ञानिकों ने किया शोध

काउंसिल फॉर साइंटिफिक एंड इंडस्ट्रियल रिसर्च - सेंट्रल इंस्टीट्यूट ऑफ मेडिसिनल एंड एरोमैटिक प्लांट्स (CSIR-CIMAP) के वैज्ञानिकों द्वारा किए गए एक हालिया शोध में पौधों की पोषण गुणवत्ता को बढ़ाने के तरीकों का पता चला है। अभी तक वैज्ञानिक किसी पौधे में किसी जीन को अधिक अभिव्यक्त करना चाहते थे, तो उसे एक ट्रांसजेनिक पौधा (जिसे उच्च पोषण मूल्य प्राप्त करने के लिए बदल दिया जाता है) बनाना पड़ता था। हालांकि दुनिया भर में खाद्य सुरक्षा अधिकारियों द्वारा लगाए गए कुछ नियमों के कारण, ट्रांसजेनिक पौधे किसानों और उपभोक्ताओं के लिए सीधे उपलब्ध नहीं हैं। इस शोध के माध्यम से वैज्ञानिकों ने पाया है कि 'पूरक पेप्टाइड्स' (पौधों में पाए जाने वाले लघु प्रोटीन का पूरक रूप) का उपयोग करके पौधों की पोषण गुणवत्ता को बढ़ाया जा सकता है। इस शोध के एक भाग के रूप में, जब पूरक पेप्टाइड्स का पौधे पर छिड़काव किया गया, तो इसके पोषण मूल्य और गुणों में वृद्धि हुई। वैज्ञानिक आशीष शर्मा ने बताया कि यह पौधे को ट्रांसजेनिक बनाए बिना उसमें प्रोटीन संचय को बढ़ाएगा। हमने अवधारणा के प्रमाण के लिए तीन पेर्टाइड्स (पौधों में पाए जाने वाले छोटे प्रोटीन) के साथ काम किया है।

Source: **Newstrack**

Fennel oil-infused polymeric beads to combat mosquito larvae

The **Council for Scientific and Industrial Research– Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP),** in its recent study, developed polymeric beads that can help eradicate mosquito larvae. These beads will be released by the institute by the end of October. Fennel oil has been mixed with two varieties of polymers, which help in the controlled release of oil. In several studies, fennel has been found to control a wide range of infectious diseases caused by fungi, bacteria, viruses, and others. Fennel oil has also been found effective against mosquitoes and as an alternative for mosquito larvicidal activity. “If fennel oil is used directly as a larvicide or mosquito repellent, it evaporates quickly. The beads obtained from this research solve the problem by encapsulating the oil and ensuring controlled distribution,” said scientist Narayan Prasad Yadav, who worked on the technology. He shared that a mixture of two polymers, a solvent, and fennel oil was dropped into a calcium chloride solution, forming the beads.

Source: **Hindustantimes**

विद्यार्थियों को विज्ञान से जोड़ने के लिए की गई पहल

गरुड़। **सीमैप** शोध केंद्र पुरड़ा में **सीएसआईआर** का 83वां स्थापना दिवस समारोह मनाया गया, जिसमे बागेश्वर जिले के 100 से अधिक विद्यार्थियों व औषधीय एवं सगंधीय पौधों से जुड़े 40 कृषकों ने प्रतिभाग किया। कार्यक्रम के दौरान सभी प्रतिभागियों को विज्ञान के क्षेत्र में उपलब्धियों से अवगत कराया गया। साथ ही विद्यार्थियों को प्रोत्साहित करने के लिए विज्ञान क्विज प्रतियोगता का आयोजन भी कराया गया,

जिसमें सभी ने बढ़ चढ़ कर प्रतिभाग किया,। कार्यक्रम के दौरान औषधीय एवं सगंधीय पौधों की खेती कर रहे कृषकों को प्रोत्साहित करने के लिए पुरुष्कृत भी किया गया। कार्यक्रम की शुरुवात दीप प्रज्वलन के साथ किया गया। कार्यक्रम की अध्यक्षता **सीमैप** के तकनीकी अधिकारी पीएस वर्मा ने किया। उनके द्वारा **सीएसआईआर** के समाज के लिए देश में किए जा रहे अनुसंधान के बारे में विस्तार से बताया। साथ ही विज्ञान के विद्यार्थियों को भविष्य में **सीएसआईआर** से जुड़ कर वैज्ञानिक बन कर देश को विकसित करने में योगदान देने की अपील भी की। कार्यक्रम के दौरान अनुपम सिंह ने **सीमैप** पुरडा की विभिन्न गतिविधियों से सभी प्रतिभागियों से भी अवगत कराया। कार्यक्रम के समापन पर कृषकों को रोजमेरी के पौधे भी वितरित किए गए। इसके उपरांत सभी विद्यार्थियों एवं कृषकों को गुलाब जल बनाने एवं हर्बल चाय बनाने की तकनीकी को प्रदर्शन भी कराया गया। इस दौरान किशन राम, गिरीश चन्द्र, कृष्ण कुमार, प्रधानाचार्य इंटर कॉलेज लीती देवेन्द्र सिंह मर्तोलिया आदि लोग मौजूद रहे।

Source: **Livehindustan**

CSIR-CIMAP practices helping menthol mint farmers boost yield

Practices promoted by the **Council for Scientific and Industrial Research – Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP**) are helping farmers combat the threat posed by synthetic menthol to menthol mint farmers. Menthol mint is a specific breed of mint which is rich in menthol oil. The country is a global leader in menthol mint production. Synthetic menthol is made after utilising fossil fuels and is cheaper than the natural menthol. Menthol is cultivated over more than 3,50,000 hectares in the Indo-Gangetic plains and over 6 lakh families are involved in growing menthol mint. “Over 40,000 tonnes of menthol mint worth about ₹3,000 crore is produced in the country every year, of which 28,000 tonnes is produced in Uttar Pradesh and 11,000 tonnes in Lucknow and nearby districts including – Barabanki, Sitapur and Hardoi,” said scientist Alok Kalra. In the past, the institute has evolved various varieties like - Saksham, Kushal, Saryu, CIM-Kranti, and CIM-Unnati which has an increased amount of menthol oil than other varieties and at the same time these varieties can be cultivated early.

Source: **Hindustantimes**

CSIR-CIMAP में तीसरे फिक्की अंतर्राष्ट्रीय सुगंध शिखर सम्मेलन का हुआ आयोजन

सीएसआईआर-सीएमएपी में शुक्रवार को तीसरे फिक्की अंतर्राष्ट्रीय सुगंध शिखर सम्मेलन का आयोजन हुआ। यहां मुख्य अतिथि उत्तर प्रदेश मुख्यमंत्री के मुख्य सलाहकार अवनीश अवस्थी रहे। सुगंध शिखर सम्मेलन आयोजित हुआ **सीएसआईआर-सीएमएपी**, बीआईएस के सहयोग से आयोजित सुगंध शिखर सम्मेलन का विषय "स्थायी अवसरों को आगे बढ़ाना: सुगंध उद्योग के लिए समावेशी विकास" रखा गया था। मुख्य अतिथि ने उद्घाटन सत्र में उत्तर प्रदेश पर विशेष ध्यान देते हुए मुख्य कार्यकारी अधिकारियों, भारत और विदेश से आए प्रतिनिधियों ने उद्योग के सामने आने वाले प्रमुख मुद्दों और अवसरों और

चुनौतियों पर अपना दृष्टिकोण साझा किया। इन वक्ताओं ने दिया संबोधन उद्घाटन सत्र में मुख्य वक्ता फिक्की फ्रैग्रेंस टास्कफोर्स व एमेरिटस, द इंटरनेशनल फ्रेगरेंस एसोसिएशन के अध्यक्ष माइकल कार्लोस, फिक्की फ्रेगरेंस टास्कफोर्स सह अध्यक्ष व एफ एंड एफ, अल्ट्रा इंटरनेशनल लिमिटेड की निदेशक भुवना नागेश्वरन रहीं। यहां अन्य अतिथि वक्ता के रूप में अल्ट्रा इंटरनेशनल लिमिटेड के संस्थापक और संत सांगानेरिया ट्रस्ट के प्रबंध ट्रस्टी संत सांगानेरिया, **(एसीएसआईआर), सीएसआईआर-केंद्रीय औषधीय एवं सुगंधित पौधा संस्थान** के निदेशक डॉ. प्रबोध कुमार त्रिवेदी, द इंटरनेशनल फ्रेगरेंस एसोसिएशन (आईएफआरए) के चेयरमैन हंस होल्गर और द इंटरनेशनल फ्रेगरेंस एसोसिएशन की अध्यक्ष मार्टिना बियानचिनी मौजूद रहे।

Source: Newstrack

विद्यार्थियों ने किया सीमैप का भ्रमण

उच्च माध्यमिक विद्यालय कपकोट के 50 विद्यार्थियों ने अध्यापकों के साथ सीमैप शोध केंद्र पुरारा में भ्रमण किया। विद्यार्थियों को **सीमैप** भ्रमण के माध्यम से देश में विज्ञान के छेत्र में चल रहे शोध कार्य एवं नवाचारों से अवगत कराना था। भ्रमण के दौरान सभी विद्यार्थियों को **सीएसआईआर** की विज्ञान के क्षेत्र में उपलब्धियों से अवगत कराया गया। विद्यार्थियों को शोध केंद्र में औषधीय एवं सुगंध वाले पौधों की पहचान कराई गई, साथ ही चिकित्सा एवं इत्र उद्योग में प्रयोग होने वाले पौधो के गुणों को भी विस्तार से विद्यार्थियों को बताया गया। विद्यार्थियों को वरिष्ठ तकनीकी अधिकारी प्रवल पीएस वर्मा ने **सीएसआईआर** के समाज के लिए देश में किए जा रहे अनुसंधान के बारे में विस्तार से बताया, साथ ही विज्ञान के विद्यार्थियों को भविष्य में **सीएआईआर** से जुड़ कर वैज्ञानिक बन कर देश को विकसित करने में योगदान देने की अपील भी की। भ्रमण के दौरान सभी विद्यार्थियों को गुलाब जल बनाने एवं हर्बल चाय बनाने की तकनीकी से भी अवगत कराया गया। इस दौरान राउमावि कपकोट की प्रधानाचार्य गीता उप्रेती, अध्यापक डॉ. विनोद मेहता, मनोज, रीमा गाड़िया एवं किशन राम आदि भी मौजूद रहे।

Source: Hindustan

Go Back

CSIR-Central Institute of Mining and Fuel Research (CSIR-CIMFR)

Tata Steel innovates with paste filling pilot plant for safe coal void management

Coal mining faces safety challenges due to inaccessible voids, lacking efficient solutions. Tata Steel's Jharia Division pioneers a Paste Filling Pilot Plant, injecting self-levelling paste comprising fly ash, cement, and additives into voids. D B Sundara Ramam, VP of Raw Materials at Tata Steel, inaugurated the plant at Digwadih Colliery, Jharkhand, alongside industry experts on February 15, 2024. The technology, a collaboration with **CSIR-CIMFR** and IIT-Kharagpur, promises higher efficiency compared to sand slurry backfilling methods. It ensures controlled spreading, mitigating chocking and segregation issues. The trial aims to extend to longer voids, enhancing safety beneath critical structures like railways and highways.

Source: **Manufacturing Today India**

Milestone Achieved: Breakthrough Of Tunnel-2, The Longest Tunnel On Mumbai Suburban Railway Network

The Mumbai Railway Vikas Corporation (MRVC) proudly announces the successful breakthrough of Tunnel-2 (Wavarle Tunnel), the longest tunnel in the Mumbai Suburban Railway Network, as part of the Panvel-Karjat railway project under the Mumbai Urban Transport Project 3 (MUTP-3). The Panvel-Karjat railway project encompasses the construction of three tunnels, totalling 3164 meters, in length Tunnel-1 (Nadhal Tunnel) 219 meters, Tunnel-2 (Wavarle Tunnel) 2625 meters, Tunnel-3 (Kirawali Tunnel) 320 meters. The project saw collaboration between several entities Technology Partner: **CSIR-CIMFR** guided the rock blasting process. Design and Drawing Works: M/s AECOM General Consultant: M/s RODIC-ARTELA (JV) Executing Agency: M/s SDPL-TIPL-JMMIPL (JV), leveraging state-of-the-art technology and expertise. A GIS-based project management system was implemented to monitor progress effectively.

Source: **Freepressjournal**

CSIR-CIMFR hosts workshop on Coal Gasification

The **Central Institute of Mining and Fuel Research (CSIR-CIMFR)** is holding a two-day workshop, CARING-2024, in its Digwadih Campus to explore the challenges and opportunities in coal gasification technology, a PIB press release stated. The event, which is expected to draw 75 participants from industry, research, and government, will focus on key aspects of gasification technology, including the production of methanol, chemicals, fertilizers, and liquid fuels. The workshop was formally opened by Dr. Arvind Kumar Mishra, Director of **CSIR-CIMFR,** on June 26. In his speech, Dr. Mishra highlighted the importance of coal in the global energy mix and the potential of gasification to produce

valuable products that can help India achieve its energy goals of promoting sustainable growth and energy security. The two-day workshop, under the CSIR One Week One Theme-Energy and Energy Devices Program, aims to promote collaboration, innovation, and knowledge sharing among participants.
Source: Theprint

Seven CSIR Labs Inaugurates One Week One Theme Campaign On Energy And Energy Devices Theme

After the inaugural of One Week One Theme (OWOT) Campaign and its logo by Hon'ble Union Minister of State for S&T Dr. Jitendra Singh in the presence of DG CSIR Dr. N. Kalaiselvi at India habitat Centre, Delhi, all **CSIR** labs are organizing programs on OWOT (Energy and Energy Devices) at their respective institutes. On 27 June 2024, 7 **CSIR** labs has organized theme based activities. The OWOT campaign is based on 8 themes of **CSIR** in which all 37 **CSIR** labs will organize programs of particular themes. CSIR-Central Institute of Mining and Fuel Research (**CSIR-CIMFR**), Dhanbad has organized Two-Day Workshop on Challenges and Opportunities in Gasification CARING-2024 as a part of **CSIR** One Week One Theme programme-Energy and Energy Devices theme. It focused on the challenges and opportunities in gasification. This event, held on June 26-27, 2024, at the **CSIR-CIMFR** Digwadih Campus, brings together industry leaders, researchers, policymakers, and stakeholders to explore the complexities and potential of gasification technology. With over 75 participants from various organizations such as Coal India Limited (CIL), Steel Authority of India Limited (SAIL), Jindal Steel and Power Limited (JSPL) Angul, Hindalco Industries, Thermax, and others from across India, the workshop is set to be a significant event in the field of gasification.
Source: Observervoice

Department of Fisheries Joint Secretary Shri Sagar Mehra visits ICAR CMFRI and CSIR-CSMCRI, Marine Algal Research Station Mandapam Regional Centre

Shri Sagar Mehra, Joint Secretary, DoF, Govt of India, visited **ICAR CMFRI** and **CSIR-CSMCRI,** Marine Algal Research Station, Mandapam Regional Centre Joint Secretary (Inland Fisheries) Shri Sagar Mehra along with Shri Subhash Chandra, Director (Fisheries) and Dr. Gunamaya Patra visited the Mandapam Regional Centre of **ICAR-CMFRI** on 29th & 30th June 2024. The Joint Secretary held detailed discussions with the Scientists of **CMFRI** and **CSMCRI**. The Joint Secretary visited the various facilities of **CMFRI** like the Marine Fish Broodbank, Marine Hatchery, Recirculatory Aquaculture System, Museum, Marine Aquarium and the Fish Farm. The Joint Secretary along with the Scientists of **CMFRI** and officials of the Ramanathapuram office of TN Fisheries Department visited the seaweed farming site at Munaikadu village in Palk Bay and interacted with the farmers and enquired about the challenges and issues they encounter in upscaling the seaweed farming.
Source: Pib

हिंदी हमारी आत्मा की भाषा है: प्रो. अरविंद

धनबाद **सीएसआईआर-केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान (सिंफर)** को सभागार में हिन्दी सप्ताह के समापन समारोह का आयोजन किया गया। संस्थान के निदेशक प्रो. अरविंद कुमार मिश्रा मुख्य वक्ता थे। उन्होंने कहा कि हिंदी हमारे राष्ट्र की भाषा है, हमारी आत्मा है। हमें अपने बच्चों में भी हिंदी के प्रति रुचि पैदा करने की जरूरत है। डॉ प्रदीप कुमार बनर्जी ने कहा कि भाषा व्यक्ति के परिचय को दर्शाती है। संस्थान के प्रशासन नियंत्रक सह राजभाषा अधिकारी आलोक शर्मा ने हिंदी सप्ताह के दौरान आयोजित प्रतियोगिताओं में सफल प्रतिभागियों के नाम की घोषणा की। शंभूशरण मंडल, प्रशासनिक अधिकारी ने मंच का संचालन किया। राजभाषा प्रभारी कुमार राहुल, हिंदी अधिकारी साहाना चौधरी एवं अनिमा महतो ने हिंदी सप्ताह के दौरान आयोजित विभिन्न कार्यक्रमों का समन्वयन किया।

Source: **Livehindustan**

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक, शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.

Source: **Indias.news**

CIMFR and IIT Hyderabad forge alliance for search of Critical Minerals

Prof BS Murty, Director of IIT Hyderabad on Monday said that his institution has forged an agreement with **CSIR-CIMFR** in order to collaborate on search and other uses of critical minerals in the country. A similar MoU has been signed with NTPC, he informed. Addressing the 83rd Foundation Day celebration at **CSIR-CIMFR** here he said that future of country lies in critical minerals like Antimony, Beryllium, Cobalt, , Gallium, Germanium, Graphite, Lithium, , Niobium, Nickel, PGE, Phosphorous, Potash, REE,

Rhenium, Silicon, and so on as we are dependent in import of these for uses in India. These are needed to ensure "Atamnirbhar and Vikshit Bharat "the dream of Prime Minister Narendra Modi. He said IIT Hyderabad has implemented three concepts including to create minds who are exceptional thinkers, support innovation and make collaborations to ensure reaching the goal of Vikshit Bharat. " Vikshit Bharat can be reality only when we see Made in India products on shelves all across the world market.
Source: **Dailypioneer**

सिंफर ने समारोहपूर्वक मनाया स्थापना दिवस

विशेष संवाददाता। **सीएसआईआर-केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान धनबाद (सिंफर)** में सोमवार को 83वां स्थापना दिवस समारोहपूर्वक आयोजित किया गया। सिंफर सभागार में आयोजित कार्यक्रम में आईआईटी हैदराबाद के निदेशक बुडाराजू श्रीनिवास मूर्ति मुख्य अतिथि के रूप में मौजूद थे। विशिष्ठ अतिथि के रूप में एनटीपीसी के निदेशक (ऑपरेशन) रवींद्र कुमार ने शिरकत की। सिंफर के सभागार में कार्यक्रम का आयोजन किया गया। उद्घाटन दीप जलाकर हुआ। सिंफर के निदेशक अरविंद कुमार मिश्रा ने स्वागत भाषण दिया। उन्होंने सिंफर की गतिविधियों व कार्यों की भी जानकारी दी। आईआईटी हैदराबाद के निदेशक ने सिंफर फाउंडेश डे लेक्टर दिया। उन्होंने कहा कि वर्तमान परिवेश में सिंफर की महत्ता लगातार बढ़ती जा रही है। राष्ट्र के निर्माण व विकास में सिंफर की अहम भूमिका है। कोयला-ईंधन खनन के क्षेत्र में नवीनतम प्रयोग हो रहे हैं। उन्होंने नवाचार पर विशेष जोर दिया। उन्होंने सहयोग व आत्मनिर्भर भारत की अवधारणा को विकसित करने की बात भी कही। कार्यक्रम में आईआईटी हैदराबाद व सिंफर के बीच एमओयू पर हस्ताक्षर किए गए, जिसमें शैक्षणिक आदान-प्रदान तथा अनुसंधान को बढ़ावा देना शामिल है।
Source: **Livehindustan**

सिंफर ने गांधी जयंती पर चलाया स्वच्छता ही सेवा अभियान

जोड़ापोखर। **सीएसआईआर-सीआईएमएफआर** डिगवाडीह परिसर में गांधी जयंती के सम्मान में 'स्वच्छता ही सेवा अभियान 2024' का आयोजन किया। कार्यक्रम का आयोजन भाग रेलवे के सहयोग से किया गया। यह आयोजन संस्थान के निदेशक प्रोफेसर अरविंद कुमार मिश्रा के निर्देश पर किया गया। लोगों को सफाई के प्रति जागरूक रहने का संदेश दिया गया। कार्यक्रम को सफल बनाने में सिंफर के अधिकारी के अलावा भाग रेलवे स्टेशन के भी कर्मचारी शामिल थे।
Source: **Livehindustan**

CSIR- CIMFR ने वन हेल्थ" पर जागरूकता कार्यक्रम आयोजित कर छात्रों को किया प्रेरित

सीएसआईआर-सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च (सीएसआईआर-सीआईएमएफआर) ने सोमवार को पीएम श्री स्कूल जवाहर नवोदय विद्यालय, बेनागोरिया, निरसा, धनबाद में “वन हेल्थ” पर

एक जागरूकता सत्र आयोजित किया। बता दें कि छात्रों को मानव, पशु और पर्यावरणीय स्वास्थ्य के बीच की जटिल कड़ी के बारे में शिक्षित करने के उद्देश्य से **सीएसआईआर**-जिज्ञासा पहल के तहत यह कार्यक्रम आयोजित किया गया। स्वास्थ्य के प्रति समग्र दृष्टिकोण अपनाने से सभी क्षेत्रों में संतुलन को बढ़ावा इस अभियान के माध्यम से मानव, पशु और पारिस्थितिकी तंत्र के स्वास्थ्य को आपस में जुड़े होने के महत्व को उजागर किया गया। सत्र में यह बताया गया कि स्वास्थ्य के प्रति समग्र दृष्टिकोण अपनाने से सभी क्षेत्रों में संतुलन और कल्याण को कैसे बढ़ावा दिया जा सकता है। जिज्ञासा कार्यक्रम का एक अवलोकन भी प्रस्तुत किया गया, जिसमें छात्रों के बीच जागरूकता बढ़ाने में इसकी भूमिका पर जोर दिया गया। ज़ूनोटिक, एंटीमाइक्रोबियल सहित कई विषयों पर चर्चा **सीएसआईआर-सीआईएमएफआर** के विशेषज्ञों ने छात्रों के साथ कई महत्वपूर्ण विषयों पर चर्चा की, जिनमें ज़ूनोटिक बीमारियाँ, एंटीमाइक्रोबियल रेजिस्टेंस (एएमआर), महामारियों का प्रभाव, खाद्य मिलावट और पोषण शामिल थे। सत्र में एक स्वस्थ और रोग मुक्त जीवन जीने के व्यावहारिक तरीकों पर भी जोर दिया गया।

Source: **Mirrormedia**

नावाडीह में सिंफर का सतर्कता जागरुकता अभियान

धनबाद, विशेष संवाददाता। सतर्कता जागरुकता अभियान-2024 के तहत **सीएसआईआर सिंफर** धनबाद ने नावाडीह ग्राम पंचायत में जागरुकता कार्यक्रम व उत्क्रमित उच्च विद्यालय लोवाडीह के छात्रों के बीच क्विज प्रतियोगिता का आयोजन किया। नावाडीह पंचायत भवन में ग्रामीणों के बीच भ्रष्टाचार व सतर्कता विषय पर जागरुकता कार्यक्रम का आयोजन किया गया। कार्यक्रम में आलोक शर्मा (प्रशासन नियंत्रक) व राकेश कुमार (अनुभाग अधिकारी) ने भ्रष्टाचार व सतर्कता विषय पर अपने-अपने विचार रखे। आज ही सीएसआईआर सिंफर ने उत्क्रमित उच्च विद्यालय लोवाडीह के छात्र-छात्राओं को भ्रष्टाचार व सतर्कता विषय पर शिक्षित किया। साथ ही विभिन्न कक्षाओं के विद्यार्थियों के बीच क्विज प्रतियोगिता का आयोजन किया गया। विजेता विद्यार्थियों को पुरस्कृत किया गया।

Source: **Livehindustan**

बोकारो के आरूष ने राज्य स्तरीय विद्यार्थी विज्ञान मंथन में किया टॉप, अब नेशनल चैंपियनशिप में दिखाएगा दमखम

बोकारो के सेक्टर-4 स्थित डीपीएस विद्यालय के दसवीं के छात्र आरूष रंजन ने राज्य स्तरीय विद्यार्थी विज्ञान मंथन में कक्षा 10 समूह में पहला स्थान प्राप्त किया है. इसके साथ ही आरूष अब विद्यार्थी विज्ञान मंथन के राष्ट्रीय स्तर की परीक्षा के लिए भी क्वालीफाई कर चुका है. यह परीक्षा मई 2025 में आयोजित होगी. बता दें कि **सीएसआईआर-सीआईएमएफआर**, धनबाद में विद्यार्थी विज्ञान मंथन का राज्यस्तरीय आयोजन किया गया. जिसमें कक्षा 6 से लेकर 11वीं के कुल 131 प्रतिभागियों ने भाग लिया. उनमें से 12

छात्र-छात्राएं का चयन राष्ट्र स्तरीय प्रतियोगिता के लिए हुआ है . लोकल 18 से खास बातचीत में आरूष ने अपनी खुशी जाहिर करते हुए बताया कि वह अपनी सफलता का श्रेय अपने माता-पिता और स्कूल के शिक्षकों को देना चाहते हैं. जिन्होंने उन्हें सही मार्गदर्शन और प्रोत्साहन दिया. उनका अगला लक्ष्य राष्ट्रीय स्तर की प्रतियोगिता में बेहतर प्रदर्शन करना है. आरूष के पिता निरंजन कुमार निजी इंश्योरेंस कंपनी में वाइस प्रेसिडेंट के पद कार्यरत हैं. वहीं माताजी बोकारो सिविल कोर्ट में असिस्टेंट के पद पर हैं. क्या है विद्यार्थी विज्ञान मंथन डीपीएस बोकारो के प्राचार्य डॉ. ए. एस. गंगवार ने आरूष की इस सफलता पर प्रसन्नता व्यक्त करते हुए उन्हें बधाई दी और राष्ट्रीय स्तर के लिए अपनी शुभकामनाएं दीं है. बता दें कि विद्यार्थी विज्ञान मंथन भारत सरकार के विज्ञान एवं प्रौद्योगिकी विभाग और एनसीईआरटी की ओर से आयोजित बड़ी प्रतिभा-खोज प्रतियोगिता है. इस परीक्षा का मुख्य उद्देश्य बच्चों में विज्ञान के प्रति रुचि लाना और विज्ञान के क्षेत्र में भारतीय वैज्ञानिकों द्वारा किए गए योगदान को अवगत कराना है.

Source: **News18**

CSIR-CIMFR and Royal Society of Chemistry hold teacher training workshop in Ranchi

CSIR-Central Institute of Mining and Fuel Research (CIMFR) partnered with the Royal Society of Chemistry to conduct a two-day teacher training workshop as part of the CSIR-Jigyasa programme. The workshop focused on improving teaching techniques to make science education more interactive and learner-centred. The event saw participation from 60 teachers in person, whilst 25 others attended virtually. The attendees expressed appreciation for the workshop's hands-on approach and engaging sessions. Pallabi Das, Senior Scientist at **CSIR-CIMFR,** discussed the importance of the **CSIR**-Jigyasa programme, which creates connections between **CSIR's** 38 laboratories and schools across India to foster scientific interest amongst students. The programme, which began in 2017, focuses on hands-on learning and interactive educational methods. Arvind Kumar Mishra, who heads **CSIR-CIMFR** as Director, stressed the necessity of adapting teaching strategies to suit Generation Z students and commended the partnership with the Royal Society of Chemistry.

Source: **Times of India**

खुली खदानों में डोजर पुश माइनिंग का सफलतापूर्वक परीक्षण

धनबाद। विशेष संवाददाता **सीएसआईआर-सीआईएमएफआर** ने भारत में पहली बार छत्तीसगढ़ के अंबिकापुर के पास अदानी समूह की पीईकेबी खदान में डोजर पुश माइनिंग पद्धति के कार्यान्वयन के लिए पहला कास्ट/थ्रो ब्लास्ट सफलतापूर्वक परीक्षण करके एक महत्वपूर्ण उपलब्धि हासिल की है। इस तकनीक में मानव रहित मशीनों का उपयोग करके खनन किया जाएगा। डॉ एम. पी. राय ने बताया कि इस परीक्षण में मानव रहित ड्रिल मशीन से 108 होल ड्रिल किया गया, जिसमें 60 टन बारूद द्वारा कास्ट ब्लास्ट का

सफल परीक्षण करवाया गया, और मानव रहित डोजर मशीन का उपयोग भी किया गया। इस पद्धति का परीक्षण सिंफर के निदेशक प्रोफेसर अरविंद कुमार मिश्रा के नेतृत्व में सफलतापूर्वक पूरी की गई है। पहला ब्लास्ट का सफल आयोजन में डॉ राय के अलावे विवेक कुमार हिमांशु, रामा शंकर यादव, सूरज कुमार एवं आशीष कुमार विश्वकर्मा शामिल थे।

Source: Livehindustan

BIT Sindri students win CSIR quiz competition

A team from the Mining Engineering Department of BIT Sindri, comprising Saurav Chatterjee and Abhay Kumar, has won the prestigious quiz competition organized by the **Council of Scientific and Industrial Research (CSIR)** in collaboration with the Mining Engineers Association of India (MEAI). The event, held at the **Central Institute of Mining and Fuel Research (CIMFR),** Dhanbad, was part of the celebrations for Indian Mining Day 2024. Over a hundred teams from Jharkhand and West Bengal participated in the competition, showcasing their knowledge and expertise. BIT Sindri was represented by two teams, both of which delivered exceptional performances. The winning team, consisting of Saurav Chatterjee, a final-year student, and Abhay Kumar, a third-year student, demonstrated outstanding skill to secure the first position. The second team from BIT Sindri, represented by Satyam Kumar and Vansh Raj, also impressed with their performance, earning a prize in the competition. Dr. Ajay Kumar, Director (Technical) of CMPDIL, and Dr. Arvind Mishra, Director of **CSIR-CIMFR**, Dhanbad, attended the event as the Chief Guest and Guest of Honor, respectively.

Source: Thejharkhandstory

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CSIR-Central Leather Research Institute (CSIR-CLRI)

Know-How Technology on "Bamboo Composites" transfers on the Day-2 of IISF 2023

One of the unique and extraordinary mega science festival — India International Science Festival (IISF 2023) is being organized during 17-20 January 2024 in Faridabad, Haryana. During the second day of this science festival on 18 Jan 2024, the Know-How Technology on "Bamboo Composites" was transferred to a well-known materials manufacturing company, M/s Asili Bamboo Products, Meerut, in the presence of Dr. Avanish Kumar Srivastava, Director, CSIR-AMPRI, Bhopal, and Mr Akshay Joshi, Director, M/s Asili Bamboo Products, Meerut. On this occasion various other dignatries were also present, namely Mr Md. Ali Shah, Sadhana; Dr. C. Anandharamakrishnan, Director, **CSIR-NIIST** Trivandrum; Prof. Manoranjan Parida, Director, CSIR-CRRI, New Delhi; Dr. B. Chandrasekaran, Former Director, **CSIR-CLRI**; Prof. Sudhir Singh Bhadauria, Director, UIT RGPV Bhopal; Shri Mayank Mathur, RC Member from CSIR-Headquarter; Dr. J.P. Shukla, Chief Scientist; Mr. Somnath Mazumder, CoA; Dr. J.P. Chourasia, Head PPD, **CSIR-AMPRI**; Dr. Sandeep Singhai, Head Business Development; Dr. Sarika Verma, PI and Principal Scientist; Dr. Neeta V.M. Khalkho, Sr. Principal Scientist, **CSIR-AMPRI;** and Dr. Satanand Mishra, Principal Scientist, **CSIR-AMPRI,** Bhopal.

Source: Pib

CSIR-CLRI projects its technology expertise and key services in India International Leather Fair 2024

In the 37th India International Leather Fair (IILF) 2024 held in Chennai during February 1-3, **CSIR-Central Leather Research Institute** presented four of the critical domains and expertise viz. (a) technology supply, (b) consultancy services, (c) human resource development activities and (d) testing and quality assurance services. Dr. K J Sreeram, Director, **CSIR-CLRI** said that **CSIR-CLRI** is the global forerunner of technology development in the areas of leather, leather chemicals, leather products, environmental technology, cleaner production etc. Insofar the leather value chain is concerned, this Institute is the leading holder of knowledge products. Technologies developed and scrutinized through a robust process and validated to be industry-ready.

Source: Pib

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Source: **Pib**

India to have its own footwear sizing system

India will get its own Indian footwear sizing system by 2025. The footwear will be certified by BIS, and a total of 1.25 lakh samples from 79 districts across the country have been collected by the **Central Leather Research Institute (CLRI)** towards the same. The report has been submitted to the BIS and trials are to begin after the approval. Dr N Kalaiselvi, Director General of the **Council of Scientific and Industrial Research (CSIR)** and Secretary of the Department of Scientific and Industrial Research (DSIR), on Tuesday said that **CLRI** has been given the responsibility to work on the Indian system of footwear sizing and it should be implemented by 2025. The user trials will be done for about one year on about 10,000 people and monitored for the 5-55 age group.
Source: **Dtnext**

Footwear in Indian sizing from 2025: CSIR

By 2025, footwear as per Indian sizing system will be available in the country, against the existing US and UK sizes, said N Kalaiselvi, director general of **Council of Scientific and Industrial Research (CSIR),** on Tuesday. She said that **Central Leather Research Institute (CLRI),** a constituent laboratory under CSIR, has already completed its pan-India feet scanning survey and submitted the final report to the Bureau of Indian Standards. “Over 1 lakh people from across 73 districts of India, within the age group of 5 to 55 have been surveyed and the report has been submitted to BIS. We will be able to launch the Indian footwear sizing system by 2025,” said Kalaiselvi during her visit to **CLRI.** She added that **CLRI** will now focus on creating footwear to meet health care needs of people. “With consultation from doctors and physiotherapists, they will develop footwear for patients suffering from orthopedic, diabetes and hormonal imbalance related problems,” said Kalaiselvi.
Source: **New Indian Express**

शहर में चमड़ा उद्योग से जुड़े 50 स्टार्टअप हो रहे तैयार; युवाओं ने लिया प्रशिक्षण

शहर में चमड़ा उद्योग से जुड़े **50** स्टार्टअप तैयार हो रहे हैं। इन स्टॉर्टअप पर काम करने वाले युवाओं को **सीएलआरआई** की ओर से प्रशिक्षण दिया गया। इस प्रशिक्षण के दौरान युवाओं को चमड़ा उत्पादों से जुड़ी विश्व बाजार की मांगों के बारे में बताया गया। प्रशिक्षण में उन्हें चर्म कारोबार का प्रबंधन करने के तरीके भी बताए गए। केन्द्रीय चर्म अनुसंधान संस्थान की ओर से चमड़ा उद्योग से जुड़े युवाओं को बाजार की नई विधाओं के बारे में भी जानकारी दी गई। सीएलई ऑडिटोरियम**,** केएलसी कॉम्प्लेक्स में हुए प्रशिक्षण में वरिष्ठ प्रधान वैज्ञानिक डॉ आर अरविंदन ने कहा कि नवाचार नए प्रयोग और नई तकनीक का मिश्रण है।

Source: Amritvichar

Chennai researchers develop footwear to treat diabetic foot ulcer, reduce risk of amputation

Chennai: Up to 20% of the 101 million people with diabetes in the country will develop foot ulcer and are at a risk of lower limb amputation. At present, there is no device that can prevent this. But researchers from **Central Leather Research Institute (CLRI)** have developed and patented special footwear that can help heal wounds faster and reduce the chance of amputation while also improving the gait.Researchers said the new footwear - ankle-foot orthosis (AFO) - is an offloading device that redistributes the pressure of the plantar, the tissue that connects the heel bone with the base of the toes, where most ulcers occur. The pressure offloading capability of the footwear would help fasten healing particularly in high-risk patients with diabetes suffering plantar ulcers. It will also reduce the chances of recurrence.

Source:Times of India

What is Bha, the proposed new shoe sizing system for Indians?

A pan-India survey on the feet sizes of Indians was recently concluded, as part of a project for developing an Indian sizing system for footwear. Proposed to be named Bha (भ), to represent Bharat, it could form the basis for manufacturing shoewear in India. Upon its implementation, Bha will replace the existing UK/European and the US sizing systems. The Chennai-based Council of Scientific and Industrial Research–Central Leather Research Institute (CSIR–CLRI) conducted the survey. It has submitted its recommendations to the Department of Promotion of Industry and Internal Trade (DPIIT), operating under the Union Ministry of Commerce. The DPIIT has forwarded the same to the Bureau of Indian Standards (BIS), which is the Indian authority to implement this sizing system, once approved. Since Bha will completely overhaul the existing sizing systems, footwear manufactured as per Bha size standards will be given to users for trial, testing and feedback. Bha is expected to be implemented sometime in 2025.

Source: Indianexpress

भारत लाएगा जूते के आकार के लिए अपनी 'भा' प्रणाली, जानिए इससे जुड़ी महत्वपूर्ण बातें

अभी जूते के आकार के लिए US (अमेरिका) या UK (ब्रिटिश) मानक उपलब्ध हैं, लेकिन अब भारत में जूते के आकार का अपना मानक आने वाला है। चेन्नई में स्थित वैज्ञानिक और औद्योगिक अनुसंधान परिषद-केंद्रीय चमड़ा अनुसंधान संस्थान **(CSIR-CLRI)** ने भारतीयों के पैरों के आकार को रिकॉर्ड करने के लिए एक अखिल भारतीय सर्वे किया, ताकि भारत में निर्मित फुटवियर के लिए एक मानक आकार प्रणाली विकसित की जा सके। नई आकार प्रणाली को 'भा' नाम देने का प्रस्ताव है। **CSIR-CLRI** ने दिसंबर, 2021 से मार्च, 2022 के बीच भारत में विभिन्न फुटवियर निर्माताओं और उपयोगकर्ताओं का सर्वे किया। सर्वे से पता चला कि भारत की जातीय विविधता के लिए कई जूते आकार प्रणालियों की आवश्यकता होगी और इससे यह भी सामने आया कि पूर्वोत्तर भारत के लोगों के पैरों का आकार छोटा होता है। **CSIR-CLRI** ने एक औसत भारतीय व्यक्ति के पैर के आयाम को बेहतर ढंग से समझने के लिए विभिन्न स्थानों पर 3D स्कैनिंग मशीने स्थापित कीं।

Source: Newsbytes

Rethinking sizes

When the shoe does not fit, it's time to rethink size measures! And that's what is happening in India. There may soon be a new sizing system called 'Bha' to measure footwear for Indians. Currently Indians use Europeans standards to gauge sizes. The need for a local system for shoe sizes has arisen given the differences in the Indian population's foot shape and size. Indian feet are flatter and wider. This was uncovered by a study conducted by The **Council of Scientific and Industrial Research (CSIR) and the Central Leather Research Institute (CLRI**) that surveyed over a lakh of people in 79 locations on the size, structure and dimension of an average Indian Foot. The survey found that most Indians wear a size larger since European footwear measures are narrower. The proposed 'Bha' system — that is likely to be out by 2025 — is being spearheaded by the Department of Promotion of Industry and Internal Trade (DPIIT) and the Bureau of Indian Standards (BIS). The expectation is that Indians will get better fitting footwear with the 'Bha' sizing.

Source: The Hindu Business Line

CSIR-CLRI's Strategic Meeting & Workshop Paves the Way for Innovation & Sustainability in Zimbabwe Leather Industry

In a bid to foster enduring collaborations aimed at a sustainable future, a strategic meeting took place at Lupane State University, Zimbabwe, on April 30, 2024. The meeting brought together esteemed representatives from the **Council of Scientific and Industrial Research – Central Leather Research Institute (CSIR-CLRI),** Dr. B. Madhan, Chief Scientist, and Dr. S. Sundarapandiyan, Senior Scientist, alongside the Vice Chancellor and faculty members of Lupane State University. The gathering served as a platform to deliberate on the impactful interventions of **CSIR-CLRI** across various African countries, with a particular emphasis on charting a course for mutual success in the leather sector.

Dr. Fortune Jomane, from Lupane State University, played a pivotal role in orchestrating the visit, which included engagements with key institutions such as the Leather Institute of Zimbabwe and a tannery in Bulawayo.
Source: Leathernews

In its quest for a proper fit, Bharat explores a new shoe sizing system

India is set to launch its own shoe sizing system called Bha (भ) to join the ranks of global standards such as the ones followed in the U.K., the U.S. and Europe. The new Indian footwear sizing system is conceived by the **Central Leather Research Institute (CLRI),** and is sponsored by the Department of Promotion of Industry & Internal Trade (DPIIT) under the Commerce Ministry. CLRI Director K.J. Sreeram is the brain behind project Bha (from Bharat) that set out to create a sizing system to fit the Indian feet. The **CLRI** conducted a pan-India survey dividing India into five zones with 1,01,880 samples across 24 parameters from 79 locations. **CLRI** Chief Scientist Md Sadiq said, "People from different walks of life from factories to IT and societies to apartments have been included in the survey."
Source: The Hindu

CSIR - Central Leather Research Institute celebrates National Technology Day and World Environment Day

CSIR - Central Leather Research Institute (CLRI), Chennai celebrated National Technology Day and World Environment Day on 04 June 2024 at **CSIR-CLRI,** Chennai. Dr. K J Sreeram, Director, **CSIR-CLRI** welcomed the august gathering represented by the Chief Guest & Speaker of the day, Shri K R Venkatadri, Chief Commercial Officer, M/s Tata Chemicals, Mumbai, Shri P. Rajasekaran, Business Head, Finished Leathers, Tata International Limited, Dewas, Scientists and Researcher of the Institute. Mr. K R Venkatadri delivered a Technology & Environment Day lecture on "Pioneering Sustainability: Bridging Tech & the Environment". While delivering a lecture, Venkatadri discussed the need for an innovation team in the research group, assessing the market and its value for the research outcomes, different levels of technology development and its environmental sustainability, etc. An Agreement in connection with licensing of the technology as "GENOCORIUM, a regenerated leather for applications in lifestyle products was exchanged between M/s Tata International Limited (TIL), Dewas and CSIR-Central Leather Research Institutes, Chennai.
Source: Pib

CSIR-Central Leather Research Institute enters Strategic Consultancy Agreement with M/s. Sai Chamois Inc, Dindigul

CSIR-Central Leather Research Institute is pleased to announce a significant step forward in its environmental sustainability of leather sector drive with the signing of a consultancy agreement with M/s. Sai Chamois Inc, Dindigul, Tamil Nadu, a renowned leader in Chamois (oil tanned) leathers. Under the terms of the agreement, **CSIR-CLRI** will provide M/s. Sai Chamois Inc. with expert guidance and support in treatment of their

wastewater, and reusing them in subsequent batches of oil tanning, leveraging their extensive experience and proven track record in the industry. "We are excited to partner with **CSIR-CLRI** as we embark on this transformative journey," said Mr. Rajeswara Rajha, Partner. "The expertise of the **CSIR-CLRI** team would be very useful in ensuring our commitment to a safer environment. This adds to our USP as we have always been a metal free leather processing unit" he added.
Source: Pib

Teacher-Training Program at CLRI- CHENNAI

CSIR-Central Leather Research Institute, Chennai organized a 5-day teacher-training program “Cultivating Scientific Temperament through Innovative Leather Technology and Sustainable Practices” from June 24-28, 2024 in association with Knowledge and Awareness Mapping Platform (KAMP) an alliance partner of the **CSIR- National Institute of Science Communication and Policy Research (CSIR-NIScPR),** with Industrial Partner M/S Nysa Communications Pvt. Ltd. (NCPL), Noida. During the training period, various lectures were organised on (1) Significance of leather and its impact on national growth in terms of revenue and employment generation, (2) Need of new footwear sizing system for India and its advantages, (3) Management of liquid and solid waste of the industries as well as domestic using circularity model, (4) Usages of leather-like materials derived from agricultural waste and (5) Healthcare research activities and products by the Scientist of the Institute.
Source: Pib

Grand Inauguration of the celebration of One week - One theme held at CSIR-Central Leather Research Institute in Chennai

The Grand Inauguration of the 'One Week, One Theme' of the Chemicals (including Leather and Petrochemicals) Theme was held on 16th July 2024 at **CSIR-CLRI.** The central theme of the Inaugural Session was “Trends in Specialty Chemicals for Leather by 2030” (Tanner-Researcher-Chemical House Interaction Meet). The welcome address was delivered by Dr K J Sreeram, CLP Theme Director and Director, **CSIR-CLRI** in which he explained about the significance of the OWOT campaign and its role in strengthening the Institute-Industry partnership. The inaugural address was delivered by Shri P Rajasekaran, Business Head – Finished Leather, Tata International Limited. Shri P Rajasekaran shared his insights on the technological advancements in the value chain of leather processing and threw light on affordable leather chemicals.
Source: Pib

CSIR-CLRI organises Leather Tech Fair and Expo in Chennai

The One-Week-One-Theme (OWOT) campaign for the ‘Chemicals (including Leather) and Petrochemicals (CLP)’ theme was celebrated at **CSIR-Central Leather Research Institute (CLRI)** on July 16, 19 and 10. Following the grand inauguration and panel discussion organised on July 16, an array of informative and thought-provoking talks were organised on July 19 at **CLRI**. Dr K.J.Sreeram – Director of **CSIR-CLRI** welcomed the

gathering comprising students and faculties of schools, and colleges, **CSIR** family and the industry stakeholders. He emphasized the importance of bringing about a change in perceptions about the leather industry among the public, the role of the leather industry in circularity, the reduction of carbon footprint, and the journey of **CSIR-CLRI.** B. Ramalingam – Head of M/s Bhartiya International Ltd spoke about the reusability and recyclability of leather and its role in the productive conversion of bio-waste (hides and skins) to value-added products.
Source: Adyartimes

Tata International launches eco-friendly Phoenix Leather

Tata International, the global trading and distribution arm of the Tata Group, has launched Phoenix Leather, an eco-friendly product under its Earthcare Leather range. Developed through a patented collaboration with the **Central Leather Research Institute (CLRI),** Chennai, Phoenix Leather marks a significant advancement in sustainable leather technology. The patented "GENOCORIUM" process behind Phoenix Leather transforms trim waste from leather production into high-quality reconstituted leather sheets. This technology not only repurposes corium waste but also significantly reduces water pollution, depletion, and greenhouse gas emissions associated with traditional leather manufacturing. The Earthcare Leather range, featuring Phoenix Leather alongside bio-based and chrome-free/metal-free/aldehyde-free options, underscores Tata International's commitment to circularity and sustainability in the leather industry.
Source: Thehindubusinessline

India's trek through lesser-known eco-fibre terrain

The fashion industry has long faced criticism for its environmental footprint. However, many innovative fabrics are emerging, offering eco-friendly alternatives and challenging the very essence of what fashion fabrics can be made from. These promising materials, such as Apple Leather, Mango Fibre, Banana Fibre, Bamboo Fibre amongst others, also serve to repurpose various waste products and by-products that would otherwise pollute landfills or oceans. While these materials offer benefits such as waste management, water conservation, reduced carbon emissions and soil regeneration, it's important to note that no fabric can be deemed entirely sustainable. With a breakthrough in 2023, scientists at the Chennai-based **Central Leather Research Institute (CLRI)** harnessed the potential of 'King of Fruits' by successfully creating a leather-like material using mango pulp, suitable for making bags, belts and more. Beyond these products, mango leather can be further utilised in the apparel industry to create a variety of items. It holds promise for footwear, belts, jackets, skirts, pants and watch straps, offering innovative and sustainable options in fashion.
Source: Apparelresources

How to make plants grow? Try hair, say scientists

Scientists at the **Central Leather Research Institute (CLRI)** in Chennai have devised a method to turn animal hair, often discarded as waste in tanneries during the leather

making process, into fertilizer. “Hair is packed with nutrients such as the protein keratin, a key ingredient for healthy plant growth,” says scientist Shakila Shobana. The technology also helps tackle pollution caused by the leather industry. Hair extracted from raw hide or skin is first washed and then put through a hydrolysis process using a novel bacterial strain, which breaks it down, explains Shakila. After six hours, a liquid keratin hydrolysate is produced, which is then used to create organic compost, which serves as a natural fertilizer. Because keratin contains nitrogen in its amino acids, its gradual release into the soil promotes plant growth. Researchers have also developed an organic supplement for agricultural use. This involves converting hair into keratin hydrolysate through biochemical processes. The hydrolysate is then spray-dried into a fine powder.
Source: Times of India

Breaking barriers. How nanozymes are revamping collagen-based biomaterials

Recreating the complex and precise functions of natural enzymes through artificial means has been one of the formidable challenges in science. Enzymes, which catalyse several vital biochemical reactions in living organisms, possess unmatched specificity, efficiency and biocompatibility. Replicating these qualities in artificial enzymes has been a significant hurdle, particularly in ensuring that they function as effectively as enzymes without hindering other biochemical processes. Artificial enzymes Researchers at the **CSIR-Central Leather Research Institute (CSIR-CLRI),** Chennai, have made significant achievements in nanozymes (nanomaterials that function like enzymes), unveiling innovative approaches that could transform the field of artificial enzymes and the development of collagen-based biomaterials. Two studies from Dr Amit A Vernekar’s research group, recently published in Chemical Science, highlight their pioneering work in expanding the field of artificial enzymes.
Source: Thehindubusinessline

CSIR-CLRI teams up with Naser Bali to make gloves for extreme cold weather

The **CSIR-CLRI,** an authority in leather science and technology, on Monday announced that it has teamed up with M/s. Naser Bali (Gloves) Pvt. Ltd., a leader in quality leather apparel and sporting gloves, to introduce cutting-edge Indian leather and gloves designed for extreme cold weather, especially for defence personnel deployed in high altitudes. The technology licensing agreement to transfer the two know-hows has been initiated today through which the two global leader--one in S and T development and one in translation--are coming together to bring innovation to the consumer. **CSIR-CLRI** and M/s. Naser Group is proud to announce this renewed partnership for S and T-led Vikisit Bharat. **CSIR-Central Leather Research Institute,** a constituent laboratory of the **Council for Scientific and Industrial Research (CSIR)** under the Ministry of Science and Technology, constantly strives to bring out innovations that are globally relevant and locally self-reliant. Through a project named CHILLS (Chemicals for Low-Temperature Applications of Leather in Strategic Sector), technologies for developing leathers and gloves that can be used at very low temperatures, especially for defense personnel

deployed in high altitudes, have been developed, and intellectual property (IP) protected, a PIB release here said.
Source: **Uni India**

CSIR-CLRI celebrates 83rd CSIR Foundation Day

CSIR-Central Leather Research Institute celebrated the 83rd Foundation Day of **Council of Scientific and Industrial Research (CSIR)** at Triple Helix auditorium on 8.10.2024. Dr. K J Sreeram, Director, **CSIR-CLRI** in his welcome address recalled the achievements of each lab of CSIR for the development of the Nation. Dr.Swarna V Kanth, Chief Scientist introduced the Chief Guest. The Chief Guest, Shri Arun Roy, IAS, Secretary, Industries, Investment Promotion & Commerce Department Govt. of Tamil Nadu graced the occasion as Chief Guest and appreciated the contribution of **CSIR** Labs to the Country. He mentioned, in particular, the need of industries R&D setup, importance of manufacturing sector, service sector and cost cutting in footwear sector through domestic technology developments. Shri. Abdul Wahab, Regional Chairman (South), Council for Leather Exports, India recalled the vision of the **CSIR-CLRI** on the leather sector and it's all technologies which helped the industries to lead the global market. LEATHER MARK: Dr. KJ Sreeram, launched the "**CSIR-Central Leather Research Institute** Introduces the Prestigious **CLRI** Leather Mark.
Source: **Pib**

Innovative artificial enzymes: Dr. Amit Vernekar's Research | 091024

Recreating the complex & precise functions of natural enzymes through artificial means has been one of the formidable challenges in science. Enzymes, which catalyse several vital biochemical reactions in living organisms, possess unmatched specificity, efficiency & biocompatibility. Replicating these qualities in artificial enzymes has been a significant hurdle, particularly in ensuring that they function as effectively as enzymes without hindering other biochemical processes. Researchers at the **CSIR-Central Leather Research Institute (CSIR-CLRI),** Chennai, have made significant achievements in nanozymes (nanomaterials that function like enzymes), unveiling innovative approaches that could transform the field of artificial enzymes and the development of collagen-based biomaterials. Two studies from Scientist Dr Amit A Vernekar's research group, recently published in Chemical Science, highlight their pioneering work in expanding the field of artificial enzymes.
Source: **Prudentmedia**

CSIR-Central Leather Research Institute inaugurates LERIG CONCLAVE 2024

CSIR-Central Leather Research Institute (CLRI) inaugurated the 57th edition of the LERIG Conclave at Triple Helix Auditorium, on 06 November 2024. Dr. R. Aravindan, Sr. Principal Scientist welcomed the gathering. Shri RK Jalan, Chairman, Council for Leather Exports (CLE) graced the occasion as Chief Guest and addressed the gathering, Dr. Ramanuj Narayan, Director, **CSIR-IMMT**, and Shri V. Noushad, President, CIFI were also graced the function as the Guests of Honour and shared **CSIR-CLRI** programs and need

of its future research in the leather and non-leather footwear sector, respectively. While delivering the presidential address, Dr. KJ Sreeram Director of **CSIR-CLRI** said that the 57th LERIG CONCLAVE would discuss the new Research and Development activities for meeting the Goals of the upcoming National Policy on Leather and Footwear sector to improve the global trade by the Indian leather industries, Advancements in Machineries for Indigenization and future of leather and footwear sector.
Source: Pib

How to dispose post-tanning waste? Make less polluting leather

Nearly 5sqft of leather goes into making a pair of shoes and the process leaves more than 70 grams of chemical-laced soslid leather waste. Every year, the Indian leather industry produces three billion sqft of leather and generates five lakh tonnes of solid waste, which includes 50,000 tonnes produced during the post-tanning process. And, don't forget, it takes 45litres of water to process one kg of hide. Much of the waste is not disposed of properly. This makes the leather sector, including the tanneries in seven districts of Tamil Nadu, among the highly polluting in the country. The situation has forced researchers to look for a solution. A few months ago, Tata International, global trading and distribution arm of the Tata Group, launched phoenix leather, which is high-quality reconstituted leather sheets made from waste generated during the post-tanning process. The product was a result of collaboration with **CSIR-Central Leather Research Institute (CLRI),** Chennai, to develop and patent a technology, which uses shaving waste, crust trimming, and buffing dust, generated in the post-tanning process, into 'regenerated' leather also called genocorium. Experts say with the 50,000 tonnes of waste from post-tanning process generated every year, around two billion sqft of regenerated leather, valued at 80 billion a year, can be manufactured.
Source: Times of India

Nanozymes can transform biomaterials for use in medicinal & biomedical applications

Researchers are expanding the horizons of artificial enzymes known as "nanozymes" to use them as catalysts for transforming biomaterials for their futuristic use in medicinal and biomedical applications. Several complex natural enzymes can act on proteins to generate functional proteins. However, the interplay of nanozymes with proteins has rarely been explored. Scientists are now probing the unexplored roles of nanozymes in biological environments and their interplay beyond small molecule substrates due to their potential prospects in biotechnological and therapeutic interventions. They are also trying to develop next-generation artificial enzymes to overcome the current limitations of selectivity, specificity, and efficiency of existing artificial enzymes. Researchers from the **CSIR-Central Leather Research Institute (CLRI),** working with the support of INSPIRE Faculty Fellowship and WISE Kiran Fellowship of the Department of Science and Technology (DST), investigated the chemistry at the interface of proteins and nanozymes to push the limits of artificial enzymes. Dr. Amit Vernekar and his PhD students, Mr. Adarsh Fatrekar and Ms. Rasmi Morajkar have probed the crucial role played by

manganese-based oxidase nanozyme (MnN) in stitching collagen, a vital structural protein in various biological tissues, through a covalent process known as “crosslinking” to produce biomaterials.

Source: **Pib**

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CSIR- Central Mechanical Engineering Research Institute (CSIR-CMERI)

CSIR launches tech-driven initiative to improve productivity, farmers' income

The **Council of Scientific and Industrial Research (CSIR)** has launched a unique mission to develop region-specific smart agro-technologies for paddy in south India, besides for other crops, aiming to improve soil health and productivity and thereby enhance the farmers' income, a senior scientist said. This endeavour will help the Central government to introduce the use of automation, sensors, drones, and Artificial Intelligence gadgets for agriculture in the future. "This is one of the first of the mission mode projects that have been conceived and implemented on the ground," he said. A team of scientists and technologists from **CSIR Fourth Paradigm Institute,** Bengaluru, **CSIR-National Aerospace Laboratories**, **CSIR-Indian Institute of Integrative Medicine** Jammu, and **CSIR-Central Mechanical Engineering Research Institute**, Ludhiana, identified the paddy fields of farmers at Chengalam, Thiruvarppu panchayat and Muleppadam Panchayat in Kottayam, Kerala, Senbagaraman Pudur and Navalkadu in Nagercoil, Tamil Nadu, and Hosapete in Karnataka for the mission.

Source: **Deccanherald**

Swaraj 50

Conceived as the first indigenous tractor, offering the farmer freedom from expensive imports and high costs, Swaraj Tractors is today the second largest tractor maker in India. From a humble beginning at Mohali in Punjab in 1974, the brand has not only survived against all odds, but has seen rapid growth, with over 22 lakh customers across India. When the Green Revolution was envisioned, the need for a parallel growth in agriculture mechanisation was felt. At that time, the installed capacity of tractors, all assembled in India with foreign collaborations, was only about 8,000 per annum. The Planning Commission estimated that India would have to add at least 40,000 tractor units every year for the next five years — especially in the 20-25 HP category. With this in mind, the **Central Mechanical Engineering Research Institute** (a laboratory of the **Council of Scientific and Industrial Research)** at Durgapur, West Bengal, was entrusted with the task.

Source: **Tribune India**

Swaraj: The Untold Story Of India’s First Indigenous Tractor

The adoption of technology in the Indian agriculture scenario started in the 1960s, during which mechanised farm tools, improved irrigation facilities, the use of high-yielding seed

varieties, and the application of pesticides and fertilizers started getting adopted. Upon Independence, India was left with indigenous manual or animal-driven agricultural tools. The country endured two severe droughts during 1964-65 and 1965-66. But this was before the Green Revolution, which changed the agricultural scenario in the country. Another historical event occurred just before the decision to develop a 20 HP Tractor with USSR's technical and financial assistance. In 1964, the then Prime Minister of India, Pt Jawaharlal Nehru invited one of the very young, dynamic and visionary mechanical engineers, Man Mohan Suri, to lead the country's only national-level mechanical research institute, named the **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, as its director. Man Mohan Suri was a highly acclaimed scientific personality of the time who was awarded the Padma Shri in the year 1961 and the Shanti Swarup Bhatnagar Prize (the highest Indian science award) in 1962 for his outstanding contributions to the field of Engineering Sciences.
Source: Scienceindiamag

Council of Scientific and Industrial Research (CSIR)-Central Mechanical Engineering Research launched Electric Tiller

Dr. N. Kalaiselvi, Director General, **Council of Scientific and Industrial Research (CSIR)** & Secretary, Department of Scientific and Industrial Research (DSIR) unveiled the Central Mechanical Engineering Research institute's Electric Tiller in Durgapur on 25th May 2024. The **CSIR-CMERI's** innovative technologyistailored to meet the requirements of small to marginal farmers, who constitute over 80% of the nation's farming community. These farmers, typically with land holdings of less than 2 hectares, can utilize the electric tiller for various agricultural tasks, benefiting from substantially reduced operational costs. Furthermore, this advancement underscores India's commitment to achieving net-zero emissions and promoting environmentally friendly farming practices. The Electric Tiller boasts enhanced torque and field efficiency, while also prioritizing user comfort and environmental sustainability.
Source: Pib

छोटे किसानों की खेत जुताई समस्याएं दूर करेगा इलेक्ट्रिक टिलर, कम लागत में देता है कई फायदे

छोटी जोत वाले किसानों को अकसर खेत की जुताई के लिए काफी समस्याओं का सामना करना पड़ता है, उनकी दिक्कतों को दूर करने के लिए इलेक्ट्रिक टिलर आ गया है. विज्ञान एवं प्रौद्योगिकी मंत्रालय ने रविवार को कहा कि वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) और केंद्रीय यांत्रिक इंजीनियरिंग अनुसंधान संस्थान (सीएमईआरआई) ने छोटे और सीमांत किसानों को टिकाऊ और बेहतर खेती में मदद करने के लिए एक इलेक्ट्रिक टिलर लॉन्च किया है. इस इलेक्ट्रिक टिलर में बेहतर टॉर्क उत्पन्न होता है. साथ ही इसमें फील्ड में काम करने की बेहतर दक्षता है. इस टिलर से काम करने वाले को भी आराम मिलता है और यह पर्यावरण को भी अधिक नुकसान नहीं पहुंचाता है. इस टिलर की एक और

खासियत यह होती है कि इसमें कंपन कम होता है. साथ ही यह साइलेंट तरीके से काम करता है,यह अधिक शोर नहीं करता है.

Source: Kisantak

CSIR innovation: New compact utility tractor can help uplift the small and marginal farmers

A newly developed compact, affordable and easily manoeuvrable utility tractor catering for small and marginal farmers could help them increase agricultural productivity while keeping the cost low. An MSME has planned to set up a manufacturing plant for mass production of tractors for supply to farmers. Marginal and small farmers comprise over 80 per cent of cultivators in India. A large population of them still depend on bullock-driven farming in which operational costs, maintenance costs and poor returns pose a challenge. Though power tillers are replacing bullock-driven ploughs, they are cumbersome to operate. Tractors on the other hand are unsuitable for small farmers and unaffordable for most small farmers. In order to address these challenges, **CSIR-Central Mechanical Engineering Research Institute (CSIR- CMERI)** based in Durgapur, West Bengal, has developed a compact, affordable and easily manoeuvrable tractor of low horsepower range to meet the requirement of the marginal and small farmers, with support from the SEED Division of Department of Science and Technology (DST), Government of India.

Source: Agriculturepost

किसानों के लिए सीएसआईआर का तोहफा, तैयार किया कॉम्पैक्ट और किफायती ट्रैक्टर

भारत में छोटे और सीमांत किसानों की संख्या अधिक है. यहां पर 80 प्रतिशत छोटे और सीमांत किसान हैं. इनके पास छोटी जोत की जमीन है. इस 80 प्रतिशत आबादी का एक बड़ा हिस्सा आज भी अपने खेतों की जुताई के लिए पारंपरिक तरीकों पर ही निर्भर है. वो जुताई के लिए बैल और भैंसों का इस्तेमाल करते हैं. इनका रखरखाव, इनके मेंटेनेंस का खर्च और फिर इससे किसानों को जो रिटर्न मिलता है, वो काफी कम है. हालांकि अब पावर टिलर बैलों से चलने वाले हल की जगह ले रहे हैं, लेकिन उन्हें चलाना परेशानी भरा है. जबकि बड़ा ट्रैक्टर छोटे किसानों के लिए अनुपयुक्त हैं. अधिकांश छोटे किसान इसके रखरखाव का खर्च उठाने में सक्षम नहीं हैं. किसानों को इन परेशानियों और चुनौतियों से मुक्ति दिलाने के लिए और उनकी समस्याओं का समाधान करने के लिए सीएसआईआर-केंद्रीय यांत्रिक इंजीनियरिंग अनुसंधान संस्थान **(सीएसआईआर-सीएमईआरआई)** ने सीमांत और छोटे किसानों की जरूरतों को पूरा करने के लिए कम हॉर्स पावर रेंज का एक कॉम्पैक्ट, किफायती और आसानी से चलने योग्य ट्रैक्टर तैयार किया है. छोटे और सीमांत किसानों के लिए एक नया विकसित कॉम्पैक्ट, किफायती और आसानी से चलने वाला ट्रैक्टर उन्हें लागत कम रखते हुए कृषि उत्पादकता बढ़ाने में मदद कर सकता है. एक एमएसएमई कंपनी ने किसानों को आपूर्ति के लिए ट्रैक्टरों के बड़े पैमाने पर उत्पादन के लिए प्लांट लगाने की योजना बनाई है.

Source: Kisantak

WBPCB to procure machine to convert domestic waste into RDF

The West Bengal Pollution Control Board (WBPCB) is procuring a machine capable of converting mixed domestic waste, including plastic waste, into Refuse Derived Fuel (RDF) which can be used to produce electricity by power plants. “We have plans to set up such plants in four places – two of which will be in Kolkata and Bidhannagar for undertaking a pilot project and research. If the pilot project is successful, it will be spread further. The respective urban local bodies will oversee the operation of these plants,” said Rajesh Kumar, member secretary of WBPCB on the sidelines of a conclave on “Sustainable Growth Opportunities for Plastics & Chemical Sectors in West Bengal” organised by Merchants’ Chamber of Commerce & Industry (MCCI) in association with Indian Chemical Council and Indian Plastics Federation. According to Rudra, **CSIR-CMERI** in Durgapur is successfully implementing a project to generate RDF from plastic waste. “Plastic should be used as a resource to make life sustainable,” Rudra said. Md. Ghulam Rabbani, state Environment minister, said that WBPCB has developed the most intensive air quality monitoring network in the country.

Source: Millenniumpost

किसानों के लिए सीएसआईआर का तोहफा, तैयार किया कॉम्पैक्ट और किफायती ट्रैक्टर

भारत में छोटे और सीमांत किसानों की संख्या अधिक है. यहां पर 80 प्रतिशत छोटे और सीमांत किसान हैं. इनके पास छोटी जोत की जमीन है. इस 80 प्रतिशत आबादी का एक बड़ा हिस्सा आज भी अपने खेतों की जुताई के लिए पारंपरिक तरीकों पर ही निर्भर है. वो जुताई के लिए बैल और भैंसों का इस्तेमाल करते हैं. इनका रखरखाव, इनके मेंटेनेंस का खर्च और फिर इससे किसानों को जो रिटर्न मिलता है, वो काफी कम है. हालांकि अब पावर टिलर बैलों से चलने वाले हल की जगह ले रहे हैं, लेकिन उन्हें चलाना परेशानी भरा है. जबकि बड़ा ट्रैक्टर छोटे किसानों के लिए अनुपयुक्त हैं. अधिकांश छोटे किसान इसके रखरखाव का खर्च उठाने में सक्षम नहीं हैं. किसानों को इन परेशानियों और चुनौतियों से मुक्ति दिलाने के लिए और उनकी समस्याओं का समाधान करने के लिए **सीएसआईआर-केंद्रीय यांत्रिक इंजीनियरिंग अनुसंधान संस्थान (सीएसआईआर-सीएमईआरआई)** ने सीमांत और छोटे किसानों की जरूरतों को पूरा करने के लिए कम हॉर्स पावर रेंज का एक कॉम्पैक्ट, किफायती और आसानी से चलने योग्य ट्रैक्टर तैयार किया है. छोटे और सीमांत किसानों के लिए एक नया विकसित कॉम्पैक्ट, किफायती और आसानी से चलने वाला ट्रैक्टर उन्हें लागत कम रखते हुए कृषि उत्पादकता बढ़ाने में मदद कर सकता है. एक एमएसएमई कंपनी ने किसानों को आपूर्ति के लिए ट्रैक्टरों के बड़े पैमाने पर उत्पादन के लिए प्लांट लगाने की योजना बनाई है.

Source: Kisantak

Centre of excellence set up at IIT-P for coating technology

A centre of excellence for wear- and corrosion-resistance coating technology that finds usage in a number of industries like manufacturing, aerospace, agriculture and

automotive, was set up at Indian Institute of Technology (IIT)-Patna on Thursday with support from the department of science and technology, Govt of India. The centre, first of its kind in eastern India, was inaugurated by IIT-P director T N Singh at the inaugural function of a four-day international conference on “Advances in Thermal Spray”. Singh said the initiative will develop “pioneering solutions that will revolutionize industries such as manufacturing, aerospace and automotive". Ramanuj Narayan, director of **CSIR-IMMT,** Bhubaneswar; Goutam Sutradhar, director of NIT-Jamshedpur; Naresh Chanda Murmu, director of **CSIR-CMERI,** Durgapur; and Anup Kumar Keshri, principal coordinator of the centre of excellence among others were present on the occasion.
Source: Times of India

Durable efficient battery for energy solutions in remote sub-zero conditions

A device that combines an efficient durable cathode catalyst and anti-freezing electrolyte fabricated for Zn-air batteries can be used as an energy source in remote areas like the Himalaya where conventional batteries may struggle due to extreme cold conditions. In an era of escalating energy demands, efficient energy storage systems are pivotal for harnessing clean, renewable resources. Researchers are trying to develop devices with heightened energy density and reduced weight. Lithium-ion (Li-ion) batteries face constraints due to heavy cathode materials like lithium cobalt oxide and lithium iron phosphate with limiting energy density. A DST Inspire Faculty Fellow Dr. Aniruddha Kundu and his team from **CSIR-CMERI**, Durgapur synthesised a cathode material by integrating CoFe alloy and Fe3C nanoparticles using an in-situ growth technique. The result is a simple integrated heterostructure of biphasic Co0.7Fe0.3/Fe3C (CoFe alloy/iron carbide) embedded on in situ grown N-doped carbon sheets.
Source: Pib

CSIR develops durable battery for energy solutions in remote sub-zero conditions that would benefit defence forces

Experts from the **Council of Scientific and Industrial Research (CSIR)** have developed a battery that functions efficiently in sub-zero temperature, which has immense benefits for the armed forces as well as the civilian populace located in high altitude areas. A device that combines an efficient durable cathode catalyst and an anti-freezing electrolyte fabricated for zinc-air batteries can be used for energy solutions in remote areas where conventional batteries may struggle due to extreme cold conditions. A team from **CSIR-Central Mechanical Engineering Research Institute** synthesised a cathode material by integrating it with cobalt and iron based alloy and nanoparticles. The resulting hybrid structure enhanced the durability and demonstrated remarkable efficacy in both liquid and solid-state zinc-air batteries, even under sub-zero temperatures, thereby showcasing its potential for practical electrochemical applications.
Source: Tribuneindia

One Week One Theme (OWOT) Programme for Civil, Infrastructure and Engineering (CIE) theme of CSIR celebrated at CSIR-SERC

The **Council of Scientific & Industrial Research (CSIR),** known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. **CSIR** has a dynamic network of 38 national laboratories, 39 outreach centers, 1 innovation complex, and three units with a pan-India presence. One Week One Theme (OWOT) campaign was launched by Dr. Jitendra Singh, Minister of Science & Technology and Earth Sciences, to highlight India's recent successes in science and technology. Among the eight R&D themes of **CSIR**, numerous events are being organized at various places across the country. As a part of this campaign, a one-day event comprising a stakeholder meet cum exhibition under the OWOT Campaign initiative focused on Civil Infrastructure and Engineering (CIE) theme was organized on 5 September 2024, at **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, with five **CSIR** labs working in the area, viz, **CSIR-Central Building Research Institute (CSIR-CBRI),** Roorkee, **CSIR-Central Road Research Institute (CSIR-CRRI),** New Delhi, **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, **CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal and **CSIR-SERC** participating in it.
Source: Pib

Department of Science and Technology Year End Review 2024

- A demo plant is established at Sihphir Venghlun in Meghalaya for post-harvest processing of ginger/turmeric through technological interventions from **CSIR-CMERI** with direct benefit to 128 Tribals and indirect to all the tribals living in project area.
- **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Bhavnagar, Gujarat converted two running solar salt works into model units and developed high purity solar salt technologies for agarias community of Kutch, Gujarat (Halwad Region). A cluster of 50 small scale salt manufacturers (agarias) is formed and trained for best practices of salt manufacturing and value addition in their salt works by utilizing bittern (liquor remained after salt harvesting).
- DST has supported two Technology Deployment Test beds in PPP mode to be implemented by IIT Delhi – Thermax Ltd and **CSIR-IICT** Hyderabad – BHEL for setting up pilot-scale demonstrations in Coal Gasification plants for Methanol and DME production with industry partnering as solution provider along with a technology designer (knowledge partner) to deploy CCU in hard-to-abate sector like thermal power.
- DST supported pilot plant project titled “Implementation of a Sustainable Bioenergy-Based Model Effluent Treatment Plant for Desiccated Coconut Industries” was inaugurated at the site of M/s. Vittal Agro Industries, Kasargod on September 02, 2024. The project was executed by **National Institute for Interdisciplinary Science & Technology (NIIST),** Thiruvananthapuram, Kerala in collaboration with M/s. Vittal Agro Industries, Kasargod, the Coconut Development Board (CDB).
  Source: Pib

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CSIR-Central Road Research Institute (CSIR-CRRI)

CSIR-CRRI's REJUPAVE technology deployed in Arunachal for high-altitude road construction

Arunachal Pradesh has successfully utilized an indigenous road construction technology "REJUPAVE" developed by India's oldest and premier road research organization **CSIR-Central Road Research Institute (CSIR-CRRI),** Ministry of Science and Technology to construct high altitude bituminous roads at low and sub-zero temperature conditions. Building a robust road infrastructure with faster pace on Indo-China border is one of the topmost priority areas of the Government of India to improve operational capacity of our defence forces. Construction and maintenance of high-altitude bituminous roads on China Border in state of Arunachal Pradesh under low and sub-zero temperature conditions was always a challenging task to India's premier road construction agency Border Road Organization.

Source: Economic Times

CSIR-CRRI's Steel Slag Road Technology is paving the way to build stronger and rco-friendly national highways in the country: Dr. V.K. Saraswat

Dr. V.K. Saraswat, Member (S&T), NITI AAYOG inaugurated India's First National Highway Steel Slag Road section on NH- 66 Mumbai-Goa National Highway today. Dr Saraswat said that the Steel Slag Road Technology, developed by **CSIR-Central Road Research Institute (CSIR-CRRI)** is transforming the waste of steel industries into wealth and is helping the National Highways Authority of India (NHAI) to build stronger and ecofriendly national highways in the country. JSW Steel, under the **CSIR-CRRI** technological guidance, has constructed the 1 km long four lane steel slag road section on Indapur-Panvel Section of NH-66 Mumbai-Goa. For construction of this road around 80,000 tons of CONARC Steel slag were converted as processed steel slag aggregates at JSW Steel Dolvi, Raigad plant. The processed steel slag aggregates are superior to natural aggregates in terms of various mechanical properties and utilized for steel slag road construction in all layers of the road in place of natural aggregates. The road has bituminous and cement concrete steel slag road section at same location in RHS and LHS carriageways. On this road section, the processed steel slag aggregates and slag cement have been utilized for construction of the cement concrete road in all layers.

Source: Pib

Know-How Technology on "Bamboo Composites" transfers on the Day-2 of IISF 2023

One of the unique and extraordinary mega science festival — India International Science Festival (IISF 2023) is being organized during 17-20 January 2024 in Faridabad, Haryana. During the second day of this science festival on 18 Jan 2024, the Know-How Technology on "Bamboo Composites" was transferred to a well-known materials manufacturing company, M/s Asili Bamboo Products, Meerut, in the presence of Dr. Avanish Kumar Srivastava, Director, CSIR-AMPRI, Bhopal, and Mr Akshay Joshi, Director, M/s Asili Bamboo Products, Meerut. On this occasion various other dignatries were also present, namely Mr Md. Ali Shah, Sadhana; Dr. C. Anandharamakrishnan, Director, **CSIR-NIIST** Trivandrum; Prof. Manoranjan Parida, Director, **CSIR-CRRI,** New Delhi; Dr. B. Chandrasekaran, Former Director, **CSIR-CLRI;** Prof. Sudhir Singh Bhadauria, Director, UIT RGPV Bhopal; Shri Mayank Mathur, RC Member from **CSIR-Headquarter**; Dr. J.P. Shukla, Chief Scientist; Mr. Somnath Mazumder, CoA; Dr. J.P. Chourasia, Head PPD, **CSIR-AMPRI**; Dr. Sandeep Singhai, Head Business Development; Dr. Sarika Verma, PI and Principal Scientist; Dr. Neeta V.M. Khalkho, Sr. Principal Scientist, **CSIR-AMPRI**; and Dr. Satanand Mishra, Principal Scientist, **CSIR-AMPRI,** Bhopal.
Source: Pib

सड़कों को टिकाऊ और कारगर बनाएगा स्टील उद्योग का कचरा समझे जाने वाला स्टील स्लैग

वर्तमान में देश की सभी सड़कें चकाचक हो गई है. हाइवे के माध्यम से लोग जल्दी से अपने यात्राओं को पूरा कर पा रहे हैं. सड़कों को मजबूत बनाने के लिए अब नई तकनीक का इस्तेमाल किया जा रहा है. सड़कों के निर्माण में स्टील स्लैग का इस्तेमाल किया जा रहा है. स्टील उद्योग का कचरा समझे जाने वाला स्टील स्लैग सड़कों के निर्माण में उपयोग किया जा रहा है. जिस कारण सड़कों में मजबूती आ रही है. इससे सड़क और भी टिकाऊ हो रहा है. बड़ी बात ये है कि स्टील स्लैग का इस्तेमाल किए जाने से प्रकृति के तत्वों का इस्तेमाल कम करना पड़ता है. स्टील स्लैग से बनी सड़क को मोटा करने की भी जरुरत नहीं होती है. भारत में कई स्टील और इस्पात के कंपनियां है जहां से लाखों टन हर वर्ष स्टील स्लैग निकलता है. उन स्टील स्लैग को अब सड़क निर्माण के कार्य में लगाया जा रहा है. भारत की निर्मित कई सड़कों में स्टील स्लैग का उपयोग किया जा रहा है. दरअसल स्टील स्लैग**,** स्टील उद्योगों का कचरा समझने वाला पदार्थ है. स्टील उद्योगों द्वारा लाखों टन स्टील स्लैग का उत्पादन हर साल हो जाता है. इसके लिए अभी तक कोई वैकल्पिक सार्थक उपयोग नहीं हो पा रहा था**,** लेकिन **सीएसआईआर की सीआरआरआई** ने नयी तकनीक विकसित कर स्टील स्लैग का उपयोग करने की रणनीति बनाई और उसके बाद उस पर काम हुआ.
Source: Abplive

CSIR-CRRI's Steel Slag Road Technology revolutionises infrastructure construction

The steel slag road technology, meticulously crafted by **CSIR-CRRI,** epitomises efficiency and eco-consciousness. Utilising processed steel slag aggregates, this method not only enhances road durability but also slashes construction costs by a remarkable 32%. JSW Steel, in collaboration with **CSIR-CRRI**, has spearheaded the implementation of this technology on the Indapur-Panvel section of NH-66, utilising 80,000 tons of CONARC

Steel slag. G S Rathore, COO of JSW Steel Ltd, commended the collaborative efforts that made this feat possible. The support from NHAI, coupled with **CSIR-CRRI's** expertise, has paved the way for a transformative approach to national highway construction. Dr. Manoranjan Parida, Director of **CSIR-CRRI**, revealed ongoing efforts to standardise steel slag utilisation guidelines, fostering sustainable infrastructure practices nationwide.
Source: Knocksense

CSIR campus to have tougher, thinner steel slag roads

Two laboratories of the **Council for Scientific and Industrial Research (CSIR)** will be the first locations in the city to have roads constructed with steel slag, a by-product waste in the production of steel. Due to its superior structural stiffness, steel slag roads are expected to be 30% thinner than conventional roads, thereby enhancing durability and sustainability. It is produced during the separation of molten steel from impurities in steel-making furnaces and largely composed metallic and silica oxides. A team from the **CSIR's Central Road Research Institute (CRRI),** headed by its director Prof Manoranjan Parida, visited the **CSIO** and the **Institute of Microbial Technology (IMTECH)** here. Discussions were held on the modalities of constructing such roads with Dr Sanjeev Khosla, Director **IMTECH**, and Dr Satish Kumar, acting Director and Chief Scientist at **CSIO**.
Source: Tribune India

BPCL Signs Agreement with CSIR

PCL recently celebrated a significant milestone with the signing of a Memorandum of Agreement (MoA) with **CSIR (Central Road Research Institute).** This collaboration marks a crucial step forward in our Waste Plastic Road (WPR) initiative, showcasing our commitment to environmental sustainability and innovation. Border Road organization (BRO) and BPCL's joint demonstration in Arunachal Pradesh, along with ITC Ltd.'s trial in Gujarat, confirms the durability of waste plastic roads under extreme climatic conditions. Multiple awards and international stakeholder interest, demonstrated by signed NDAs, reinforce the global significance and potential of BPCL's WPR initiative.
Source: Psuconnect

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स्लैग को अब सड़क निर्माण के कार्य में लगाया जा रहा है. भारत की निर्मित कई सड़कों में स्टील स्लैग का उपयोग किया जा रहा है. दरअसल स्टील स्लैग, स्टील उद्योगों का कचरा समझने वाला पदार्थ है. स्टील उद्योगों द्वारा लाखों टन स्टील स्लैग का उत्पादन हर साल हो जाता है. इसके लिए अभी तक कोई वैकल्पिक सार्थक उपयोग नहीं हो पा रहा था, लेकिन **सीएसआईआर** की **सीआरआरआई** ने नयी तकनीक विकसित कर स्टील स्लैग का उपयोग करने की रणनीति बनाई और उसके बाद उस पर काम हुआ.

Source: **Abplive**

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Source: **Knocksense**

BRO’s Project Vijayak In Kargil Successfully Utilizes Indigenous REJUPAVE Road Construction Technology

In Ladakh, the Border Roads Organisation’s (BRO) Project Vijayak in Kargil has successfully utilized the indigenous REJUPAVE road construction technology. Developed by the **Council of Scientific and Industrial Research-Central Road Research Institute (CSIR-CRRI),** under the Ministry of Science and Technology, REJUPAVE was used to construct high-altitude bituminous roads in low and sub-zero temperatures on the Drass-Umbala-Sankoo Road, located in Drass, the world’s second coldest inhabited place. REJUPAVE, an innovative asphalt modifier derived from biomass and renewable resources, lowers the heating requirements for bituminous mixes and maintains their temperature during transit. This technology was previously implemented by BRO to build road sections at the world’s highest Sela road tunnel and the LGG-Damteng-Yangste (LDY) road section near Arunachal Pradesh’s China border at 18,000 feet. Now, it has been successfully tested on the Drass-Umbala-Sankoo Road at an altitude of 13,000 feet. M/s Verma Industries technology partner of **CSIR CRRI** has supplied the REJUPAVE to Project Vijayak BRO for this technology trial.

Source: **Newsonair**

BRO utilizes indigenous REJUPAVE tech for high-altitude road construction in Kargil

Border Roads Organisation's (BRO) Project Vijayak in Kargil has successfully utilized the indigenous REJUPAVE road construction technology on the Drass-Umbala-Sankoo Road. Developed by the Council of Scientific and Industrial **Research-Central Road Research Institute (CSIR-CRRI)** under the Ministry of Science and Technology, REJUPAVE is designed for high-altitude bituminous road construction in low and sub-zero temperatures, such as those found in Drass, the world's second coldest inhabited place. REJUPAVE, an innovative asphalt modifier derived from biomass and renewable resources, reduces the heating requirements for bituminous mixes and maintains their temperature during transit. This advanced technology was previously implemented by BRO for road sections at the world's highest Sela road tunnel and the LGG-Damteng-Yangste (LDY) road section near Arunachal Pradesh's China border at 18,000 feet. The latest successful application on the Drass-Umbala-Sankoo Road at 13,000 feet demonstrates its effectiveness in extreme cold.

Source: **Risingkashmir**

On the way: Production of Bitumen using biomass

India is looking to start large-scale production of bio-bitumen from biomass or agricultural waste, a move that would help reduce imports of the material used for asphalting of roads while also addressing the persistent issue of stubble burning. India currently imports about half of its annual requirement of bitumen and the target is to replace imports with bio-bitumen over the next 10 years, a senior government official told ET. "Based on the success of the pilot study, we hope to kick-start production of bio-bitumen on a large scale by the end of 2025," the official added. "We hope to start production of bio bitumen on a commercial scale by the end of next year. This will result in substantial savings on foreign exchange, make India independent in production of bio-bitumen and can be a great way to address the problem of stubble burning," CRRI director Manoranjan Parida told ET. Road transport and highways minister Nitin Gadkari is personally overseeing the progress of the project, which is funded by his ministry as the government focuses on various alternatives for road construction including recycled waste material and molasses.

Source: **Economictimes**

Emphasizing Sustainability, NITI Aayog's Dr. V K Saraswat Advocates for Steel Slag Utilization as a CSR Activity at PHDCCI's International Conference

Sustainability comes with a price and we have to give away something for it, hence it should be treated as part of a CSR activity, said Dr. V K Saraswat, Member (Science), NITI Aayog while discussing the Steel slag and how the journey for the project of utilizing steel slag and fly ash as usable products started. Speaking at the International Conference on Steel Slag Road- A Sustainable Green Infrastructure. Transforming Waste to Wealth organized by PHDCCI and **CSIR-CRRI** at The Oberoi Hotel on Saturday, he emphasized that the steel industry should look for ways to reduce the cost of these aggregates and continue innovating. Regarding cost challenges, he discussed that If we

compare the cost of natural aggregate to steel slag, we must acknowledge that the majority of natural aggregate comes from illegal quarrying and suggested it be treated as CSR activity.
Source: Ibgnews

International Conference on Steel Slag Road: Member (Science) Niti Aayog, Dr.V.K.Saraswat releases the Guidelines for Utilization of Steel Slag in Road Construction

Member (Science) Niti Aayog, Dr. V.K. Saraswat in the First International Conference on Steel Slag Road jointly organized by **CSIR-CRRI** and PHDCCI at New Delhi, released the Guidelines for Utilization and Processing of Steel Slag as Processed Steel Slag Aggregates in Road Construction. During this occasion, Dr. Saraswat emphasize the importance of sustainable development and the efficient utilization of industrial waste of steel industries i.e. Steel Slag, in infrastructure projects in the country. Dr. Saraswat informed that the adoption of these guidelines for construction and maintenance of road network using steel slag, is expected to bring numerous benefits, including cost saving, reduced environmental impact and improved road performance. He further said that **CSIR-CRRI** Steel Slag Road Technology is making significant contribution to realize the vision of Hon. Prime Minister of India Shri Narendra Modi ji for “Waste to Wealth”. He further congratulated Dr. Manoranjan Parida Director **CRRI** and Shri Satish Pandey, Principal Scientist and inventor of steel slag road technology for their exemplary contributions for the development and implementation of this technology on pan India basis.
Source: Pib

India to use steel slag in roads for sustainable infrastructure

In a significant step towards sustainable infrastructure, Dr V.K. Saraswat, Member (Science) of Niti Aayog, unveiled new guidelines for utilising steel slag in road construction. This announcement took place at the First International Conference on Steel Slag Road, organised by **CSIR-CRRI** and PHDCCI in New Delhi. The guidelines promote the use of processed steel slag aggregates in road construction, harnessing waste from the steel industry to support environmental sustainability. Dr Saraswat highlighted the substantial benefits of these guidelines, including cost savings, reduced environmental impact, and improved road performance. Dr Saraswat linked the initiative to Prime Minister Narendra Modi?s ?Waste to Wealth? vision, acknowledging significant contributions from Dr Manoranjan Parida, Director of **CRRI**, and Shri Satish Pandey, Principal Scientist. Shri Nagendra Nath Sinha, Secretary to the Government of India, Ministry of Steel, emphasized the R&D efforts leading to these guidelines, noting that the Ministry of Steel sponsored a major project with **CSIR-Central Road Research Institute** to facilitate the large-scale use of steel slag as a substitute for natural aggregates in road construction.
Source: Constructionworld

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Source: Ibgnews

International Conference on Steel Slag Road: Member (Science) Niti Aayog, Dr.V.K.Saraswat releases the Guidelines for Utilization of Steel Slag in Road Construction

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Source: Pib

Govt Paving Way for Use of Bio-bitumen to Build National Highways: 1 Road Test, 2 Research Projects Underway

The ministry of road transport and highways (MoRTH) has sanctioned two research projects to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen, union minister Nitin Gadkari said on Wednesday. Further, a test section was laid on the Shamli-Muzaffarnagar portion of NH-709AD in November 2022 for performance monitoring for a period of three years to assess the suitability of bio-bitumen in road construction, the minister said in the Rajya

Sabha. Bitumen is a black solid or viscous substance obtained from petroleum and is used for covering roads. Bio-bitumen, also known as bio-asphalt, is a sustainable, petroleum-free alternative to traditional bitumen derived from fossil fuels. “Ministry has sanctioned two (02) research projects, one each to IIT Roorkee, and **Central Road Research Institute (CRRI)** New Delhi in collaboration with **Indian Institute of Petroleum (IIP)** Dehradun to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen,” Gadkari said.
Source: **News18**

Government to allow up to 35% bio-bitumen mixing, to save ₹10,000 crore of foreign exchange outflows

Union Road Transport Minister Nitin Gadkari on Wednesday (August 7, 2024) said the government will allow mixing of lignin up to 35% in petroleum-based bitumen, a large part of which is imported from other countries. Bitumen is a black substance produced through the distillation of crude oil and is widely used for making roads and roofs. The minister said the farmers are now not only producing foodgrains, but they have become energy producers. **Central Road Research Institute (CRRI)** and the Indian Institute of Petroleum, Dehradun, had developed bio-bitumen from paddy straw. In the written reply, he said the ministry has sanctioned two research projects, one each to IIT Roorkee, and **Central Road Research Institute (CRRI)** New Delhi in collaboration with the **Indian Institute of Petroleum (IIP)** Dehradun to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen.
Source: **The Hindu**

कानपुर में जाजमऊ पुराना पुल कितना सुरक्षित? CSIR की टीम ने की जांच, 15 दिन बाद आएगा फैसला

कानपुर-उन्नाव को सड़क मार्ग से जोड़ने के लिए गंगा पर बने जाजमऊ पुराने पुल की स्थिति खस्ताहाल है। दिल्ली से आई **केंद्रीय सड़क अनुसंधान संस्थान (सीएसआईआर)** की टीम को प्राथमिक जांच में पुल की बेयरिंग के बाद 70 प्रतिशत पीयर क्षतिग्रस्त मिले हैं। मंगलवार को टीम ने पुल की क्षमता का जायजा लेने के लिए फाउंडर हिस्से से कंक्रीट के नमूने लिए। आधा दर्जन बिंदुओं पर जांच के बाद टीम दिल्ली रवाना हो गई। अब 15 दिन बाद रिपोर्ट आने पर पुल का भविष्य तय किया जाएगा। कानपुर-उन्नाव-लखनऊ को जोड़ने के लिए वर्ष 1974 में जाजमऊ पुल तैयार किया गया था। यह पुल अब बूढ़ा हो गया है। भारी वाहनों के आवागमन से पुल पर बड़े-बड़े गड्ढे हो गए हैं। जगह-जगह सरिया का जाल झांक रहा है। किनारों पर मौजूद गड्ढों से पुल के नीचे बहती गंगा की धारा को देखा जा सकता है। इस पुल से रोज हजारों छोटे-बड़े वाहनों का आवागमन होता है। पुल की जांच का जिम्मा भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (एनएचएआई) ने **सीएसआईआर** को सौंपा था। दो दिन पूर्व टीम ने शहर आकर पुल का निरीक्षण शुरू किया।
Source: **Amritvichar**

NDMC to rope in CRRI for proper construction and upkeep of roads

To ensure proper construction and maintenance of its roads, pavements, etc, New Delhi Municipal Council is set to sign an MoU with **Central Road Research Institute (CRRI).** The latter will provide technical guidance in ascertaining quality control and maintenance of the road network in Lutyens' Delhi, said NDMC vice-chairman Satish Upadhyay. A draft proposal in this regard was approved in the council meeting on Friday. The initiative is likely to cost Rs 4.7 crore to the council and will be implemented for a period of five years. As per the agreement, training will also be given to engineers and staff supervising the road construction work in the NDMC area. “To make sure these facilities are operational and remain in good condition, NDMC intends to hire the services of **CRRI**. Besides helping in road improvement works, it will provide technical guidance in ascertaining the maintenance requirements and thickness of overlays or carpeting layers for improving the riding quality of NDMC roads. Sharing details of quality control with the broad objective to provide technically sound and economical solutions will also be the responsibility of **CRRI**,” stated the proposal.

Source: Times of India

CSIR study underway to map noise hotspots across State

Delhi-based **CSIR- Central Road Research Institute (CSIR)** is mid-way in completing the crucial project related to noise mapping and identifying the sound/noise hot spots across the State, with more focus on the coastal belt. The agency is expected to submit its report by January, 2025 proposing mitigation plan to control the noise pollution -- which has gripped the coastal State at present. The study, initiated by the Goa State Pollution Control Board (GSPCB) will help the government in drafting a fresh State Noise Action Plan- as directed by the National Green Tribunal. As per law, the ambient noise quality standard for commercial areas is restricted at 66 dB at day time and 55 dB at night, whereas for residential areas, the noise standards are 55 dB during the day and 45 dB at night. For silent zones, the prescribed limit is 50 dB during day and 40dB during night hours. Sources explained that the agency will help develop noise maps of cities in Goa in terms of the day and night equivalent noise levels indicating hotspots areas. Sources said that the agency, will not only look into sound or noise pollution related due to late night parties or loud music, but other sources of pollution including vehicles and industries.

Source: Thegoan

CRRI and IRC's joint initiative to protect school children from road accidents

Renowned social worker and Assistant Secretary of 'Shri Ramakrishna Seva Sangh' Tushar Kanti Sheet praised the joint initiative taken by **Central Road Research Institute (CRRI)** and Indian Road Congress (IRC) to protect school children from road accidents. Sheet said that the model prepared by **CRRI** and IRC to make schools safe zones by developing traffic management infrastructure around schools is a welcome step. If this scheme is successful, it will be possible to protect lives and property of school children to a large extent with different types of zebra crossings, maximum speed limit along with clearly visible indicator boards will be installed around schools located on main roads. As

per the instructions of IRC, a central government body, the signs will be issued in different languages for all the states of the country. Several guidelines have been issued by IRC for the safety of school children. According to this, zebra crossings within the school zone will be marked in white and red and will be more detailed than the normal crossings, so that drivers can get information about the safe zone from a distance. It will also be made mandatory to write the word 'School' in big letters on the road surface.
Source: Dailypioneer

One Week One Theme (OWOT) Programme for Civil, Infrastructure and Engineering (CIE) theme of CSIR celebrated at CSIR-SERC

The **Council of Scientific & Industrial Research (CSIR),** known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. **CSIR** has a dynamic network of 38 national laboratories, 39 outreach centers, 1 innovation complex, and three units with a pan-India presence. One Week One Theme (OWOT) campaign was launched by Dr. Jitendra Singh, Minister of Science & Technology and Earth Sciences, to highlight India's recent successes in science and technology. Among the eight R&D themes of **CSIR**, numerous events are being organized at various places across the country. As a part of this campaign, a one-day event comprising a stakeholder meet cum exhibition under the OWOT Campaign initiative focused on Civil Infrastructure and Engineering (CIE) theme was organized on 5 September 2024, at **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, with five **CSIR** labs working in the area, viz, **CSIR-Central Building Research Institute (CSIR-CBRI),** Roorkee, **CSIR-Central Road Research Institute (CSIR-CRRI),** New Delhi, **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, **CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal and **CSIR-SERC** participating in it.
Source: Pib

IITRAM and CSIR-CRRI shake hands for research

To boost academic and research collaboration, the Institute of Infrastructure Technology Research and Management (IITRAM) has signed a memorandum of understanding (MoU) with the **Council for Scientific and Industrial Research - Central Road Research Institute (CSIR-CRRI),** which enables both institutions to conduct joint research and facilitate the shared supervision of BTech, MTech and PhD students throughout projects and internships.
Source: Ahmedabadmirror

Dept seeks CRRI help for infra works

To introduce innovation in road and building construction work, the public works department is planning to collaborate with the Delhi-based **CSIR-Central Road Research Institute (CRRI).** In a letter to the institute’s director, the public works department stated, “Works department is interested to promote use of new technologies and innovative materials in infrastructure projects so that implementation of new

technologies at site, research and knowledge transfer can take place." Ashok Kumar Giri, chief engineer (roads and building) requested **CSIR-CRRI** to share such kinds of field-oriented research proposal with usage of technologies and innovative materials to promote their application in infrastructure projects. The public works department has proposed that the pilot project should be directly supervised and monitored by **CSIR-CRRI** while the department will provide required funding and pilot infrastructure for the project during the implementation stage.
Source: **Times of India**

CRRI, IRC's safer school zones model focuses on shared responsibility for child safety

The safety of children on their daily journey to school will no longer just be the responsibility of students and drivers. With the introduction of new 'Safe School Zones' guidelines, the **Central Road Research Institute (CRRI)** and the Indian Road Congress (IRC) are making road safety a shared commitment, involving everyone—from road agencies to parents—in an effort to curb the rising number of tragic accidents involving young students. According to National Crime Records Bureau's (NCRB) data nearly 30 young lives are lost each day to road accidents, casting a shadow over the promise of education and childhood. The data also suggests children make up more than 10% of all road accident deaths, with many students commuting via shared vans, school buses, e-rickshaws, bicycles, and even walking. "As nearly 30 children dying on Indian roads every day, the need for school area to remain safe is important. The previous guidelines, over two decades old, were revised in terms of their scope, as they expected the child to follow the rules but now the responsibility has been distributed among all the stakeholders," explains Mukti Advani, a senior principal scientist at **CRRI**.
Source: **Educationtimes**

NDMC collaborates with CSIR-CRRI

The New Delhi Municipal Council (NDMC) on Thursday signed a Memorandum of Agreement (MoA) with the **CSIR-Central Road Research Institute (CRRI)** to enhance the city's road infrastructure through technical expertise and training. "The aim of this MoA is to provide technical guidance in ascertaining the maintenance needs, the thickness of overlays and also quality control with the broad objective to provide technically sound and economical solutions," an official statement of the NDMC said. The **CRRI** and NDMC agreed to work together towards a common goal for the maintenance of the road network in the city and the training of engineers and staff members, it added. According to the statement, the MoA was signed by NDMC Chief Engineer Sanjay Arora and **CRRI** Director Manoranjan Parida at the civic body's headquarters, Palika Kendra, in New Delhi. Under the MoA, the **CRRI** will offer consultancy on assessing pavement conditions, suggesting recarpeting layers and conducting third-party quality assessments for road works, the statement said.
Source: **Millenniumpost**

Experts discuss mine waste utilization for construction at IIT ISM Dhanbad

Civil engineering experts from across the country convened at IIT ISM Dhanbad on Thursday to discuss and explore the latest advancements in utilizing industrial and mine waste as construction materials. The seminar, titled 'Valorization of Industrial Mine Wastes in Highway Construction', was organized by the Indian Geotechnical Society (IGS), Dhanbad Chapter, in collaboration with the **Central Road Research Institute (CRRI)** in New Delhi. Prof. Manoranjan Parida, from the **CSIR-Central Road Research Institute (CRRI),** inaugurated the seminar, highlighting the significant contributions of the Central Road Research Organization. He discussed its role as a research laboratory under the Council of Scientific and Industrial Research, emphasizing its ongoing research and development projects aimed at advancing highway construction and infrastructure. Significance and uses of waste valorization Dr. Anil Kumar Sinha, head of Geotechnical Engineering and Senior Principal Scientist at **CSIR-CRRI,** discussed the potential of industrial waste materials for road construction.

Source: Thejharkhandstory

CRRI to help Noida relocate ad poles to make expressway safer?

Noida Authority is planning to engage Regional Centre for Urban and Environment Studies (RCUES) – an agency under the Union ministry of housing and urban affairs – to carry out a survey on ways to make Noida Expressway safer for commuters. Sources said the Authority could also collaborate with **Central Road Research Institute (CRRI)** for this road safety initiative. A final approval from the Authority CEO is awaited on this. As part of the project, the Authority has identified multiple structures that need to be shifted out of the crash barrier area to prevent deadly accidents. According to an estimate, the expressway has 12 advertisement and 8 traffic camera poles, 21 signboards, 13 foot overbridges, and around 20 public toilets off it. These structures will either be relocated to the service lane or redesigned to enhance road safety. The need to enhance road safety along the expressway was felt all the more following an accident on Aug 14, when three students died after their car rammed one such pole before hitting the crash barrier. Two of the youths who died were the sons of a junior engineer at the Authority.

Source: Times of India

Plan to make all roads in Andhra Pradesh pothole-free, says R&B Minister

The government is planning to make all roads in the State pothole-free and has received proposals worth ₹290 crore for repairing 1,393 damaged roads, covering 7,071 kilometres, Roads and Buildings (R&B) Minister B.C. Janardhan Reddy has said. Participating virtually as the chief guest at a workshop held at the SRM University-A.P. on October 7, Monday, the Minister said with the latest technology and technical support from the varsity, a complete restoration of the road network would be possible. The workshop was organised by the varsity in association with the Roads and Buildings (R&B) department of the State government and the **Council of Scientific and Industrial Research-Central Road Research Institute (CSIR-CRRI)** to address the critical challenges associated with the maintenance and rehabilitation of the State roads,.

Principal Secretary, (R&B), Kantilal Dande, and **CSIR-CRRI** Director Manoranjan Parida, researchers, professors and government officials participated in the one-day workshop. “A road is the index of a developed society. To tackle the key factors leading to road damage and rehabilitation, we require technical support and cutting-edge research from reputed institutes like **CSIR-CRRI** and new-age universities like SRM University-AP,” Mr. Kantilal Dande said.
Source: **The Hindu**

CM के निर्देश पर शहर को नया रूप देने की कवायद शुरू, CSIR वैज्ञानिक चौराहों-घरों में जा करेंगे सर्वे

भरतपुर संभाग मुख्यालय अब मुख्यमंत्री भजनलाल शर्मा के निर्देश के बाद शहर को नया रूप देने की कवायद शुरू हो चुकी है। इसके लिए दिल्ली से आई टीम ने शुक्रवार को पहली बार जिला कलेक्ट्रेट में कलेक्टर के साथ मीटिंग की और प्लान के बारे में जानकारी ली। **केंद्रीय सड़क अनुसंधान संस्थान** की टीम द्वारा शहर का व्यापक यातायात प्लान तैयार करने के लिए जिला कलेक्टर डॉ. अमित यादव की अध्यक्षता में **सीएसआईआर** की टीम एवं प्रमुख विभागों के अधिकारियों की बैठक कलेक्ट्रेट सभागार में आयोजित की गई। नगर विकास न्यास द्वारा शहर के यातायात प्लान तैयार करने के लिए केन्द्रीय सड़क अनुसंधान संस्थान को कार्यादेश जारी किए गए हैं। मुख्यमंत्री भजनलाल शर्मा के निर्देशन में शहर का व्यापक यातायात प्लान तैयार करने के लिए केंद्रीय सड़क अनुसंधान संस्थान की टीम लगातार एक महीने तक शहर में भ्रमण कर प्रमुख चौराहों, तिराहों, भीड़ के स्थानों, प्रमुख सड़कों के साथ घर-घर जाकर नागरिकों से यातायात एवं दिनचर्या के संबंध में सर्वे कर व्यापक रूप से सुव्यवस्थित एवं दुर्घटना रहित यातायात प्लान तैयार करने के लिए रिपोर्ट देंगे।
Source: **Amarujala**

Prof Manoranjan Parida Elected as President Indian Roads Congress (IRC)

Prof Manoranjan Parida, Director, **Central Road Research Institute**, New Delhi has been elected as the President of IRC on 11th Nov during the Annual Session of IRC held in Raipur. IRC is the largest professional body of Highway Engineers dealing with Highway infrastructure such as highways, bridges and tunnels etc. Prof. Parida, an aluminous of UCE Burla currently known as VSSUT, is an academician of high repute. He was Deputy Director at IIT Roorkee before joining **CSIR-CRRI.** He has been MoRTH Chair Professor on Development of Highway System in India at IIT Roorkee during 2013-2017. Design and Development of Noise Barrier for Flyovers in Delhi is an innovative contribution by him. He has provided substantial inputs for third party quality audit of 1700 km. of State Highway in the State of Bihar (during 2007-2013) under the RSVY Project. He has supervised 35 Ph.D. Theses and published more than 450 papers in Journals/Conferences. He has provided consultancy for more than 350 urban road infrastructure projects, intercity corridors, rural roads, and expressways.
Source: **Orissadiary**

CSIR-CRRI to Host Conference on Use of Waste Materials in Road Construction

CSIR-Central Road Research Institute (CSIR-CRRI) is set to organize a conference on "Use of Waste Materials in Road Construction" on 12th December 2024 at the bauma CONEXPO INDIA, India Expo Mart, Greater Noida. The conference will delve into: Session 1: Waste Materials in Granular Layers, Session 2: Utilization of Slag Aggregates, Session 3: Waste Materials in Bituminous Layers The event will take place alongside the 7th edition of bauma CONEXPO INDIA, the country's leading exhibition for construction machinery, building material machines, mining equipment, and construction vehicles. The exhibition is organized in collaboration with the Indian Construction Equipment Manufacturers' Association (ICEMA) and the Builders Association of India (BAI), combining global expertise from bauma Munich and CONEXPO-CON/AGG North America.

Source: **Nbmcw**

Eco-Friendly Pothole Mix Recycled From Steel Slag To Transform Roads In Guwahati Soon

In a remarkable step toward sustainability, Guwahati is set to benefit from an innovative, eco-friendly solution curated from steel waste that promises to repair potholes in 15 to 30 minutes. This sustainable method, aimed at protecting the environment and public infrastructure, aligns with global efforts to reduce waste and promote greener practices. In an exclusive conversation with Business North East (BNE), Managing Director of Ramuka Global, Deepak Ramuka, highlighted the critical issue of slag disposal. "Steel companies often dump slag on vast tracts of land without a sustainable plan for processing. Over time, this can lead to hazardous groundwater pollution due to iron seepage," he said, revealing that Ramuka Global is coming up with a 'Pothole mix,' which will be launched in Guwahati soon. The company faces this challenge head-on by championing a circular economy and the government's 'waste to wealth' initiative. Operating a state-of-the-art, fully certified plant in Surat, Gujarat, the company processes over 1 million metric tonnes of steel slag annually. Moreover, it is on track to become the first Indian company to receive authorization and certification from **CSIR-CRRI** for its groundbreaking work in processing steel slag into usable products.

Source: **Business Northeast**

India has the world’s highest number of traffic deaths. Could AI help save lives?

Results from a pilot project in Nagpur that installed cameras in public buses to scan the road ahead and used algorithms to track risks were promising. Last month, a bus carrying 42 passengers in Almora district of Uttarakhand “skidded before tumbling down a 60-metre gorge”. Barring up to six survivors, all the other passengers died in the crash. Road mishaps, whether on India’s highways or city streets, happen with such regularity that they do not stir either the central or state governments into taking strong preventive measures. But advances in artificial intelligence could offer new solutions to tackling India’s road toll. How can we reduce the number of accidents on India’s roads? To get an overall sense of the reasons for road accidents, the resulting deaths and what could be

done to reduce them, the **Central Road Research Institute** analysed data related to Nagpur, in Maharashtra, between 2008 and 2021. With a total population of 3.06 million people, Nagpur witnessed an annual average of 200 deaths and about 1,000 injuries, which is on the higher side for Maharashtra. This study highlighted the urgent need for marrying engineering solutions with technology to address urban traffic problems such as risk of collisions. The AI-based technology – advanced driver assistance systems – involves mounting a camera on a vehicle's windshield to scan the road ahead and uses complex algorithms to track potential risks.
Source: Scroll

BBMP successfully utilized pilot project CSIR CRRI steel slag based instant pothole repair technology ECOFIX to fix the Bengaluru City Road

Road research institute **CSIR-Central Road Research Institute** has joined hand with the Bruhat Bengaluru Mahanagara Palike (BBMP) to fix the potholes of Bengaluru city road. City of Bengaluru is facing problems of recurring potholes,which is causing traffic congestion,leading to road accidents. To address this challenge India's premier road research institute **CSIR-CRRI** in collaboration with BBMP and RAMUKA GLOBAL SERVICES has successfully carried out a pilot project of steel slag based ECOFIX technology by fixing the potholes on Avenue road near Anjani temple,Bengaluru. ECOFIX is utilised to fix the deep and shallow potholes under a live demonstration project to BBMP engineers of Govt.of Karnataka on one of the busiest road of Bengaluru city. On this occasion the inventor of the technology Dr. Satish Pandey,Principal Scientist, **CSIR-CRRI** has informed that the as per the direction of Chief Secretary of Govt.Of Karnataka Dr.Shalini Rajneesh,**CSIR-CRRI** has carried out the demonstration trial of this eco-friendly technology on BBMP road for instant repair of potholes. ECOFIX is developed using industrial waste of steel industries i.e iron and steel slag and has the unique ability to repair the water logged pothole without any dewatering requirement.
Source: Countryandpolitics

Ecofix Technology to Help BBMP in Instant Road Repairs in Bengaluru

Engineers of Bruhat Bengaluru Mahanagara Palike (BBMP) expressed satisfaction over a live demonstration of a pilot project steel slag based ECOFIX technology to fix deep and shallow potholes conducted on busiest Avenue road near Anjani Temple in Bengaluru city on Wednesday by scientists of **CSIR-Central Road Research Institute (CRRI),** a premier road research institute of the country. The **CSIR-CRRI** Steel Slag road technology is well tested for its durability and performance in Gujarat, Jharkhand, Maharashtra and Arunachal Pradesh. During the live demonstration, Principal-Scientist of **CSIR-CRRI** and inventor of the ECOFIX technology Dr Sanjay Pandey carried out a road repair demonstration on Avenue road and immediately after its repair, the road was opened for vehicular movement, making BBMP engineers happy. Engineer-in-Chief of BBMP Dr B.S. Prahallad stated to make use of the technology for eco-friendly sustainable road repair in Bengaluru city in coming days. He termed ECOFIX technology "a boon to the city roads." After taking note of the advantages of the ECOFIX technology, Prahallad

said during monsoon season when the majority of hot mix plants cannot be operated but with ECOFIX technology “It is possible to carry out durable road repairs in an eco-friendly manner.”
Source: Deccanchronicle

Civic body mulls 25 new flyovers, to carry out survey

In response to increasing traffic woes, the Ahmedabad Municipal Corporation (AMC) has launched a comprehensive initiative to address the city's congestion problems. The civic body plans to conduct an extensive traffic survey covering at least 25 key junctions across the city in collaboration with traffic police. The AMC has approached the Central Road Research Institute **(CSIR-CRRI)**, a central govt agency, for quotations to carry out the study. Initially, the AMC will gather details of the most congested junctions from city traffic police and then add on to the list. Later, a traffic survey will be conducted by the **CSIR-CRRI** following which flyovers will be constructed at high-priority junctions over the next decade. An AMC official, speaking on condition of anonymity, said that in 2011-12, a traffic survey was conducted at 34 city junctions by **CSIR-CRRI**. Over the past 13 years, flyovers have been constructed at more than a dozen junctions — IIM-A, Dinesh Chambers, Income Tax and Anjali. Due to metro construction, the planned flyover at Helmet Junction on Drive-In Road was scrapped as a metro corridor was being developed there. At present, flyovers are being built at Vadaj and four other junctions. The **CSIR-CRRI** conducted a survey 13 years ago after which IITRAM was consulted for surveys at two junctions.
Source: Times of India

Belagavi Showcases Eco-Friendly Road Maintenance Breakthrough

In a groundbreaking step toward sustainable infrastructure, Karnataka unveiled a promising solution for eco-friendly road maintenance using Steel Slag-based ECOFIX technology. Chief Secretary Dr. Shalini Rajneesh, joined by PWD Chief Engineer H. Suresh and Belagavi Mayor Savita Kamble, witnessed a successful demonstration of this innovative pothole repair method on State Highway-141, Rakskoppa-Sutagatti. Led by Shri Satish Pandey, Principal Scientist at **CSIR-CRRI** and inventor of ECOFIX, the demonstration showcased the immediate repair of a waterlogged pothole without dewatering. Traffic resumed seamlessly after the quick fix, highlighting the efficiency of the ECOFIX mix. Dr. Shalini Rajneesh emphasized the importance of preventive and periodic road maintenance to ensure a robust road network, especially during monsoons when traditional methods fail due to the shutdown of hot mix plants. ECOFIX, developed from metallurgical waste, aligns with Karnataka’s “Waste to Wealth” vision by reducing reliance on natural aggregates and minimizing environmental impact. India, the world’s second-largest steel producer, generates around 19 million tonnes of steel slag annually, projected to reach 60 million tonnes by 2030. ECOFIX repurposes this waste into a high-strength, rut-resistant mix for road repairs, offering a cost-effective and sustainable solution.
Source: Belgaummirror

Inauguration of Asia's first highway with bio-bitumen surface: Giant leap towards sustainable road infra

Union minister for road transport and highways, Nitin Gadkari, inaugurated a 1km stretch of Asia's first highway with a bio-bitumen blended surface. The trial patch begins near the 'Kamptee 22Km' milestone on Jabalpur-Nagpur route. The project will help cut pollution from stubble burning as the source of bio-bitumen comes from easily available crop stubble, which farmers can sell instead of torching the residue. Calling it his dream project, Gadkari hoped if the technology takes off, air pollution will be reduced dramatically. Stubble is already fetching Rs 2,500 per tonne in Punjab and Haryana, he said. As it replaces the conventional bitumen, by 15%, it is expected to reduce the cost of road building. There are projections that it can cut imports of petroleum bitumen by at least Rs 4,500 crore initially. Along with bio-bitumen, it also has 10% rubber powder content, further cutting the proportion of petroleum bitumen. However, the project's success is still two years away. **Central Road Research Institute (CRRI),** a govt body, will observe whether the road withstands heavy traffic and changing seasons. The bio-bitumen will pass the endurance test, if the road does not deflect beyond 0.4mm during the period, said a **CRRI** scientist.

Source: Times of India

Council of Scientific and Industrial Research (CSIR) Year End Review 2024

Significant Scientific & Technical Attainments during the year

- **CSIR-CRRI's** REJUPAVE technology deployed in Arunachal Pradesh and Ladakh for high-altitude road construction
  The indigenous road construction technology "REJUPAVE" developed by **CSIR-Central Road Research Institute (CSIR-CRRI),** to construct high altitude bituminous roads at low and sub-zero temperature conditions, was successfully utilized by the Border Road Organization (BRO) for high-altitude bituminous roads construction on China Border in state of Arunachal Pradesh. The technology has also been used by the BRO's project Vijayak in Kargil to construct high-altitude bituminous roads on the Drass-Umbala-Sankoo Road in Drass, Ladakh.
- India's First National Highway Steel Slag Road section on NH-66 Mumbai-Goa National Highway inaugurated
  V.K. Saraswat, Member (S&T), NITI AAYOG inaugurated India's First National Highway Steel Slag Road section on NH- 66 Mumbai-Goa National Highway on 15 January 2024. JSW Steel, under the **CSIR-CRRI** technological guidance, has constructed the 1 km long four lane steel slag road section on Indapur-Panvel Section of NH-66 Mumbai-Goa. For construction of this road around 80,000 tons of CONARC Steel slag were converted as processed steel slag aggregates at JSW Steel Dolvi, Raigad plant.

Source: Pib

CSIR's new technology answer to challenges posed by rugged terrain in constructing border roads

Road construction technology developed by the **Council for Scientific and Industrial Research (CSIR)** could be the answer for construction of roads in remote, high-altitude areas where inclement weather and rugged terrain pose a huge challenge. "The indigenous road construction technology, called REJUPAVE, developed by **CSIR's Central Road Research Institute (CRRI),** to construct high altitude bituminous roads at low and sub-zero temperature conditions was successfully utilised by the Border Road Organization (BRO) for high-altitude bituminous roads construction on China Border in state of Arunachal Pradesh," the Ministry of Science and Technology stated in its year-end review issued on December 27. "The technology has also been used by the BRO's project Vijayak in Kargil to construct high-altitude bituminous roads on the Drass-Umbala-Sankoo axis in Drass region of Ladakh," the year-ender added. The bio-oil-based REJUPAVE, an acronym for 'Rejuvenator for Recycling of Asphalt Pavement Material for Hot in Plant and Hot in Situ Recycling of Bituminous Pavement', was introduced by CRRI earlier this year.

Source: **Tribuneindia**

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CSIR-CSIO

CSIR-Central Scientific Instruments Organisation (CSIR-CSIO)

Renowned Scientist Prof. Shantanu Bhattacharya Appointed as Director of CSIR-CSIO Chandigarh

Council of Scientific and Industrial Research - Central Scientific Instruments Organization (CSIR-CSIO) is pleased to announce the appointment of Prof. Shantanu Bhattacharya as its new Director, effective from Tuesday. A distinguished scholar and a leading figure in the field of Microsystems fabrication, Prof. Bhattacharya brings a wealth of experience and expertise to his new role. He was previously associated with the esteemed Indian Institute of Technology, Kanpur.
Source: Face2news

CSIR-CSIO and ALIMCO Join Forces to Advance Rehabilitation and Assistive Technology for Divyangjan

In a significant step towards enhancing the lives of Divyangjan (persons with disabilities), the **Council of Scientific and Industrial Research - Central Scientific Instruments Organisation (CSIR-CSIO)** and Artificial Limbs Manufacturing Corporation of India (ALIMCO) have inked a Memorandum of Understanding (MoU) for collaboration in the design, development, and manufacturing of rehabilitation and assistive technology (AT). The MoU, signed between Director **CSIR-CSIO**, Prof. Shantanu Bhattacharya, and CMD ALIMCO, Shri Praveen Kumar, marks a pivotal moment in the journey towards ensuring accessibility and inclusivity for persons with disabilities. The ceremony, held at the Department of Empowerment of Persons with Disabilities (DEPwD) office at CGO Complex, New Delhi, witnessed the esteemed presence of Shri Rajesh Aggarwal IAS, Secretary, DEPwD, and Shri Rajesh Yadav IAS, Joint Secretary, DEPwD.
Source: **Pib**

CSIR campus to have tougher, thinner steel slag roads

Two laboratories of the **Council for Scientific and Industrial Research (CSIR)** will be the first locations in the city to have roads constructed with steel slag, a by-product waste in the production of steel. Due to its superior structural stiffness, steel slag roads are expected to be 30% thinner than conventional roads, thereby enhancing durability and sustainability. It is produced during the separation of molten steel from impurities in steel-making furnaces and largely composed metallic and silica oxides. A team from the **CSIR's Central Road Research Institute (CRRI),** headed by its director Prof Manoranjan Parida, visited the **CSIO** and the **Institute of Microbial Technology (IMTECH)** here. Discussions were held on the modalities of constructing such roads with Dr Sanjeev

Khosla, Director **IMTECH**, and Dr Satish Kumar, acting Director and Chief Scientist at **CSIO**.
Source: Tribune India

Two Day International Conference on Sustainable Development in Chemical and Material Sciences (SDCMS-2024) Concludes at CUJ

A two-day International Conference on Sustainable Development in Chemical and Material Sciences (SDCMS-2024) was organized by Department of Chemistry from 4th to 5th April 2024 in the academic block of Central University of Jammu. The conference involved a gathering of renowned scientists and academicians across the country and abroad. On the 2nd day today, the scientific session started with a talk by eminent speaker Dr.Vivek Pachauri, RWTH Aachen University, Germany. He discussed the topic"Attempting Biologization at nano scale towards sustainable sensors technology". Other eminent speakers with various expertise in their field of the session were Prof. Pankaj Chauhan, IIT Jammu, Prof. Surendra B. Anantharaman, IITM, Dr. Suman Singh, **CSIR-CSIO** Chandigarh, Dr. Avishek Saha, **CSIR-NCL** Pune, Prof. Subrata Banik, Sastra University, Dr. Manoj Nayak, **CSIR-CSIO** Chandigarh, Dr. Rajesh Kanawade, **CSIR-NCL** Pune, Prof. Debabrata Patra, INST Mohali. The session had been concluded with the vote of thanks to all the eminent speakers with a token of appreciation and a gift.
Source: Takeonedigitalnetwork

Tidco Centre of Excellence signs MoU with CSIR

To strengthen its commitment towards the Industrial research and commercialisation of technologies, Tamil Nadu Industrial Development Corporation (TIDCO) Centre of Excellence (CoE) on Tuesday signed MoUs with the **Council of Scientific & Industrial Research (CSIR) through its constituent laboratory - Central Scientific Instruments Organisation (CSIR-CSIO**), Chandigarh and its regional centre at **CSIR** Campus Taramani, Chennai. TIDCO through its Industrial Centres of Excellence (CoEs) - TANSAM, TANCAM, and TAMCOE, in association with Siemens, Dassault Systemes and GE Aerospace respectively, at a total project cost of ₹600 crore, have been successfully enabling Innovation, Industry 4.0 adoption and supporting the State's Advanced Manufacturing Capabilities amongst, Industry, Academia, MSMEs, Startups, and the government agencies. Spokes of the centres are also being created at various Academic institutions across the state to make the rich expertise and technologies available at these CoEs, within the reach of the students for their capacity building and bridging the gap between the Academia and Industries.
Source: Thehindubusinessline

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

Council Scientific and Industrial Research (CSIR)-National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the **NPL**

campus, as part of its 'One Week One Theme' initiative with participating labs **CSIR-CSIO, CSIR-CEERI**, and **CSIR-IIP**. Prof. Venugopal Achanta, Director of **CSIR-NPL**, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of **CSIR-NAL** and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme. Dr. P. C. Panchariya, Director of **CSIR-CEERI,** highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.

Source: Pib

CSIO & PEC Joint Workshop on "Image Processing for Biomedical Applications (CPWIP-2024)" held at PEC

The Department of Computer Science and Engineering at Punjab Engineering College (Deemed to be University), Chandigarh, organized a joint workshop, **CSIO** & PEC Joint Workshop on "Image Processing for Biomedical Applications (CPWIP-2024)", on 11th September 2024. This workshop was a collaborative effort between **CSIR-CSIO**, Chandigarh, and PEC, Chandigarh. It featured prominent experts, including Prof. Dinesh Kumar (RMIT University, Melbourne, Australia), Dr. Prashant K Mahapatra (Senior Scientist, **CSIR-CSIO**), Prof. Tirlok Chand (Chairperson), Prof. Padmavati (Coordinator), and Prof. Sudesh Rani (Coordinator). The focus of the workshop was the latest advancements in image processing for biomedical applications, with participation from over 100 attendees across the country, both online and offline. Prof. Padmavati highlighted the workshop's focus on cutting-edge developments in biomedical applications, medical diagnostics, treatment planning, and healthcare solutions. The workshop brought together renowned experts from **CSIO**, PEC, and RMIT Australia, offering participants valuable insights into the latest technologies, methodologies, and their practical applications in the biomedical field.

Source: 5dariyanews

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media

personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.
Source: Pib

CSIR Foundation Day Celebrations held in Chennai

The foundation day of **Council of Scientific & Industrial Research (CSIR),** New Delhi, an autonomous organization under Ministry of Science & Technology, Govt. of India, was celebrated with great enthusiasm on 26 September 2024, at the **CSIR** Campus in Taramani, Chennai by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). As a part of the foundation day celebrations Open Day was observed at **CSIR** Campus, Taramani, Chennai, and at TTRS (Tower Testing and Research Station) Campus, Tirusulam, Chennai, **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and Regional Units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML**. All laboratories in the **CSIR** Campus and TTRS were kept open for the general public between 9.30 am and 3:00 pm. Elaborate arrangements were made to receive the visitors. State-of-the-art facilities, Technologies and products were showcased and demonstrated for the benefit of the visitors. More than 9200 people including school and college students, teachers, professionals from the industry, entrepreneurs and the general public visited the campus with great enthusiasm.
Source: Pib

Engineering students visit CSIR-CSIO

The Electrical and Electronics Engineering Department of Rayat Bahra University organized an educational visit to the **Council of Scientific and Industrial Research, and Central Scientific Instruments Organisation (CSIR-CSIO),** Chandigarh. Students of 2nd year of Electronic and Electrical Engineering went there to understand the recent trends and innovations in the field of Biomedical Electronics & Digital Signal & Image Processing along with the Faculty Coordinator Er Maninder Kaur. Students gained knowledge about applications of electronics and electrical engineering in various fields and enjoyed the educational visit. Vice-Chancellor Dr Parvinder Singh and Dean, University school of Engineering and Technology Dr Anmol Goyal, Head of the Department Er Sonal Sood, said the educational visit to **CSIO** provided the students with hands-on exposure to cutting-edge scientific instruments, enhancing their understanding of STEM concepts and bridging the gap between theory and real-world applications.
Source: 5dariyanews

नवजात में गंभीर पीलिया के इलाज के लिए विश्व में पहली बार पीजीआई ने सीएसआईआर-सीएसआईओ के साथ मिलकर बनाई खास डिवाइस

नवजात में गंभीर पीलिया के इलाज को आसान बनाने के लिए पीजीआई के विशेषज्ञों ने पहली बार **सीएसआईआर-सीएसआईओ (सेंट्रल साइंटिफिक इंस्ट्रूमेंट्स आर्गेनाइजेशन)** के साथ मिलकर एक विशेष डिवाइस बनाई है। इन बच्चों में खून बदलने की प्रक्रिया के लिए तैयार डबल वॉल्यूम एक्सचेंज ट्रांसफ्यूजन डिवाइस से अब ढाई घंटे का काम 45 मिनट में पूरा हो सकेगा। वहीं, इसमें गलती की गुंजाइश भी नहीं रहेगी। पीजीआई और **सीएसआईओ** के 5 वर्षों के शोध को विश्वभर ने सराहा है। डिवाइस के पेटेंट के बाद ट्रांसफर ऑफ टेक्नोलॉजी की प्रक्रिया पूरी कर इंडस्ट्री पार्टनर के साथ बाजार में उतारने की प्रक्रिया शुरू कर दी गई है। पीजीआई के एडवांस पीडियाट्रिक सेंटर के प्रो. सौरभ दत्ता और **सीएसआईओ** के वैज्ञानिक डॉ. संजीव वर्मा ने बताया कि मैनुअली चार स्टेप में की जाने वाली प्रक्रिया को दो स्टेप में पूरा किया जा सकेगा। अगर किसी भी स्तर पर चूक हुई तो तत्काल सेंसर आगाह करेगा। जैसे-जैसे प्रक्रिया पूरी होगी डिवाइस पर डिसप्ले होगा। प्रो. सौरभ दत्ता ने बताया कि मैनुअली इस प्रक्रिया में लगभग ढाई घंटे का समय लगता है। प्रक्रिया के दौरान कम से कम एक डॉक्टर और एक नर्स तैनात रहते हैं। एक-एक प्रक्रिया को लगातार चार्ट पर लिखना होता है कि कितने साइकिल हो गए। इस दौरान गलती होने का खतरा रहता है। इस जटिलता को देखते हुए स्थिति को ऑटोमैट करने पर विचार किया गया।

Source: **Amarujala**

Scientists develop AI-powered drone for automatic target identification

In the first innovation of its kind in the country, scientists have developed a drone-mounted software framework to enable automatic detection of objects like humans, bunkers and tanks from optical images and pinpoint their exact location. The project has been undertaken by the **Central Scientific Instruments Organisation (CSIO),** a constituent laboratory of the Council for Scientific and Industrial Research, and took about two years to complete. The framework is meant to enhance UAV capabilities in surveillance and automation. This is unlike the video or still feed from an airborne drone, which is viewed and analysed by controllers to locate objects or targets. Here the system itself identifies the desired objects based on the task at hand. **CSIO** scientists said that besides defence and law enforcement applications, the system can also be used for civilian purposes such as disaster management as well as geological and cartographic surveys. Referred to as 'Vision-based Target Detection and Localisation', the technology was transferred for commercial production and marketing to L&T, Mumbai, two weeks ago. Five companies had initially responded to **CSIO's** proposal to transfer the technology.

Source: **Tribuneindia**

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the

occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.
Source: Pib

Rayat Bahra students visit CSIR-CSIO

First semester students of B.Tech Applied Science from Rayat Bahra Institute of Engineering and Nanotechnology visited the **Central Scientific Instruments Organisation (CSIR-CSIO)** in Chandigarh as part of an industrial tour. The educational initiative, conducted under the guidance of Director-Principal Dr Gurjit Singh, aimed to enhance the understanding of students regarding the role of scientific research and technology in national development. Providing insights about the visit, Prof Rohit Sharma, Head of the Department of Applied Science, and Prof Taranjit Kaur highlighted the hands-on learning opportunities that the students received. Through interactive sessions and live demonstrations, the students gained practical knowledge about advanced optical instruments, biomedical technologies and material science, which are an integral area of research at **CSIR-CSIO.** Sixty students participated in this enriching educational experience.
Source: Tribuneindia

CSIO develops affordable, high-power lens for visually impaired

The **Central Scientific Instruments Organisation (CSIO),** Chandigarh, has developed high-powered aspheric lens-based spectacles, known as Low-Vision Aids (LVA), to provide an affordable assistive device for patients suffering from severe or functional low vision (FLV). These lenses have been developed with different power combinations, such as +12D, +16D, +20D, and +26D, and can be customised for other power requirements depending on the patient's needs and extent of vision loss. Compared to conventional spherical glass-based lenses, these aspheric LVAs are 60 per cent lighter and more powerful, offering better optical performance in terms of reduced aberrations and higher image quality. According to scientists at **CSIO**, "These lenses are like using a magnifying glass for people with extremely low vision." However, conventional lenses of such power would be extremely large and bulky, making LVAs a convenient option, especially for

children. The LVAs were launched at a function chaired by the President of India, Droupadi Murmu, during the National Awards for Empowering Divyangjans 2024, in New Delhi. Scientists associated with the project explained that FLV is defined as impaired visual function that persists despite treatment or refractive correction. It can also be described as a visual acuity of less than 6/18 or a visual field less than 10 degrees from fixation.

Source: Tribuneindia

CSIR JIGYASA EPIC Hackathon 2024

The finale event of the **CSIR** Jigyasa EPIC Hackathon was organised on December 20, 2024 at the **CSIR-IGIB,** South Campus, New Delhi. The event was inaugurated by Dr. Souvik Maiti, Director, **CSIR-IGIB**. Dr. Geethavani Rayasam (Head, **CSIR- HRDG),** Dr. D. Shailaja (Chief Scientist, **CSIR-IICT)** and Mr. Anurag Mishra (Head,Cipla Foundation) were among the dignitaries. The event started with the poster presentation of the EPIC Hackathon students who had completed their Summer internship at **CSIR** laboratories across India under the EPIC program. Total 35 teams and 48 students had participated in two-month summer internship at 18 **CSIR** laboratories across the country and out of which 29 students presented their research projects done during the summer internship. At the end of the event, the winners of the **CSIR** EPIC Hackathon were felicitated with prizes and certificates. Workshop on pitch deck and Innovation & Entrepreneurship were also organized for the participants. The winner of **CSIR** Jigyasa EPIC Hackathon 2024 is Mr. Japteg Singh Bamrah, who received a cash prize of Rs. 50,000 for his project Solar-Mech Engine. He did his internship at **CSIR-IIIM**, Jammu. Mr. Uddhav Gupta& Mr. Udbhav Bandhani were the first runner-ups. They did their internship at **CSIR-CSIO,** Chandigarh and won a cash prize of Rs. 30,000 for their joint submission titled “Drishyamitram- Illuminating walkways for visually challenged”. Ms. Shreya Vinod and Mr. Soyal Parijawon the third prize of Rs. 10,000 each for their innovative works.

Source: Pib

Go Back

CSIR-Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI)

CSIR-CSMCRI and KAMP: Nurturing the Minds of Tomorrow with their Scientific Excursion for Over 100 Students

On January 17th, 2024, a Scientific Excursion at the **CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar**, Gujarat, was conducted by Knowledge and Awareness Mapping Platform with more than 100 students from Delhi World Public School, Rajkot, Gujarat and Narayana E Techno School, Mumbai. Initially, the students were briefed about **CSIR-CSMCRI,** Bhavnagar, by Dr. Doongar R Chaudhary (Principal Scientist and **CSIR**-Jigyasa Coordinator **CSIR-CSMCRI**, Bhavnagar). After that, experienced scientists and researchers from CSIR-**CSMCRI** inspired the students in their scientific pursuits through an interactive lab visit and various engaging lectures. During this excursion, the students received the opportunity to interact and learn from various scientists from **CSIR-CSMCRI,** like Dr. Gopal R. Bhadu, Dr. Anshul Yadav, Mr. Rishikesh Chormare, Dr. Bhupendra Kumar Markam.

Source: Pib

CSIR- NIScPR, UBA, VIBHA, DSIR and Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blairjointly organized Two day Workshop cum Training on "Making Value Added Products Using CSIR Technologies in Andaman Region"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with Unnat Bharat Abhiyan (UBA), Vijnana Bharati (VIBHA), Department of Scientific and Industrial Research (DSIR), and Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM) jointly organized a two-day Workshop cum Training on "Making Value Added Products Using **CSIR** Technologies in Andaman Region" at Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM), Port Blair, Andaman & Nicobar Islands from 11-12 January 2024. The workshop aimed towards providing training and exposure to farmers and women self-help groups (SHGs) and aspiring entrepreneurs on **CSIR** Technologies like making value added products from Pandanusfruitusing technology developed by **CSIR-Institute of Himalayan Bioresource Technology (IHBT);** Decentralized Solar Thermal Dryer for Hygienic Drying of Food Products developed by **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Dehumidified Dryer Technology by **CSIR-NIIST** Trivandrum and Managing Fungus Problems in Betel Nuts technology developed by CSIR-Institute of Himalayan Bioresource Technology (IHBT).

Source: Pib

International conference on salt and marine chemicals to begin at CSMCRI in Bhavnagar on Thursday

Around 300 industry captains and researchers from around the world will gather at the **Central Salt and Marine Chemicals Research Institute (CSMCRI)** in Bhavnagar for discussing advances in salt and marine chemicals as par of a two-day international conference which will begin on Thursday. Sheik Abdulaziz Al Qahtani, chairman of Abdulahadi A. Al Qahtani Sons Group Holding Co, Saudi Arabia will be the chief guest at the inaugural ceremony of the conference named Advances in Salt and Marine Chemicals: Brine Mining, Purification, and Resource Recovery (ICASMC-2024). Franz Goetzfried owner of Salt Research & Consulting, Germany will be the guest of honour at the inaugural ceremony. A salt exhibition will also be organised simultaneously on the campus of the **CSMRCI,** the premier research laboratory run by the Central government.
Source: Indian Express

Scientist Taqui Khan leaves behind an unmatched legacy; academia mourns his passing away

It was sometime in 1978, I had joined Nizam College to pursue my B. Sc in (Math, Physics & Chemistry). The initial ragging and welcome to the classes was completed. One day, I was talking to a group of seniors, when the Principal of the College, Prof M M Taqui Khan was passing by. There was sudden silence, everybody stood up in respect. That impression of Prof Taqui Khan remained etched in my memory. Within a few months, in 1979 he moved on to Osmania University and was later selected to lead the national Institute-**Central Salt and Marine Chemical Research Institute (CSMCRI),** Bhavnagar in Gujarat in 1982. It was one of the 42 national laboratories under the **Council of Scientific and Industrial Research (CSIR).** It was a prestigious posting then for a university professor to be elevated to lead a national lab. Incidentally, Dr Hussain Zaheer was the only other person from Hyderabad who held a director post in the CSIR (founder of RRL, Hyd.) by then. Dr Zaheer rose to become the Director General position in the 1960s.
Source: Siasat

Mobile water purification system that tackles emergency needs

In what has been pitched as a significant breakthrough, the **Central Salt and Marine Chemicals Research Institute (CSMCRI)** in Bhavnagar has developed an independent mobile water purification system. Mounted on a pickup van, the purification system can provide drinking water to people in the aftermath of natural disasters or other emergency situations, as per officials. It can filter water from natural sources — with high salinity — without requiring any external power source. Such units are expected to hit the market soon as **CSMCRI,** the premier research and development laboratory of the central government, has licensed the technology to a Nagpur-based firm for commercialisation.
Source: Indian express

15 tonnes of Kappaphycus alvarezii seedling distributed

Fifteen tonnes of Kappaphycus alvarezii seedling was distributed to rural women at an event organised at **CSIR- CSMCRI-**Marine Algal Research Station, Mandapam, recently. Red seaweed Kappaphycus alvarezii farming is a well-known activity found along the Tamil Nadu coast. It supports the livelihood for about 1,000 coastal rural women residing at Ramanathapuram, Pudukottai and Tuticorin districts. But women farmers find it difficult to get adequate seed to expand the farming work. To overcome the seed shortage issue, the Ministry of Fisheries, Animal Husbandry and Dairying has supported the funding through a project and CSIR-CSMCRI has established a seed bank farm to supply seed biomass of Kappapphycus alvarezii seaweed under PMMSY scheme.
Source: The Hindu

More Than 75 UG, PG, And PhD Candidates Participate In Course On Fermentation Technology At OU

The Certificate Course on Fermentation Technology under the National Skill Development Program jointly organized by **CSIR-CSMCRI,** Gujarat, Prof T. Navaneeth Rao Central Facilities for Research and Development (CFRD), Osmania University, and Abode Biotech India Pvt Ltd, Hyderabad, concluded today at PTNR-CFRD. The three day programme is part of the CSIR integrated Skill initiative. More than 75 undergraduate, postgraduate and PhD students participated in the program. the training sessions included lectures by prominent experts in the field of fermentation technology, demonstrations of equipment and an industrial visit to Abode Biotec Pvt Ltd. at Nacharam.
Source: indtoday

Experts to discuss benefits of membrane technology

The **CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI)** in Bhavnagar will host the three-day International Conference on Materials and Membranes for Water and Energy (ICMMWE-2024) from Jul 10. The event will feature over 60 invited talks and see participation from more than 250 delegates representing countries like Japan, the UK, South Korea, Russia, Australia, UAE, Singapore, Israel, and India. Research students from various CSIR laboratories, IITs, NITs, Central and State Universities are also set to present their research through oral and poster sessions. Professor T Pradeep from IIT Madras will deliver the inaugural lecture to kick off the conference. Dr. Kannan Srinivasan, Director of **CSIR-CSMCRI** said, “This event will play a significant role in providing scientific and technical support not only to Indian user industries but also to international counterparts.” The conference aims to facilitate discussions and collaborations that will drive advancements in the fields of water purification, renewable energy, and green hydrogen technology.
Source: Times of India

Department of Fisheries Joint Secretary Shri Sagar Mehra visits ICAR CMFRI and CSIR-CSMCRI, Marine Algal Research Station Mandapam Regional Centre

Shri Sagar Mehra, Joint Secretary, DoF, Govt of India, visited **ICAR CMFRI** and **CSIR-CSMCRI,** Marine Algal Research Station, Mandapam Regional Centre Joint Secretary

(Inland Fisheries) Shri Sagar Mehra along with Shri Subhash Chandra, Director (Fisheries) and Dr. Gunamaya Patra visited the Mandapam Regional Centre of **ICAR-CMFRI** on 29th & 30th June 2024. The Joint Secretary held detailed discussions with the Scientists of **CMFRI** and **CSMCRI**. The Joint Secretary visited the various facilities of **CMFRI** like the Marine Fish Broodbank, Marine Hatchery, Recirculatory Aquaculture System, Museum, Marine Aquarium and the Fish Farm. The Joint Secretary along with the Scientists of **CMFRI** and officials of the Ramanathapuram office of TN Fisheries Department visited the seaweed farming site at Munaikadu village in Palk Bay and interacted with the farmers and enquired about the challenges and issues they encounter in upscaling the seaweed farming.
Source: Pib

MIL-OSI Asia-Pac: Promotion of Seaweed Based Organic Products and Biostimulants

In order to ensure a supply of good quality of Biostimulants to the farmers, the Government of India incorporated the Biostimulants under the Fertilizer (Control) Order,1985. Seaweed is one of the eight categories of the Biostimulants. Under the FCO the Government of India is empowered to specify the specifications of Sea Weed and also regulates its quality. Seaweed cultivation is also promoted at Gulf of Kutch (Kori creek area) in Gujarat. Three proposals sanctioned under PMMSY to R&D institutes viz. **Central Salt & Marine Chemicals Research Institute (CSIR-CSMCRI),** Central Marine Fisheries Research Institute (ICAR-CMFRI) and Private Entrepreneur supported by NFDB, Department of Fisheries, GoI are undertaking seaweed cultivation feasibility, training and demonstration projects involving local villagers.
Source: Foreignaffairs

3-day meet on CO2 conversion to value-added chemicals begins at CSIR-IICT

A three-day national conference on “Catalysis for Energy, Environment & Sustainability (CEES-2024)” commenced at the **CSIR- Indian Institute of Chemical Technology (CSIR-IICT)** here on Wednesday, under the patronage of the Catalysis Society of India (CSI) and CO2 India Network. The meeting, being hosted alongside the “CO2 India Network 3rd Annual Meet”, aims to advance research and development in catalysis, focusing on CO2 conversion to value-added chemicals, materials for selective CO2 capture, and fine chemicals. **IICT** director D. Srinivasa Reddy, chief scientist N. Lingaiah, **CSIR-CSMCRI** director S. Kannan, TIFR-Mumbai’s Vivek Polshettiwar, HPCL-Mumbai Director (Refineries) Bharathan, IIT Roorkee director Kamal Kishore Pant and others spoke on the inaugural day. Scientists from other **CSIR** labs, IITs, IISERs, IISc, various universities, and professionals from key industries are participating, said a press release.
Source: The Hindu

‘Desalination units a must to meet ever-increasing demand of water’

The ever-increasing demand for fresh water for domestic and industrial purposes can be met through the installation of desalination plants using multiple technologies across

India, said Kannan Srinivasan, director of **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI).** He added that desalination is one of the solutions to address the challenge of meeting water necessities. Srinivasan also pointed out that India's piped water network can ease the task of distribution through desalination plants. He made these remarks during a panel discussion on water and wastewater management at the 'One Week One Theme – Green Horizon Summit 2024' held at **CSIR-NEERI** on Tuesday. The session was moderated by Rajesh Biniwale, co-chair, SEP Vertical, **NEERI.** "We have nine states and four union territories with 63 coastal districts. Water is becoming increasingly saline in these districts. The ingress of salinity is becoming more prevalent in these areas. This is putting serious stress on sources of potable drinking water and leading to water shortage for households, agriculture, and coastal industry establishments where freshwater requirement is inevitable," he said. Srinivasan said that one of the possible solutions, based on global experiences, is desalination. "Desalination as a market has emerged in the country in the last 15 years. Based on interests by coastal states, a huge amount of desalination capacity is going to be set up. Water is going to be a pricey commodity in future," Srinivasan said.
Source: Times of India

Department of Science and Technology Year End Review 2024

- A demo plant is established at Sihphir Venghlun in Meghalaya for post-harvest processing of ginger/turmeric through technological interventions from **CSIR-CMERI** with direct benefit to 128 Tribals and indirect to all the tribals living in project area.
- **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Bhavnagar, Gujarat converted two running solar salt works into model units and developed high purity solar salt technologies for agarias community of Kutch, Gujarat (Halwad Region). A cluster of 50 small scale salt manufacturers (agarias) is formed and trained for best practices of salt manufacturing and value addition in their salt works by utilizing bittern (liquor remained after salt harvesting).
- DST has supported two Technology Deployment Test beds in PPP mode to be implemented by IIT Delhi – Thermax Ltd and **CSIR-IICT** Hyderabad – BHEL for setting up pilot-scale demonstrations in Coal Gasification plants for Methanol and DME production with industry partnering as solution provider along with a technology designer (knowledge partner) to deploy CCU in hard-to-abate sector like thermal power.
- DST supported pilot plant project titled "Implementation of a Sustainable Bioenergy-Based Model Effluent Treatment Plant for Desiccated Coconut Industries" was inaugurated at the site of M/s. Vittal Agro Industries, Kasargod on September 02, 2024. The project was executed by **National Institute for Interdisciplinary Science & Technology (NIIST),** Thiruvananthapuram, Kerala in collaboration with M/s. Vittal Agro Industries, Kasargod, the Coconut Development Board (CDB).
  Source: Pib

NIO hosts conclave on ecology, environment, earth, ocean sciences and water

The **CSIR-National Institute of Oceanography (CSIR-NIO)**, in collaboration with **CSIR-NEERI,** Nagpur; **CSIR-NGRI**, Hyderabad; and **CSIR-CSMCRI,** Bhavnagar, hosted a

stakeholder conclave on Ecology, Environment, Earth, Ocean Sciences and Water (E3OW). The event, organised in a hybrid mode, was held at the **CSIR-NIO,** Dona Paula, as a part of the 'One Week One Theme' campaign of the **CSIR**, which aims to showcase and strengthen research and technological advancements aligned with national priorities. The event brought together industry representatives, academic partners, and research scientists to foster collaborations and advance research and development (R&D) initiatives. The inaugural session was chaired by Dr. Atul Vaidya, Director, **CSIR-NEERI** and Prof Sunil Kumar Singh, Director of **CSIR-NIO**, alongside Dr Prakash Kumar, Director, **CSIR-NGRI,** and Dr Kannan Srinivasan, Director, **CSIR-CSMCRI.** The leaders emphasised the critical role of stakeholder engagement in developing impactful technologies and achieving the Government of India's Vikasit Bharat 2047 vision. A significant highlight of the conclave was the signing of a Non-Disclosure Agreement between **CSIR-NIO** and The Kelp Agro and Minerals, Raigad, to develop Type II collagen from jellyfish. This pioneering technology, developed by Dr Supriya Tilvi and her team at **CSIR-NIO**, offers promising applications in biomedicine and nutraceuticals.
Source: Heraldgoa

'Industry engagement needed in environmental solutions'

Ajit Kumar Saxena, CMD of Moil, highlighted the critical need for expertise in addressing environmental challenges and stressed the importance of industry involvement in environmental problem-solving. He called for practical solutions and emphasised the necessity of societal engagement in tackling these complex issues. Saxena was the chief guest at the Green Horizon Summit-2024 hosted by **CSIR-NEERI** at its auditorium on Tuesday. **NEERI** collaborated with CII to launch the 'One Week One Theme' campaign focusing on E3OW (Ecology, Environment, Earth and Ocean Sciences and Water). The event featured prominent leaders including JNARDDC director Anupam Agnihotri, CII Vidarbha Zone chairman Shailesh Awale, **CSIR-NEERI** director Atul Vaidya, **CSIR-NIO** director Sunil Singh, **CSIR-CSMCRI** director Kannan Srinivasan, CII Vidarbha Zone vice chairman Shree Jamdar, and **CSIR-NEERI** senior principal scientist Amit Bansiwal. Saxena emphasised that while there are many environmental issues, there is a lack of adequate expertise, making events like this essential to bridge the gap. He commended the participation of the Confederation of Indian Industry (CII), highlighting the importance of direct engagement with industry to tackle environmental challenges effectively. Saxena expressed hope that pragmatic and implementable solutions would emerge from such events to address issues related to ecology, environment, and water. He also underscored the need to involve society, as environmental problems are both pervasive and complex.
Source: Times of India

Go Back

CSIR-Institute of Genomics & Integrative Biology (CSIR-IGIB)

Nobel laureate and professor at the Department of Chemistry at the University of Copenhagen, Denmark, Prof. Morten Meldal, accompanied by his wife Ms. Phaedria Marie St. Hilaire, Life Science Business Leader, call on Union S&T Minister Dr Jitendra Singh

Nobel laureate and professor at the Department of Chemistry at the University of Copenhagen, Denmark, Prof. Morten Meldal called on the Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh in New Delhi today and discussed bilateral cooperation in Pharmaceuticals and promotion of chemistry studies among school children. Prof Meldal, who delivered lectures at the **CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB),** IIT Delhi and Miranda House in the city, said he was very impressed with the work done at the Biotechnology Industry Research Assistance Council (BIRAC), a Public Sector Enterprise set up by Department of Biotechnology (DBT).

Source: Pib

Reducing the costs of blockbuster gene and cell therapies in the Global South

We are living in the age of biology, where new research is translated daily into potential treatments for deadly diseases. Researchers are conducting thousands of clinical trials to assess the efficacy of these first-in-human therapeutics, but alongside excitement, innovation brings costs. These costs are paid by healthcare providers and patients, leaving many blockbuster treatments, from gene therapy and chimeric antigen receptor (CAR)-T cells to immune checkpoint inhibitors, out of reach for most of the world. Cancer is a priority for Indian biotech, as it delivers a good return on investment, says Debojyoti Chakraborty, a scientist at the **Council of Scientific & Industrial Research (CSIR) Institute of Genomics and Integrative Biology** in New Delhi. But as well as having the world's second highest burden of cancer, India is home to many people with rare diseases — the focus of his research.

Source: Nature

Decoding lncRNAs: Key to COVID-19 Severity and Recovery Unveiled by CSIR-IGIB Study

In a groundbreaking study by the **CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB)** in Delhi, India, researchers have unveiled the significant role of long non-coding RNAs (lncRNAs) in the progression and severity of COVID-19. This comprehensive analysis, focusing on the spatio-temporal expression dynamics of

lncRNAs, highlights their crucial functions during and after SARS-CoV-2 infection, offering insights into potential therapeutic targets. The Dynamics of lncRNA Expression in COVID-19 Employing single-cell RNA sequencing (RNA-seq), the study identified 203 differentially expressed lncRNAs, including cell type-specific ones like MALAT1 and NEAT1, which modulate immune function in various cell types. These findings underscore the complex role of lncRNAs in regulating immune responses and their potential as biomarkers for disease severity and recovery.
Source: Bnnbreaking

CSIR- Structural Engineering Research Centre and CSIR Madras Complex (CMC) organised "Phenome India" - A Unique Health Check-up Camp

The **Council of Scientific and Industrial Research - Institute of Genomics and Integrative Biology, New Delhi (CSIR - IGIB)** has initiated a unique health check –up camp called Phenome India - **CSIR** Health Cohort Knowledgebase (**CSIR** Cohort - PI-CHeCK) for the **CSIR** family. **CSIR** is one of the largest research and development organisations of India and this is a network of 37 laboratories situated across the country. The **CSIR- Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC) organised "Phenome India" - A Unique Health Check-up Camp during from 8 to 11 March 2024 at **CSIR** Campus, Taramani, Chennai. Phenome India is not just a health check-up camp; it's a pioneering step towards understanding the unique health landscape of our nation. By gathering diverse data through PI-CHeCK, **CSIR** aspires to pave the way for tailored healthcare solutions and contribute significantly to the advancement of medical knowledge.
Source: **Pib**

Study finds women are more likely to develop long Covid

A recent study by the Dr D Y Patil Medical College, Hospital and Research Centre and **CSIR Institute of Genomics and Integrative Biology** in New Delhi has found several risk factors associated with long Covid, including alcohol consumption and SARS-CoV-2 reinfections. The study. recently published in Scientific Reports, a journal from the publishers of Nature, found that women were more likely to develop long Covid as compared to men. Of the studied 3,329 healthcare workers, 216 (6.19%) suffered from long Covid. Dr Aayush Gupta, lead researcher from Dr D Y Patil Medical College, said, “Persistent weakness/tiredness lasting 12 weeks to 6 months was the most experienced long-Covid symptom. Loss of smell, myalgia, headache, neurotic symptoms, shortness of breath, loss of appetite, menstrual abnormalities, cough, joint pain, sore throat, sleeping troubles, difficulties in concentration/confusion and leg pain were other common long Covid symptoms. Some cases had rectal bleeding, weakness in eyesight and panic attacks.”
Source: Times of India

Study finds alarming levels of antibiotic resistance in poultry farms

A recent report revealed concerning levels of Antimicrobial Resistance Genes (ARG) in 11 out of 14 samples from poultry farms in Tamil Nadu and Andhra Pradesh. The report "Poultry’s Pill Problem: Antibiotics and its Environmental Concern," jointly released by

Toxics Link and World Animal Protection, scrutinized 14 samples of poultry litter and groundwater from six farms. The analysis highlighted a significant presence of ARGs targeting 15 antibiotics, including glycopeptides, carbapenems, and macrolides. Dr. Vijay Pal Singh, Principal Technical Officer at **CSIR-IGIB** and Associate Professor at ASIR, emphasizes the significance of the study's findings. He states, "The results provide evidence of antibiotic use in poultry and its role in increasing AMR." He highlights the need for collaborative efforts with stakeholders to develop protocols and control measures to curb this trend.
Source: **Groundreport**

Hope, despair and CRISPR — the race to save one woman's life

When researcher Arkasubhra Ghosh finally met Uditi Saraf, he hoped that there was still a chance to save her. Ghosh and his collaborators were racing to design a one-off treatment that would edit the DNA in the 20-year-old woman's brain cells and get them to stop producing toxic proteins. It was an approach that had never been tried before, with a long list of reasons for why it might not work. The treatments didn't work. And the experience taught Rajeev and Sonam how long it could take to get approval to try an experimental therapy in the United States. They decided Uditi's base-editing therapy should also be manufactured and administered in India. About an hour and a half away from their home, Debojyoti Chakraborty, a geneticist at the **Council of Scientific and Industrial Research's Institute of Genomics and Integrative Biology** in New Delhi, had been making headlines for his efforts to devise a CRISPR-based treatment for a genetic blood disorder called sickle-cell disease.
Source: **Nature**

मंकी पॉक्स की गुत्थी सुलझी! DDU और CSIR IGIB के वैज्ञानिकों का बड़ा दावा

दीनदयाल उपाध्याय गोरखपुर विश्वविद्यालय और **सीएसआईआर-आईजीआईबी** के वैज्ञानिक से मिलकर मंकी पॉक्स की गुत्थी सुलझा ली है. मंकी पॉक्स एक पशुजन्य बीमारी है. इसकी पहचान पहली बार 1970 में पश्चिमी और मध्य अफ्रीका में हुई. यह रोग वायरस के कारण होता है. जो संक्रमित जानवरों से मनुष्यों में फैलता है. शोध में पता चला हक़ी कि ये वायरस मंकीपॉक्स वायरस के जीन ओपीजी-153 में विशेष रूप से 'एटीसी' मोटिफ समय के साथ घट रहे हैं, जिसके कारण संक्रमण की दर बढ़ गई है. हालांकि, इस कमी के साथ ही वायरस की मनुष्यों को बीमार करने की क्षमता कम हो गई है. इस शोध में कुछ ऐसे डीएनए मोटिफ भी मिले हैं, जो सभी मंकीपॉक्स वायरस में संरक्षित हैं.
Source: **Abplive**

India getting close to developing gene therapy for sickle cell disease, say officials

India is getting closer to developing a gene therapy for sickle cell disease, a genetic blood disorder with a high prevalence rate among the Scheduled Tribes, officials of the Union Tribal Affairs Ministry said on June 19. Officials of the Tribal Affairs Ministry told *The Hindu*

that the â€œgood newsâ€ Mr. Nayyar was referring to was related to the tests that are currently being run by the Council of Scientific and Industrial Researchâ€“Institute of **Genomics and Integrative Biology (CSIR-IGIB**). â€œ Following this, the tests will proceed to the next phase and eventually move on to being tested on patients,â€ a senior official said. This comes months after the U.S. Food and Drug Administration approved the CRISPR-Cas9 technology for a cell-based gene therapy to treat sickle cell disease in December 2023.
Source: TheHindu

CSIR's 'Phenome India' Project Hits Target with 10,000 Samples Collected, Aims for New Era in Precision Medicine

The **Council of Scientific and Industrial Research (CSIR)** announced the successful conclusion of the first phase of its groundbreaking longitudinal health monitoring project, the 'Phenome India-**CSIR** Health Cohort Knowledgebase' (PI-CheCK). To mark this significant milestone, **CSIR** organized a special event, 'Phenome India Unboxing 1.0', at the **National Institute of Oceanography (NIO),** Goa today, 3rd June. Dr. Souvik Maiti Director, **CSIR-Institute of Genomics and Integrative Biology (IGIB),** Dr. Sunil Kumar Singh, Director at **CSIR-National Institute of Oceanography (NIO),** Dr. Shantanu Sengupta, Senior Principal Scientist at **CSIR-IGIB,** Dr. Rajendra Prasad Singh, Senior Principal Scientist at **CSIR** and Dr. Viren Sardana, Senior Scientist at Centre of Excellence for Intelligent Sensors and Systems were among the dignitaries present.
Source: Pib

CSIR की 'फेनोम इंडिया' परियोजना ने 10,000 नमूने एकत्र कर लक्ष्य हासिल किया, सटीक चिकित्सा में नए युग की शुरुआत का लक्ष्य

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (CSIR) ने अपनी अभूतपूर्व अनुदैर्ध्य स्वास्थ्य निगरानी परियोजना, 'फेनोम इंडिया-सीएसआईआर हेल्थ कोहोर्ट नॉलेजबेस' (पीआई-चेक) के पहले चरण के सफल समापन की घोषणा की। इस महत्वपूर्ण उपलब्धि को यादगार बनाने के लिए, सीएसआईआर ने आज 3 जून को गोवा के राष्ट्रीय समुद्र विज्ञान संस्थान (एनआईओ) में एक विशेष कार्यक्रम 'फेनोम इंडिया अनबॉक्सिंग 1.0' का आयोजन किया। **सीएसआईआर-इंस्टीट्यूट ऑफ जीनोमिक्स एंड इंटीग्रेटिव बायोलॉजी (आईजीआईबी)** के निदेशक डॉ. सौविक मैती, **सीएसआईआर-नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी (एनआईओ)** के निदेशक डॉ. सुनील कुमार सिंह, सीएसआईआर-आईजीआईबी के वरिष्ठ प्रधान वैज्ञानिक डॉ. शांतनु सेनगुप्ता, सीएसआईआर के वरिष्ठ प्रधान वैज्ञानिक डॉ. राजेंद्र प्रसाद सिंह और सेंटर ऑफ एक्सीलेंस फॉर इंटेलिजेंट सेंसर्स एंड सिस्टम्स के वरिष्ठ वैज्ञानिक डॉ. वीरेन सरदाना उपस्थित गणमान्य व्यक्तियों में शामिल थे।
Source: Insamachar

Therapeutic utility of a novel gene editing tool

In a new paper published in Nature Communications, scientists from the **Council of Scientific and Industrial Research – Institute of Genomics and Integrative Biology (CSIR-IGIB),** New Delhi and the L V Prasad Eye Institute (LVPEI), Hyderabad, along with other national and international collaborators, present an enhanced CRISPR-Cas9 based genome editing system that is more precise and efficient than existing technologies. The system has high specificity, extended flexibility for genome coverage and the LVPEI team has validated its applicability for precision mutation editing and correction. In the paper, the team at **CSIR-IGIB,** led by Dr. Debojyoti Chakraborty, demonstrated the greatly improved editing efficiency of a Cas9 protein from a bacterium called Francisella novicida (FnCas9). Through an elaborate genetic engineering process, the team enhanced the edit efficiency and fidelity of this protein (enFnCas9). This improved tool is better than other popular Cas9 proteins (such as SpCas9 from Streptococcus pyogenes) and has the potential to be developed into new diagnostics and therapeutics.
Source: Businessnewsthisweek

Indian scientists build breakthrough gene-editor

Scientists from the **CSIR-Institute of Genomics and Integrative Biology**, New Delhi, have developed an enhanced genome-editing system that can modify DNA more precisely and more efficiently than existing CRISPR-based technologies. CRISPR occurs naturally in some bacteria, as a part of their immune system that limits infections by recognising and destroying viral DNA. In Nobel-prize winning work, scientists repurposed this bacterial defence mechanism to develop a novel approach for editing the genomes of higher-order organisms. CRISPR's off-target problem Today, using CRISPR-Cas9, researchers can add, remove or alter specific DNA sequences in the genome of animals. This system has been used in various fields, including in agriculture — to improve the nutritional value of plants and increase the yield — and in healthcare to diagnose several diseases and treat genetic disorders.
Source: The Hindu

Indian scientists claim to edit DNA with unmatched precision: Discover the details here

Scientists at the **CSIR-Institute of Genomics and Integrative Biology** in New Delhi have developed a new genome-editing system that surpasses current CRISPR technology in both precision and efficiency. The Limitations of Traditional CRISPR, originally a bacterial immune system, was adapted to edit the DNA of complex organisms. However, the traditional CRISPR-Cas9 system sometimes causes "off-target" effects, altering unintended parts of the genome. This issue is particularly pronounced with the SpCas9 enzyme from Streptococcus pyogenes, which, despite improvements in accuracy, often suffers from reduced efficiency. Advancements with FnCas9 To overcome these challenges, researchers explored the Cas9 enzyme from Francisella novicida, known as FnCas9. Initially, FnCas9 was highly precise but had low efficiency. Scientists led by Debojyoti Chakraborty and Souvik Maiti engineered new versions of FnCas9 to enhance its effectiveness without sacrificing precision. By modifying the amino

acids that interact with the target DNA, they improved FnCas9's binding affinity, making gene editing more effective and flexible.
Source: **Moneycontrol**

Genetic clues to irregular heartbeat

Whole-genome sequencing has uncovered genetic variants likely to cause cardiac channelopathies, a group of inherited disorders that affect the heart's electrical activity1. These mutations were not detected by whole-exome sequencing in Indian patients. About 1% of Indians carry mutations in genes coding for ion channels that can cause the disease. Symptoms include dizziness, syncope, palpitations, and seizures in most cases. In rare cases, the symptom of onset can be cardiac arrest or sudden cardiac death. Major forms of cardiac channelopathy include long QT syndrome, Brugada syndrome, short QT syndrome, and catecholaminergic polymorphic ventricular tachycardia. A team of researchers, led by the **CSIR Institute of Genomics and Integrative Biology** in Delhi, did whole-genome sequencing with DNA isolated from 25 patients at five tertiary health care centers. Whole-exome sequencing results had been negative for mutations.
Source: **Nature**

3.85 crore people screened for Sickle Cell Anaemia across 17 states: Union Health Minister

A total of 3.85 crore people in 17 identified States have been screened for sickle cell anaemia as of July 31, Union Health Minister J. P. Nadda told the Rajya Sabha on Tuesday, August 6, 2024. The National Sickle Cell Anaemia Elimination Mission (NSCAEM) was launched by Prime Minister Narendra Modi from Madhya Pradesh on July 1, 2023. The objectives of the mission include providing affordable, accessible and quality care to all patients with sickle cell disease(SCD), reducing the prevalence of the disease through awareness campaigns and targeting screening of 7 crore people aged 0-40 years in affected districts of tribal areas by 2025-26, Mr. Nadda said. The **Council of Scientific and Industrial Research (CSIR)** has been actively promoting research in gene editing therapies for advanced treatment options for SCD through its programme under the Sickle Cell Mission which was undertaken at one of the constituent laboratories of **CSIR**, namely **CSIR-Institute of Genomics and Integrative Biology (IGIB),** Delhi from 2017-2023.
Source: **The Hindu**

Faculty Development Program (FDP) on 'Recent Trends in the Development of Novel Approaches in Anti-Cancer Therapeutics"

Five days AKTU sponsored Faculty Development Program (FDP) on 'Recent Trends in the Development of Novel Approaches in Anti-Cancer Therapeutics", was organized by the Noida Institute of Engineering and Technology Pharmacy Institute, Greater Noida. The program was inaugurated by Dr. Pragya Shukla (Head of Clinical Oncology) of Delhi State Cancer Institute who was also the Chief Guest. Mrs. Luna Maheshwari, of Plus Healthcare Technologies Pvt. Ltd., Mumbai described the operation and applications of

various instruments used specifically for anticancer research in academics. Dr. Javed Ali of Jamia Hamdard discussed approaches for delivery of drugs for the treatment of breast cancer. Dr. Rajani Mathur of DPSAR explained the use of natural resources to control cancer in days ahead. Dr. Himanshi Kapoor of **CSIR-Institute of Genomics and Integrative Biology,** New Delhi focused on the requirement of checking toxicity and drug resistance in controlling cancer. Dr. Ritushree Kukreti, Chief Scientist of **CSIR-Institute of Genomics and Integrative Biology (IGIB)** explained the role of pharmacogenomics in the development of personalized cancer medicine.
Source: Parichowk

Newly engineered proteins could offer safer and more effective gene therapies

An improved gene editor — about 3.5 times better at reaching different parts of the human genome — can correct a mutation associated with a genetic eye disorder that causes blindness in children1. Traditional Cas enzymes often show reduced editing efficiency or complex PAM (protospacer adjacent motif) requirements, limiting their therapeutic potential. Scientists at the **CSIR-Institute of Genomics and Integrative Biology** in Delhi and the University of Tokyo in Japan engineered enhanced Cas9 variants from Francisella novicida (enFnCas9). They modified the enzyme's WED-PI domain and the phosphate-lock loop of the Cas enzyme to create three new variants with enhanced kinetic activity, increased PAM binding affinity and a negligible change in specificity. The improved versions outperformed the commonly used Streptococcus pyogenes Cas9 (SpCas9) and its engineered derivatives in on-target editing efficiency, knock-in rates and off-target specificity.
Source: Nature

Gene mutation likely cause for developing autism in early childhood: RGCB study

Autism, a developmental disorder that causes functional abnormalities in brain development, is caused by a combination of environmental and genetic factors with its symptoms manifesting in childhood as early as the age of two years. Complexities of ASD (Autism Spectrum Disorder) include single gene mutations in early development genes. A recent RGCB study linked a novel mutation in the Tlx3 gene with abnormal development of the cerebellum (a major region of the hindbrain that controls balance, motor movement, and other complex functions) and autism. The study, conducted by Dr. Jackson James and his team from BRIC-Rajiv Gandhi Centre for Biotechnology (RGCB) here, has been published in the prestigious journal iScience. Deleting Tlx3 gene from the cerebellum of a transgenic mouse (a mouse with its DNA altered through genetic engineering techniques) embryo potentially affects the coordination of cerebellum function. When these mice embryos were allowed to grow until adulthood, they developed hallmarks of autistic behaviour, including abnormalities in social skills, repetitive behaviour, and motor/movement function. The RGCB team, in collaboration with **CSIR-IGIB (Council Of Scientific And Industrial Research–Institute Of Genomics And Integrative Biology (CSIR–IGIB),** New Delhi, also assessed the potential for this mutation to occur in the

human population and identified TLX3 mutation variants that are linked to nine ASD cases and other co-morbid neurodevelopmental conditions.
Source: Uni India

CSIR conducted Scientific Aptitude Assessment Exercise under JIGYASA program

The Scientific Aptitude Assessment Exercise under **CSIR's** JIGYASA programwas conducted online on 20December 2024 in which the students gathered in each of 37 constituents' laboratories of **CSIR** and took part in the big scientific demonstration and experiment. The event was unique because it was the first time these many students underCSIR JIGYASA program performed an experiment simultaneously. The event was inaugurated by Dr. Souvik Maiti, Director of the **CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB),** Delhi. During his inaugural address, he welcomed all the online participants and thanked them for their presence. "Education is not only attainedby reading text books or giving exams, going beyond textbooks and regular curriculum is also important", Dr Maiti said. He praised the importance of such events toward imparting practical skills to the students. Dr. Beena Pillai, Chief Scientist, **IGIB** introduced participants with the theme of the event. Citing the example of Dr. Mitali Mukerji, a former Chief Scientist at the **CSIR-IGIB** with notable achievement in the field of human genomics and personalized medicine, Dr Pillai told about the importance of DNA, Genomics and Molecular Biology in agriculture, healthcare and other sectors. Students who gathered to perform DNA isolation experiments were given isolation kits and were briefed about the protocol by Dr. Arya Sidharthan. Later, she performed a practical demonstration of DNA isolation following which around 550 students isolated DNA from their saliva.
Source: Pib

CSIR JIGYASA EPIC Hackathon 2024

The finale event of the **CSIR** Jigyasa EPIC Hackathon was organised on December 20, 2024 at the **CSIR-IGIB,** South Campus, New Delhi. The event was inaugurated by Dr. Souvik Maiti, Director, **CSIR-IGIB**. Dr. Geethavani Rayasam (Head, **CSIR- HRDG),** Dr. D. Shailaja (Chief Scientist, **CSIR-IICT)** and Mr. Anurag Mishra (Head,Cipla Foundation) were among the dignitaries. The event started with the poster presentation of the EPIC Hackathon students who had completed their Summer internship at **CSIR** laboratories across India under the EPIC program. Total 35 teams and 48 students had participated in two-month summer internship at 18 **CSIR** laboratories across the country and out of which 29 students presented their research projects done during the summer internship. At the end of the event, the winners of the **CSIR** EPIC Hackathon were felicitated with prizes and certificates. Workshop on pitch deck and Innovation & Entrepreneurship were also organized for the participants. The winner of **CSIR** Jigyasa EPIC Hackathon 2024 is Mr. Japteg Singh Bamrah, who received a cash prize of Rs. 50,000 for his project Solar-Mech Engine. He did his internship at **CSIR-IIIM**, Jammu. Mr. Uddhav Gupta& Mr. Udbhav Bandhani were the first runner-ups. They did their internship at **CSIR-CSIO,** Chandigarh and won a cash prize of Rs. 30,000 for their joint submission titled

"Drishyamitram- Illuminating walkways for visually challenged". Ms. Shreya Vinod and Mr. Soyal Parijawon the third prize of Rs. 10,000 each for their innovative works.
Source: Pib

Around 830 School Students across the country performed DNA isolation at 33 CSIR Labs

A scientific activity was carried out by the **Council of Scientific and Industrial research (CSIR)** in its laboratories across the country. **CSIR** is one of the largest S&T organisations of the Nation. A Delhi based constituent laboratory of **CSIR** namely **Institute of Genomics and Integrative Biology (IGIB)** coordinated the activity by connecting simultaneously to all the other laboratoriesof **CSIR** through online mode. The event was inaugurated by Dr. Souvik Maiti, Director, **CSIR-IGIB**. Dr. Geetha Vani Rayasam, Head, **CSIR-HRDG.** On the occasion, a number of senior scientists from various **CSIR** labs, teachers and school students were also present. About thirty school studentsof class 9 at each of the participating **CSIR** laboratories isolated DNA from their own saliva using the DNA isolation kits under the guidance of Dr. Beena Pillai, Chief Scientist and Dr.Arya Sidharthan, science communicator from **CSIR-IGIB.** Through this exercise, the studentslearned about the scientific principles of cell structure and chemical nature of DNA. Finally, the students were given a short questionnaire designed to evaluate their understanding of scientific principles, and assess their scientific aptitude.The outcome of the pilot study of scientific aptitude assessment followed by a larger study, is expected to help not only the students in making STEM career choices suited to their aptitude but also policy makers in designing curriculum and align with New Education Policy 2020.
Source: Pib

New method for detecting H. pylori & its mutations can help dyspeptic patients in resource poor remote settings

Researchers have found a way to develop FELUDA as a point-of-care diagnostic service at a minimal cost for detection of H. pylori and its mutations in dyspeptic patients from rural areas of India, with minimal or no access to diagnostic laboratories. Infections with H. pylori affect over 43 percent of the world's population with a wide range of gastrointestinal disorders, including peptic ulcers, gastritis, dyspepsia and even gastric cancer. Resistance to clarithromycin, primarily attributed to point mutations in the 23S ribosomal RNA coding gene of H. pylori poses a global threat to public health, by necessitating repeated diagnostic tests and use of multiple courses of different antibiotic combinations for eradication of the same. Towards this goal, Dr. Debojyoti Chakraborty and Dr. Souvik Maiti's group at **CSIR-IGIB** had previously demonstrated the possibility of detecting H. pylori antibiotic resistance mutations using Cas9-based mutation detection strategies. However, CRISPR-Cas9 based biosensing techniques face limitations due to the requirement of NGG PAM sequences at the recognition site while detecting mutations. To encounter this limitation of CRISPR-Cas9 based detection tools in this study, Dr Shraddha Chakraborty (currently a Department of Science and Technology INSPIRE Faculty Fellow at DBEB, IIT Delhi) and colleagues at **CSIR-IGIB** explored the potential of

en31-FnCas9 to successfully detect the presence and identify the 23S rDNA mutation status of H. pylori in gastric biopsy samples from dyspeptic patients, both by in vitro cleavage studies and lateral flow-based test strip assays (FELUDA).
Source: Pib

New hope for chronic hand eczema patients: Tofacitinib clinical trial shows 90% improvement

In a significant breakthrough for those suffering from chronic hand eczema, a widespread skin condition resistant to existing treatments, a clinical study by RML Hospital has shown a remarkable 90% improvement in symptoms in 12 of 15 patients within just four weeks of using Tofacitinib. The treatment regimen lasted about six months. According to researchers, the drug was used after studying the signaling pathway in the skin of patients. The condition commonly affects individuals with frequent exposure to detergents and solvents, including those working in vegetable processing, resulting in skin degradation of hands. The research, conducted by medical professionals at RML, in collaboration with the **Council of Scientific and Industrial Research — Institute of Genomics and Integrative Biology (IGIB),** Delhi, was published in a recent PubMed publication (Archives of Dermatological Research). Chronic hand eczema is the most common occupation-related skin disorder, with as many as 40% of workers in high-risk occupations developing this ailment. Dr Kabir Sardana, principal investigator from RML Hospital's dermatology department, noted that the condition significantly affects workers with frequent water exposure, including healthcare professionals, food service staff and hairdressers.
Source: Times of India

CSIR-Structural Engineering Research Centre conducts CSIR Jigyasa Scientific Aptitude Assessment for school students

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai, organized the **CSIR** Jigyasa Scientist Aptitude Assessment on 20 December 2024 at its campus. 25 students and 2 teachers from PM SHRI Kendriya Vidhyalaya, Meenambakkam, Chennai participated in the event. As a part of this event, a hands-on session followed by a scientific aptitude assessment test was organized. The students carried out a science experiment independently with the online guidance by the scientists of **CSIR-IGIB,** New Delhi. Dr. N. Anandavalli, Director, **CSIR-SERC** interacted with the students regarding their hands-on experiment session and their future goals. She asked the students to be innovative and creative by engaging in science-related events and activities and encouraged them to take science as their career. Dr. S. Maheswaran, Senior Principal Scientist & Nodal Officer Jigyasa, **CSIR-SERC** gave a brief on **CSIR, CSIR-SERC** and Jigyasa activities, which encourages school children to pursue science and research. The student participants also attended the **CSIR** Jigyasa EPIC Hackathon 2024 Finale through online mode. The students also visited various laboratories of **CSIR-SERC**, interacted with the scientists and had a glimpse of ongoing research activities of the centre.

Source: Pib

Go Back

CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)

Alpine plants may alter height or leaf size to cope with early snow-melt conditions

Early snow-melting triggers complex responses in alpine plant species, influencing traits like leaf composition and resource acquisition strategies, a recent study finds. Rohtang, whose land undergoes a drastic change form humid to semi-arid, is an ecologically sensitive zone facing “a high degree of ecosystem degradation” due to large tourist influx and climate change, Amita Chawla, one of the study authors from **IHBT**, tells Mongabay-India. This study by scientists from the Institute of Himalayan Bioresource Technology under the Council of Scientific and Industrial Research (CSIR) based in Himachal Pradesh state and the Academy of Scientific and Innovative Research, Ghaziabad, claims that it is one of the few to investigate in detail how ecological and physiological traits of alpine plant species are affected by the extended season length; how do these changes differ at contrasting heights; and how do different species in the same location respond to early snow melt. Their study also aimed to assess whether these responses to altered seasonality are specific to height or the plant’s functions.

Source: **Mongabay**

स्वाद के साथ अब कुपोषण भी दूर करेगी चॉकलेट, सीएसआईआर-आईएचबीटी ने की तैयार

स्वाद के साथ अब चॉकलेट बच्चों का कुपोषण दूर करेगी। पहले जिला कांगड़ा और फिर प्रदेशभर में कुपोषण को खत्म करने के लिए यह चॉकलेट बार मददगार साबित होंगे। हर दिन अलग-अलग प्रकार की चॉकलेट 2 से 5 साल के कुपोषित बच्चों को दी जाएंगी। इसमें प्रोटीन, फैट, आयरन, फाइबर, कार्बोहाइड्रेट की भरपूर मात्रा होगी, जो कुपोषित बच्चों को स्वस्थ और तंदुरुस्त बनाने में मदद करते हैं। इसके अलावा बच्चों में खाना खाने की रुचि भी बढ़ेगी। **सीएसआईआर-आईएचबीटी** पालमपुर (**हिमालयन जैव संपदा प्रौद्योगिकी संस्थान)** ने कुपोषित बच्चों के लिए छह प्रकार के चॉकलेट बार तैयार किए हैं। हर दिन अलग-अलग प्रकार के चॉकलेट बार कुपोषित बच्चों को पौष्टिक तत्व प्रदान करेगा। जानकारी के अनुसार महिला एवं बाल विकास विभाग और जिला कांगड़ा प्रशासन के सहयोग से फरवरी में जिला कांगड़ा में पायलट प्रोजेक्ट चलाया जाएगा। ‘भरपूर’ योजना के तहत जिला के हर उपमंडल के आंगनबाड़ी केंद्रों में कुपोषित बच्चों को यह चॉकलेट बार दिए जाएंगे।

Source: **Amarujala**

CSIR-IHBT Palampur team visited Mizoram to promote cultivation of mushrooms, high-value aromatic crops, and low-chilling varieties of apples

Some suitable areas of Mizoram have high-value aromatic crops potential. To help the farming community by planting shiitake and oyster mushrooms and low-chilling varieties of apple. To improve the economy of Mizoram, Mizoram Science Technology and Innovation Council (MISTIC), Aizawl, Mizoram, and College of Horticulture, Thenzol is doing it in collaboration with **CSIR IHBT**, Palampur. Dr. Sudesh Kumar Yadav, Director, **CSIR-IHBT,** Palampur said that the Department of Biotechnology, Government of India has awarded the Institute three projects for inter-institutional collaboration, and approval was given under this initiative of project Shitake and Oyster. To promote the cultivation of mushrooms, high-value aromatic crops, and low-chilling varieties of apples and the development of sustainable use of biological resources of Mizoram approval has been granted.

Source: **Himachal Headlines**

CSIR-IHBT organizes workshops on the Nutraceutical delivery system

In the inaugural session of the workshop, Dr. Amulya K Panda, Former Director, of the National Institute of Immunology, New Delhi and Associate Director Panacea Biotech "Biotechnology in his presentation on the topic "Transfer of Innovation in Nutraceuticals and Excipients" Said in the lecture that there are immense possibilities in the field of nutraceuticals. require that To make laboratory-developed nutraceutical products available to the general public. Earlier, in his welcome address, the director of the institute, Dr. Sudesh Kumar Yadav said that The institute is carrying out pioneering research in the field of nutraceuticals and their production and It is also playing an advanced role in processing. **CSIR-IHBT** green A range of health-benefiting nutraceuticals using technology developed and transferred to entrepreneurs. including cartilage health Nutraceutical formulations for canning, canning technology for ready-to-eat foods, ready to Eat Crispy Fruits and Vegetables, Gluten Free Foods from Buckwheat, Iron and Zinc Enriched Spirulina-based bars and candies, multigrain high protein mixes, and protein and There are many products like fiber-rich bars.

Source: **Himachal Headlines**

Shri Ram Mandir construction has been technically assisted by atleast four leading National Institutes of CSIR (Council of Scientific & Industrial Research) and DST (Department of Science & Technology) under Ministry of Science & Technology, in addition to certain inputs from other institutions like IITs as well as ISRO (Indian Space Research Organisation), says Union Minister Dr Jitendra Singh

Shri Ram Mandir construction has been technically assisted by atleast four leading National Institutes of **CSIR (Council of Scientific & Industrial Research)** and DST (Department of Science & Technology) under Ministry of Science & Technology, in addition to certain inputs from other institutions like IITs as well as ISRO (Indian Space Research Organisation). Disclosing this here today, Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions,

Atomic Energy and Space, Dr Jitendra Singh said, the four institutes which made a significant contribution include **CSIR -Central Building Research Institute (CBRI)** Roorkee; **CSIR - National Geophysical Research Institute (NGRI)** Hyderabad; DST - Indian Institute of Astrophysics (IIA) Bengaluru and **CSIR-Institute of Himalayan Bioresource Technology (IHBT)** Palampur (HP).
Source: Pib

CSIR -IHBT sends tulip flowers to commemorate the opening of the Shri Ram Temple in Ayodhya

CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT) Palampur (HP) has sent tulip flowers to commemorate the opening of the Shri Ram Temple in Ayodhya. These Tulip flowers will be offered to Lord Ram in the Pran-Pratishtha Mahotsav of Shri Ram Temple, at Shri Ram Janmabhoomi, Ayodhya on January 22 nd, 2024. Every year, multiple varieties of tulips are planted in the **CSIR-IHBT** Tulip Garden, which is the first in Himachal Pradesh and the second tulip garden of Bharat. The garden not only promotes the natural beauty of Himachal Pradesh but also tourism.
Source: Himachalheadlines

IHBT Palampur team visits SRHU

A five-member team (4 offline and 1 online) of scientists, comprising Dr Rakesh Kumar, Dr Mahesh Gupta, Dr Mohit Sharma, Dr Bhavya Bhargava and Dr Rakshak Kumar (online) from the Institute of **Himalayan Bioresource Technology (IHBT),** Palampur, visited Swami Rama Himalayan University, Jolly Grant, on 23-24 January in furtherance of the MoU signed between **CSIR-IHBT**, Palampur, and SRHU, Dehradun. Presentations were made by the **IHBT** team on their current R&D protocols developed, patents obtained and technology transferred to multiple stakeholders including many startups, companies, farmers and clusters pan India.
Source: Garhwalpost

After apple cultivation success in Mizoram, CSIR to harvest new territories

Encouraged by the success of its pilot project on apple cultivation in Mizoram, a first in the Northeastern States, scientists from the country's top research agency, the **Council of Scientific and Industrial Research (CSIR),** have devised an ambitious plan to expand the cultivation of high-revenue, low-chilling fruit crops in the region, aiming to boost the income of local communities. This initiative also means that locals won't have to import the fruit from other States, thereby reducing carbon footprints through transportation, as highlighted by Dr Rakesh Kumar, Senior Principal Scientist from **CSIR's Institute of Himalayan Bioresource Technology (IHBT)** in Palampur. IHBT has been tasked with spearheading apple cultivation in the region.
Source: Daily Pioneer

CSIR- NIScPR, UBA, VIBHA, DSIR and Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blairjointly organized Two day Workshop cum Training on "Making Value Added Products Using CSIR Technologies in Andaman Region"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with Unnat Bharat Abhiyan (UBA), Vijnana Bharati (VIBHA), Department of Scientific and Industrial Research (DSIR), and Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM) jointly organized a two-day Workshop cum Training on "Making Value Added Products Using **CSIR** Technologies in Andaman Region" at Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM), Port Blair, Andaman & Nicobar Islands from 11-12 January 2024. The workshop aimed towards providing training and exposure to farmers and women self-help groups (SHGs) and aspiring entrepreneurs on **CSIR** Technologies like making value added products from Pandanusfruitusing technology developed by **CSIR-Institute of Himalayan Bioresource Technology (IHBT);** Decentralized Solar Thermal Dryer for Hygienic Drying of Food Products developed by **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Dehumidified Dryer Technology by **CSIR-NIIST** Trivandrum and Managing Fungus Problems in Betel Nuts technology developed by CSIR-Institute of Himalayan Bioresource Technology (IHBT).

Source: Pib

Mesmerizing Tulip garden at CSIR-IHBT has been opened for public in Palampur

Tulip is a tuberous cut flower that has huge International and domestic demand. It ranks third in the world's top cut flower trade. Under the mission, the institute has been planting these beautiful flowers in its premises for the last two years. This year 50,000 tulip bulbs of 6 varieties of various vibrant colors have been planted in the garden. The garden, after its opening, is expected to attract a large number of visitors from within and outside the state thereby promoting scientific tourism. **CSIR-IHBT** started experimental trials on flower and bulb production of tulip in the Lahaul valley of Himachal Pradesh for its commercial cultivation. To begin with, several farmers from cooperative societies such as Yaani Mahadev Floriculture Society, Madagran; Pattan Valley Floriculture Society Limited, Shansha; and Tinan White Mountain Floriculture Society Limited, Jangla, were trained and empowered to cultivate tulips. They are now engaged in tulip cultivation for bulb and flower production, and are reaping benefits.

Source: Himachalheadlines

CSIR Palampur: सीएसआईआर पालमपुर देश में पहली बार तैयार करेगा पियोनी फूल, कंपनी के साथ किया एमओयू

हिमालयी **जैवसंपदा प्रौद्योगिकी संस्थान (सीएसआईआर)** पालमपुर देश में पहली बार नीदरलैंड के पियोनी फूल को उगाने पर शोध करेगा। इस फूल के बीज को यहां के वातावरण के हिसाब से विकसित करने के लिए सीएसआईआर नीदरलैंड और हरियाणा की एक कंपनी के साथ मिलकर शोध करेगा। नीदरलैंड की मैसर्ज डर्क शिपर और हरियाणा की जींद की मैसर्ज रेड मिर्ची कंपनी के साथ एमओयू साइन हो चुका है। हिमाचल प्रदेश के ठंडे क्षेत्र लाहौल-स्पीति, लद्दाख और कारगिल में इसके पौधे उगाकर उस पर अध्ययन किया जाएगा। इसके बाद फूल की किस्में देश भर के किसानों तक पहुंचाई जाएंगी।

Source: Amarujala

Khalsa College of Veterinary and Animal Sciences Signs MoU with CSIR-IHBT for Research

Khalsa College of Veterinary and Animal Sciences (KCVAS), Amritsar has signed a memorandum of Understanding (MoU) with **Council of Scientific and Industrial Research-Institute of Himalayan Bioresource Technology (CSIR-IHBT),** Palampur, Himachal Pradesh for collaborative research, training and academic activities in the area of veterinary sciences and related areas of mutual interest. Dr. Sudesh Yadav, Director, **CSIR-IHBT** and Dr. Harish Verma, Principal, KCVAS signed the document to collaborate in the activities related to veterinary sciences. From KCVAS, Dr. SK Nagpal, MD, Dr. PN Dwivedi Head, Microbiology was present & from **CSIR-IHBT,** Dr Sukhjinder Singh, Coordinator Business Development Unit; Dr Narendra Tirpude, Sr. Scientist; Administrative Officer; and Controller of Finance & Accounts were also present.
Source: Punjabnewsexpress

Tourists throng Palampur's Tulip Garden

The Tulip Garden in Palampur, now in its third year, has become a major attraction for tourist from across the country. It is Himachal Pradesh's first Tulip Garden planted by **CSIR- Institute of Himalayan Bioresource Technology (IHBT),** Palampur. This year, it was thrown open to the public on February 2 and has already experienced a surge in visitors. According to officials, the number of visitors has surpassed 65,000 so far. While last year, it welcomed around 70,000 visitors and it is anticipated that this year's numbers may reach up to one lakh. It will remain open to the public till the first week of March. Tulips are tuberous cut flowers that have huge international and domestic demand. It ranks third in the world's top cut flower trade. The garden was inaugurated in February 2022 and drew nearly 40,000 visitors during the first flowering season. This year, six varieties of tulips, purple flag, pink ardour, escape, ile de france, royal virgin, strong gold, have been grown in the garden and the number of bulbs used is 50,000, as compared to 45,000 last year. Last year, bicolour varieties were used but this year, the institute has used only single colour varieties.
Source: Hindustan Times

ट्यूलिप गार्डन का दीदार करना है तो आइए पालमपुर, मन मोह लेगी 6 किस्मों की 50 हजार फूलों का दृश्य

सीएसआईआर-आईएचबीटी संस्थान पालमपुर में खिले ट्यूलिप फूल कश्मीर का एहसास दिला रहे हैं. इन दिनों बड़ी संख्या में ट्यूलिप गार्डन का दीदार करने पर्यटक पहुंच रहे हैं. यहां 6 किस्मों के 50 हजार ट्यूलिप के फूल लगाए गए हैं. ट्यूलिप गार्डन का जिक्र आते ही सबसे पहले जम्मू-कश्मीर का नाम जेहन में आता है, लेकिन अब आप हिमाचल प्रदेश के पालमपुर में भी ट्यूलिप गार्डन का दीदार कर सकते हैं. यहां सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान पालमपुर में 6 किस्मों के 50000 ट्यूलिप के पौधे लगाए गए हैं. जिसका नजारा बहुत ही अद्भुत है. इस ट्यूलिप गार्डन को देखने के लिए अब देश के कई हिस्सों से पर्यटक देखने आ रहे हैं.
Source: Etvbharat

Empowering Heeng Cultivation in Kargil: A Workshop Organised by CSIR-IHBT, Palampur

The **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT),** Palampur, organized a two-day workshop and training program focused on “Heeng Cultivation in Kargil” as part of the “Unnat Bharat Abhiyan.” Ten forward-thinking farmers from Kargil, UT Ladakh, actively participated in this initiative. Throughout the program, participants gained insights into the potential and opportunities of heeng cultivation in the Kargil region, including its climatic requirements, agricultural techniques, and the management of biotic and abiotic stresses, as well as the quality analysis of oleo-gum resin. Practical demonstrations were conducted covering nursery management, field plantation, and tissue culture techniques. Additionally, attendees were introduced to the Kisan Sabha Mobile app for smart farming and had the chance to explore the heeng germplasm resource center and seed production center within the institute premises.
Source: Himachalheadlines

Students of Floriculture & Landscaping trade of (ITI) Leh, attend a short-term training program

Students Floriculture & Landscaping trade of (ITI) Leh, are attending a short-term training program at the Institute of Himalayan BioResource Technology **IHBT (CSIR)** in Palampur, Himachal Pradesh from 15th-25th March 2024. Thirteen students and a Faculty are currently at IHBT Palampur for the ten-day programme for hands-on training and mentorship by Faculty and experts at **IHBT CSIR**. The training program is designed to cover a wide array of topics, like - cultivation techniques, plant propagation, pest management, and post-harvest handling and includes interactive sessions, field visits, and hands-on practical exercises. The training is part of the ‘Skill Immersion Programme’ of LSDM whereby students of Industrial Training Institutes are being attached for two to six weeks with renowned national institutes for Hands-on training, Industry exposure, Mentorship and technology integration.
Source: **Scoopnews**

SDRC holds awareness on new SFURTI cluster

Sustainable Development Research Centre (SDRC) organised an awareness and motivation programme on March 22 at Bundrock auditorium of Patkai Christian College, Chűmoukedima. An update from SDRC informed that the programme was organised to create awareness about the new Scheme of Fund for Regeneration of Traditional Industries (SFURTI) cluster and motivate stakeholders to actively engage in the development of the Nagaland shiitake mushroom and other food processing cluster, which are currently being implemented by SDRC in collaboration with **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)** as the technical agency and Khadi and Village Industries Commission (KVIC) as the nodal agency.
Source: Easternmirror

CSIR IHBT Palampur organized a workshop on the basics of laboratory animals in preclinical research

In this workshop, the youth researchers will have the opportunity to acquire the skills required for high-quality research. On this occasion, Dr. Om Prakash Sharma, former Chief ICAR-IVRI, Palampur; gave a keynote address on “An Overview of the Use of Laboratory Animals in Medical Research” Dr. Sudesh Kumar Yadav, Director **CSIR-IHBT**

inaugurated the workshop and welcomed all the people present, the work being done by the institute on the above-mentioned subject. Dr. Yadav also highlighted the importance of laboratory animals in today's context. He appealed to the participants to make full use of this opportunity to adopt new technologies, Learn, and build an advanced society. Before this, the organizer of the workshop, Dr. Vikram Patial, gave detailed information about the workshop and said that this workshop was organized by "The National Research Foundation", Department of Science and Technology, India.
Source: Himachalheadlines

Peony flower trials in Palampur cheer farm scientists

The peony flower, known for its vibrant blooms, has long been cultivated in various parts of the globe, primarily for its ornamental value. However, its commercial cultivation in India has remained largely unexplored until recent trials conducted at the **Council of Scientific & Industrial Research (CSIR)-Institute of Himalayan Bioresource Technology (IHBT)'s** floriculture farm here. Led by a team of researchers, the peony trials have been initiated at the **CSIR-IHB,** which is situated in Palampur. The trials have shown promising results, igniting hopes for the cultivation of this lucrative crop among farmers.
Source: Tribuneindia

How Sugar and Growth Signals Trigger Flowering in Saffron Plants

Saffron, the world's most expensive spice, is harvested from the stigmas of the Crocus sativus flower, a plant that has fascinated scientists and farmers alike due to its complex biology and economic value. One of the challenges in saffron cultivation is the plant's inconsistent flowering, which is crucial for stigma production. Not all plants flower equally; smaller corms, the bulb-like storage organs of saffron, often fail to produce flowers, leading to variations in yield. To address this issue, researchers from the **CSIR-Institute of Himalayan Bioresource Technology** have delved into the genetic mechanisms that control the size-dependent flowering in saffron[1). The study focused on apical buds, the part of the plant where flowering initiation takes place. By comparing gene expression profiles in buds from small and large corms, the researchers aimed to uncover the genetic factors that determine whether a plant will enter the flowering stage.
Source: Naturalsciencenews

Empowering Fragrant Crop Cultivation: CSIR-IHBT's Aroma Mission

CSIR-Himalayan Biopathy Technology Institute (CSIR-IHBT) in Palampur, Himachal Pradesh, embarked on a mission to distribute 10,000 plants and 10 kgs of contained ball seeds of lavender rosemary to the ethnic areas of Pangi in Kangra and aspiring district Chamba under **CSIR** Aroma Mission Phase-3. Dr. Sudesh Kumar Yadav, Director of **CSIR-IHBT** Palampur, highlighted the growing international demand for fragrant oils derived from aromatic plants. With India's oil market estimated to reach 239.85 million USD by 2028, fragrant crop farming becomes pivotal, especially in regions where conventional crops face challenges due to wildlife interference. The Aroma Mission

Project aims to bolster the cultivation of fragrant crops, thereby enhancing India's position in the production of essential oils and uplifting farmers' livelihoods. Lavender and rosemary plants were distributed to Pangi Ayrian Farmers Producer Society of District Chamba, alongside ball seeds distributed to Jan Kalyan Sabha Society of Baijnath, District Kangda, Himachal Pradesh.
Source: Himachalheadlines

CSIR-IHBT Hosts World Bioresource Technology Summit on Environment Day

The **CSIR-Institute of Himalayan Bioresource Technology** announced the launch of the World Bioresource Technology Summit on June 5, 2024. This date coincides with Environment Day, a global celebration dedicated to the protection and conservation of the environment. During the welcome address, the Institute's Director, Dr. Sudesh Kumar Yadav, highlighted the significance of World Environment Day and discussed its history. She emphasized the unique bio-wealth of the Himalayas and the visible impacts of pollution and climate change on this region. Dr. Yadav noted the Institute's efforts in environmental conservation through research and various projects aimed at preserving natural resources in the Himalayan area. The chief guest, Prof. Sudesh Yadav from the School of Environmental Sciences at Jawaharlal Nehru University, New Delhi, delivered a lecture on "Sustainability for Life." He stressed that human existence is intrinsically linked to the environment, pointing out that a polluted environment poses a severe threat to life. Prof. Yadav advocated for significant changes in our lifestyles to adopt more environmentally friendly practices.
Source: Himachalheadlines

Over nine lakh tulips to be planted across Capital

Over nine lakh tulips will be planted across Delhi during the flowering season, Raj Niwas officials said on Wednesday. "In a meeting chaired by Lieutenant-Governor V.K. Saxena yesterday [Tuesday), a blueprint was prepared for the sourcing and planting of tulips in the upcoming flowering season. The meeting was attended by the horticulture departments of various civic and government agencies," an official said. The number of tulips planted across Delhi this year is nearly twice more than last year's tally of five lakh tulips, and nearly six times more than the 1.5 lakh tulips planted in 2022. According to officials, about 2.5 lakh tulip bulbs will be sent by the **CSIR-Institute of Himalayan Bioresource Technology**, as well as other centres where the New Delhi Municipal Council (NDMC) had sent the harvested tulip bulbs procured previously for further regeneration. Additionally, the NDMC and Delhi Development Authority (DDA) will procure 3.25 lakh and four lakh tulips from the Netherlands. Other civic agencies will purchase tulips from the NDMC and DDA as per their requirements.
Source: The Hindu

Boosting Sweetness in Stevia Using Gamma Radiation

The perennial herb Stevia rebaudiana Bertoni, native to South America, is renowned for its intense sweetness and potential health benefits. The key compounds responsible for

its sweetness are stevioside and rebaudioside-A, which are significantly sweeter than traditional sugar and have been the focus of research for over a century[2)[3). Recent research conducted by the **Council of Scientific and Industrial Research - Institute of Himalayan Bioresource Technology (CSIR-IHBT)** aimed to enhance these sweetening compounds through induced mutagenesis using gamma-rays[1). In the study, healthy seeds of the 'Madhuguna' variety of Stevia rebaudiana Bertoni were irradiated with ten different doses of gamma rays ranging from 5 to 100 kR. Gamma-rays are a form of ionizing radiation that can induce mutations in the DNA of organisms. The seeds were exposed to these doses in a controlled environment at CCS Haryana Agricultural University in India.
Source: **Naturalsciencenews**

CSIR experts attend conference on Asian medicine in Taiwan

Dr Sudesh Kumar Yadav, Director, **CSIR-Institute of Himalayan Bioresource Technology, (CSIR-IHBT)** Palampur, and Dr Rakesh Kumar, Senior Principal Scientist at CSIR-IHBT, recently participated in the double 10th joint conference of International Association for the Study of Traditional Asian Medicines (IASTAM) and Asian Society for the History of Medicine (ASHM) in Taipei, Taiwan. IASTAM and ASHM are the world's foremost community devoted to advancing the study of Asian medicine. Over 300 scientists, practitioners, historians, experts from 29 countries participated in the conference. Dr Sudesh chaired one of the sessions, while Dr Rakesh delivered an invited panel speech. He highlighted the advancements and potential of **CSIR-IHBT's** research in the field of medicinal plants from Himalayas. He discussed the traditional system of Indian medicine and briefed the audience about the institute's activities, including bio prospection of Himalayan medicinal plants, preparations of standard extracts, in vitro analysis of phyto molecules and bioactivity assays of promising plant fractions though in silico/in vivo/ex vivo
Source: **Tribuneindia**

CSIR-IHBT, Palampur Marks 42nd Foundation Day

The **CSIR-Institute of Himalayan Bioresource Technology (IHBT)** in Palampur celebrated its 42nd Foundation Day. The chief guest, Dr. (Mrs.) N. Kalaiselvi, Honorable Director General of CSIR and Secretary DSIR, Government of India, lauded the institute's accomplishments and extended heartfelt congratulations. In her speech, she underscored the significant expectations from science and technology in the country and the responsibility to meet national and global demands. She emphasized the vast potential in the Himalayas and urged the institute to continuously progress from biodiversity to bio-economy. Her Excellency Anisa K. Mbega, High Commissioner of the United Republic of Tanzania, also graced the event. She praised the institute's achievements and conveyed her best wishes for the Foundation Day, highlighting biodiversity as the cornerstone of life and the potential for collaboration between the two countries in this field.
Source: **Himachalheadlines**

CSIR-IHBT Palampur conducted a two-day training program on agro and processing technologies of aromatic crops

Meghalaya, a hilly state in Northeast India, is witnessing a shift in its agricultural landscape as traditional farming becomes increasingly non-remunerative. Farmers in the region face difficulties due to Meghalaya's mountainous terrain, unpredictable weather, and heavy rainfall, all leading to soil erosion, nutrient depletion, and diminished soil fertility. In response, many are turning to aromatic and industrial crops as a viable and lucrative alternative. A team from **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT),** Palampur, Himachal Pradesh, in collaboration with the Institute of Natural Resources (INR), Shillong, Meghalaya, conducted a two- day training-cum-awareness program on agro and processing technologies of aromatic crops during September 3-4, 2024. The program saw the active participation of more than 40 tribal farmers from Phlangwanbroi village, Mawsynram block in the East Khasi Hills district, and Laskein block in the West Jaintia Hills district. During the program, the farmers received practical training on agronomic practices and post-harvest processing of aromatic crops, especially aromatic grasses, which hold great potential for improving livelihoods in the region.

Source: **Himachalheadlines**

Farmers Embrace Aromatic Crops to Overcome Challenges

Farmers are increasingly facing difficulties such as reduced profits from traditional crops and damage caused by wild and stray animals. To address these issues, many are turning to aromatic and industrial crops as viable alternatives. In this context, **CSIR-IHBT,** Palampur, organized an orientation workshop and seed distribution program under the Aroma Mission III on September 13, 2024. The event saw the participation of 60 farmers from Kangra and Chamba districts. The chief guest, Prof. Shekhar C. Mande, Distinguished Professor at the Bioinformatics Center, Savitribai Phule Pune University, Maharashtra, and former Secretary, DSIR, Govt. of India, and Director General, **CSIR** New Delhi, interacted with the farmers. He highlighted that the Aroma Mission aims to double farmers' incomes by promoting the cultivation of high-value aromatic crops and connecting their products with traders. Prof. Mande commended the collaborative efforts of **CSIR** laboratories in making the mission successful, noting the significant involvement of women farmers.

Source: **Himachalheadlines**

CSIR-IHBT Team Visits Farmers Cultivating Aromatic Marigold in Kangra

A team from the **CSIR-Institute of Himalayan Bioresource Technology (IHBT),** Palampur, Himachal Pradesh, led by Dr. Rakesh Kumar, Senior Principal Scientist, visited the fields of farmers growing aromatic marigold in the villages of Deol, Kandkosari, and Lulani in Baijnath Tehsil, Kangra District, and Bala and Nagri villages in Palampur Tehsil. The visit also included Mr. Chuni Lal, President of Jan Kalyan Sabha Baijnath, and other members. Under the **CSIR** Aroma Mission, the team provided training to farmers on

cultivation techniques, agricultural activities during the crop cycle, and harvesting methods. Along with technical advice, the team also informed farmers about the potential of aromatic oils obtained from aromatic marigold. This crop is proving to be a profitable alternative to traditional farming, which is becoming less beneficial for farmers due to challenges from wild animals, stray cattle, and unpredictable weather. The **CSIR** Aroma Mission, aimed at promoting the cultivation of aromatic crops on barren and fallow land, is now in its third phase. **CSIR-IHBT** Palampur is playing a significant role in this. Dr. Sudesh Kumar Yadav, Director of **CSIR-IHBT**, stated that the institute is assisting farmers through capacity-building and skill development programs under the mission projects.
Source: Himachalheadlines

सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान की टीम ने डॉ. राकेश कुमार, वरिष्ठ प्रधान वैज्ञानिक के नेतृत्व में

सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान (CSIR-IHBT) की टीम ने डॉ. राकेश कुमार, वरिष्ठ प्रधान वैज्ञानिक के नेतृत्व में कांगड़ा जिले के बैजनाथ तहसील के देओल, कंडकोसरी और लुलानी गांवों तथा पालमपुर तहसील के बला और नगरी गांवों में सगंधित गेंदे की खेती कर रहे किसानों के खेतों का दौरा किया। इस दौरे में जन कल्याण सभा बैजनाथ के प्रधान चुनी लाल एवं अन्य सदस्य भी शामिल हुये। **सीएसआईआर** अरोमा मिशन के तहत टीम ने किसानों को खेती की तकनीकों, फसल चक्र के दौरान की जाने वाली कृषि गतिविधियों, और कटाई के तरीकों पर प्रशिक्षण प्रदान किया। तकनीकी सलाह के साथ-साथ टीम ने किसानों को सगंधित गेंदे से प्राप्त होने वाले सगंधित तेलों की संभावनाओं के बारे में भी जानकारी दी। यह फसल जंगली जानवरों और आवारा पशुओं और अनिश्चित मौसम की चुनौतियों से अप्रभावित रहने के कारण पारंपरिक खेती का एक लाभदायक विकल्प साबित हो रही है, जो अब किसानों के लिए कम लाभकारी होती जा रही है।
Source: Aajsamaaj

CSIR-IHBT Celebrates its 83rd Foundation Day with Focus on Agricultural Biodiversity and Environmental Conservation

The Council of Scientific and Industrial Research (CSIR) marked its 83rd Foundation Day with great enthusiasm on 17th October 2024 at the **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)** in Palampur. Established in 1942, **CSIR** is India's largest research organization, known globally for its advancements in various fields of science and technology. The council operates through 37 national laboratories, 39 outreach centers, an innovation complex, and three additional units, contributing significantly to the nation's progress. The Chief Guest of the event, Padma Bhushan Prof. R.S. Paroda, Chairman of TAAS and former Director General of the Indian Council of Agricultural Research, applauded **CSIR** and the institute for their vital role in enhancing the rural economy through impactful research. He delivered an insightful address on "Management of Agricultural Biodiversity of Northern Himalayas," emphasizing the

importance of science in achieving self-reliance in the agricultural sector. Prof. Paroda highlighted how different plants have unique properties that can be harnessed to produce medicines and various other products, stressing the need for sustainable biodiversity conservation. Padma Bhushan and Padma Shri Dr. Anil Joshi, Founder of the Himalayan Environment and Conservation Organization (HESCO), Dehradun, was the special guest at the event.

Source: **Himachalheadlines**

विज्ञान ने कृषि क्षेत्र में बनाया आत्मनिर्भर : प्रो. परोदा

सीएसआईआर-आईएचबीटी संस्थान पालमपुर में 83वां स्थापना दिवस समारोह मनाया गया। समारोह के मुख्य अतिथि पद्म भूषण और भारतीय कृषि अनुसंधान परिषद के टीएएएस चेयरमैन और पूर्व महानिदेशक प्रो. आरएस परोदा रहे। इस दौरान उन्होंने कहा कि विज्ञान ने हमें कृषि क्षेत्र में आत्मनिर्भर बनाया है। प्रत्येक पौधे में विविध गुण होते हैं, जिनका उपयोग कई प्रकार की औषधियों तथा उत्पाद बनाने के लिए किया जाता है। इनका हमारे दैनिक जीवन में अत्यधिक महत्व है। यह देख जैवविविधता का संरक्षण एवं सतत उपयोग होना चाहिए, जिसके लिए हम सब को मिलकर कार्य करना होगा। **सीएसआईआर** को शुभकामनाएं देते हुए उन्होंने संस्थान की शोध गतिविधियों एवं ग्रामीण आर्थिकी के उन्नयन में महत्वपूर्ण भूमिका एवं योगदान के लिए संस्थान की सराहना की। वहीं, हिमालयन पर्यावरण एवं संरक्षण संगठन (हेस्को) देहरादून के संस्थापक और पद्म भूषण एवं पद्मश्री डॉ. अनिल जोशी ने कहा कि पर्यावरण संरक्षण समय की आवश्यकता है। हम अभी भी जल, भूमि, वायु, वन के प्रति जागरूक न हुए तो भावी पीढ़ी के लिए जीवन बहुत कठिन हो जाएगा।

Source: **Amarujala**

CSIR-IHBT hosts workshop on tackling climate change impact on horticulture in the Himalayas

CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT) recently organized a two-day workshop titled “Sustaining Horticultural Production under the Climate Change Scenario in the Himalayas” at Palampur, Himachal Pradesh. The event focused on identifying and addressing the challenges faced by farmers due to climate change. Distinguished guests included Dr. Rajendra S. Paroda (Padma Bhushan), Chairman of TAAS and former Secretary, DARE & DG, ICAR, Dr. P.L. Gautam, former DDG (Crop Science) and former Vice-Chancellor of G.B. Pant University, and Dr. Sudesh Kumar Yadav, Director of **CSIR-IHBT.** The experts emphasized the importance of addressing climate change to boost crop productivity and farmers’ income through high-value crops. Dr. Yadav stressed the need for a multipronged approach involving diverse stakeholders to combat the effects of climate change on agriculture.

Source: **Himachalheadlines**

9th Ayurveda Day Celebrated at CSIR-Institute of Himalayan Bioresource Technology, Palampur

The **CSIR-Institute of Himalayan Bioresource Technology (IHBT)** in Palampur marked the 9th Ayurveda Day with a grand celebration. Since 2016, the Government of India has been observing Ayurveda Day on Dhanvantari Jayanti to promote awareness about Ayurvedic principles, herbs, and lifestyle. This year's theme, "Ayurveda Innovation for Global Health," underscores the growing global significance of Ayurveda. Dr. Vijay Chaudhary, Principal of Government Ayurvedic College, Paprola, delivered an insightful address on the importance of Ayurveda in daily life, particularly emphasizing diet and lifestyle. He highlighted Ayurveda as a robust medical system that is gaining international recognition. In his welcome address, Dr. Sudesh Kumar Yadav, Director of IHBT, extended his greetings for Ayurveda Day. He elaborated on the institute's efforts in documenting, verifying, and authenticating herbs, aligning with the 2024 theme. Dr. Yadav also discussed the institute's initiatives in plant conservation and propagation, calling for increased focus in these areas. The event saw active participation from the institute's staff and students, members of Ayurvedic College, Paprola, and students and teachers from Kendriya Vidyalaya, Palampur.

Source: Himachalheadlines

CSIR-IHBT to host 'One Week, One Theme' program focused on AgriNutribiotech

The **CSIR-Institute of Himalayan Bioresource Technology (IHBT),** Palampur, kickstarted its "One Week, One Theme" (OWOT) event, focusing on the AgriNutribiotech (ANB) theme. This event brings together experts from the agricultural, nutritional, and biotechnological sectors, aiming to foster collaboration, promote innovative technologies, and support the development of aromatic and floriculture crops. Inaugural Ceremony and Guest of Honor The inauguration began with a tree plantation, followed by a formal welcome. Key dignitaries attending included Prof. Shashi Kumar Dhiman, Vice-Chancellor of Himachal Pradesh Technical University (HPTU), as the Chief Guest, alongside Dr. Zabeer Ahmed, Director of **IIIM** Jammu, and Madam Netra Meti, IAS, SDM Palampur, as Guests of Honor. Addressing the audience, Prof. Dhiman stressed the importance of innovation in agricultural biotechnology to uplift rural communities, particularly through value-added crops like chamomile and lavender. Dr. Ahmed and Madam Meti highlighted the role of institutions like **CSIR-IHBT** in driving research that directly benefits farmers and entrepreneurs in the region.

Source: Himachalheadlines

सीएसआईआर में हुआ कर्टेन रेजर कार्यक्रम

सीएसआईआर-आईएचबीटी संस्थान पालमपुर ने इंडिया इंटरनेशनल साइंस फेस्टिवल (आईआईएसएफ) के कर्टेन रेजर कार्यक्रम का आयोजन हुआ। इस कार्यक्रम का मुख्य उद्देश्य विज्ञान को उत्सव के रूप में मनाना है। इस वर्ष आईआईएसएफ 30 नवंबर से तीन दिसंबर तक गुवाहाटी असम में आयोजित किया जाएगा। **सीएसआईआर** में हुई हुए कर्टेन रेजर कार्यक्रम में बतौर मुख्यातिथि कोंपेला एस शास्त्री राष्ट्रीय

सचिव, विज्ञान भारती ने आईआईएसएफ के महत्व और वैज्ञानिक दृष्टिकोण को बढ़ावा देने में इसकी भूमिका पर प्रकाश डाला। उन्होंने देश की समृद्ध वैज्ञानिक विरासत और इसे गति देने की आवश्यकता पर विस्तार से चर्चा की। कार्यक्रम के विशिष्ट अतिथि डॉ. अश्विनी राणा अध्यक्ष, विज्ञान भारती एचपी चैप्टर और एसोसिएट प्रोफेसर एनआईटी हमीरपुर ने विकास में विज्ञान की भूमिका और इसे जनसाधारण के बीच लोकप्रिय बनाने की आवश्यकता पर बल दिया। डॉ. अमित कुमार, वरिष्ठ प्रधान वैज्ञानिक ने कार्यक्रम की जानकारी साझा की और धन्यवाद प्रस्ताव भी प्रस्तुत किया।

Source: Amarujala

Central University of Jammu Students Visits 3-Days Educational Trip to CSIR-IHBT Palampur

In a commendable initiative to provide experiential learning beyond the classroom, 53 students from the Centre for Molecular Biology at the Central University of Jammu, including M.Sc. Biotechnology students and Ph.D. research scholars, embarked on a 3 days educational trip to the **CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)** in Palampur, Himachal Pradesh.. The students were accompanied by faculty members, Dr. Shelly Sehgal and Dr. Swarkar Sharma, on this journey that combined academic learning, interactions beyond classrooms, fun activities with practical exposure to advanced research environments. Upon their arrival at **CSIR-IHBT,** the students were introduced to cutting-edge laboratory facilities and advanced instrumentation. The institute, renowned for its research in Himalayan bioresources, provided them access to state-of-the-art labs, where students gained first-hand knowledge of sophisticated equipment and were briefed on the current research in biotechnology, molecular biology, and bioresource utilization. This interaction provided students with an understanding of the technical intricacies involved in biotechnological research and offered them an invaluable opportunity to witness professional research methodologies.

Source: Takeonedigitalnetwork

Lutyens' Delhi to bloom with over 3 lakh tulips as part of NDMC's floral makeover

Lutyens' Delhi is set to receive a floral makeover as the NDMC plans to plant over 3.25 lakh tulip bulbs as part of a broader effort to enhance the city's beauty, officials said. The initiative, costing ₹2.19 crore, will cover iconic locations such as Shanti Path, Akbar Road, Connaught Place, Parliament House, and 52 roundabouts, with tulips in seven different colours, they added. The New Delhi Municipal Council is procuring a total of 5.5 lakh tulip bulbs from the Netherlands, the officials said. While 3.25 lakh bulbs will be used by the NDMC, the remaining bulbs are being allocated to the Delhi Development Authority and the Municipal Corporation of Delhi for use in their parks and public spaces. Both the DDA and MCD will bear the costs for their shares of the bulbs, they added. The agency also expects to receive flowers from the **CSIR-Institute of Himalayan Bioresource Technology** in Palampur, where more than 50,000 preserved seeds from last year's

plantation cycle were sent for regeneration. Similarly, around 18,000 tulips whose seeds were also preserved are being grown locally at the NDMC's advanced propagation chamber in Lodhi Garden, the officials said.
Source: **Hindustantimes**

फरीदाबाद की क्रीस्टीना ग्रोवर सगंधित फसलों से बढ़ा रही महिलायों की आमदनी

आज समाज-पालमपुर। फरीदाबाद की क्रीस्टीना ग्रोवर, जो 22 साल तक एक मार्केटिंग प्रोफेशनल रही हैं, ने कोविड-19 के बाद अपना करियर बदलने का बड़ा फैसला लिया और हिमाचल प्रदेश में कृषि क्षेत्र में कदम रखा। क्षेत्र में रोजगार की कमी के कारण उन्होंने सगंधित पौधों की खेती में अपना भविष्य देखा। यह कदम न केवल उनके व्यक्तिगत लक्ष्य के साथ मेल खाता था, बल्कि हिमालयी क्षेत्र की बढ़ती कृषि संभावनाओं का भी लाभ उठाने का अवसर था, जहां ज्यादातर लोग कृषि से अपनी आजीविका चलाते हैं। क्रीस्टीना ने **सी.एस.आई.आर.-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान,** पालमपुर के वैज्ञानिकों से मार्गदर्शन लिया और उनकी सहायता से उन्होंने हिमाचल प्रदेश के निचले हिस्सों में पशुओं से प्रभावित और बंजर जमीन पर लेमनग्रास उगाने की शुरुआत की। क्रीस्टीना के प्रोजेक्ट को गति मिली जब तीन स्थानीय किसान बहनों, स्नेह गुप्ता, रमा तंडन, और शारदा परगल ने गांव घुरनुन, तहसील नुरपुर, जिला कांगड़ा, हिमाचल प्रदेश में पांच एकड़ जमीन का योगदान किया। इसके बाद, क्रीस्टीना और उनके साझीदार रवि गुप्ता ने 20 एकड़ भूमि पर खेती शुरू की और आठ महिलाओं को रोजगार दिया, जिससे महिला सशक्तिकरण और ग्रामीण विकास को बढ़ावा मिला। सफलता यह दिखाती है कि पारंपरिक खेती में भी नवाचार के माध्यम से सफलता प्राप्त की जा सकती है **सी.एस.आई.आर.-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान** के सहयोग से क्रीस्टीना को 2.5 लाख उच्च गुणवत्ता वाले लेमनग्रास के पौधे और सगंध तेल निकालने की तकनीकी सहायता प्रदान की गई।

Source: **Aajsamaaj**

Go Back

CSIR-Indian Institute of Chemical Biology (CSIR-IICB)

Skill Development Programs of CSIR-IICB Under CSIR- Integrated Skill Initiative

CSIR-Indian Institute of Chemical Biology (CSIR- IICB), Kolkata, one of the premier biomedical research laboratories in India under **Council of Scientific and Industrial Research (CSIR)** has invited applications for admission to of skill development courses offered at the Centre. **CSIR-IICB** has started the **CSIR**-Integrated Skill Initiative program under the aegis of 'Skill India' mission of Government of India. The courses are aimed at enabling the unskilled Chemical and Biological Science graduates and postgraduates to acquire necessary skills to become highly skilled workforce in India.
Source: **Mathrubhumi**

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Source: **Mathrubhumi**

Endemic dengue may have helped stem severity of early COVID wave in India: study

Can the dengue virus beat the coronavirus and is it why the early wave of the pandemic in 2020 resulted in fewer COVID deaths or severe infections compared to Europe or North America where dengue is not endemic? Research from the **CSIR-Indian Institute of Chemical Biology**, Kolkata hints at these intriguing possibilities following an analysis of antibodies from people infected with dengue and testing them against a kind of coronavirus called murine hepatitis virus (mouse coronavirus). In research settings, this virus — being part of the same family of human coronaviruses — is considered a good surrogate to study the behaviour of the coronavirus strains that infected people during the pandemic. Their results, published in the peer-reviewed Journal of Medical Virology this week, suggest that the antibodies following a dengue infection were able to 'neutralise' these coronavirus.
Source: **The Hindu**

Endemic dengue may have helped stem severity of early COVID wave in India: study

Can the dengue virus beat the coronavirus and is it why the early wave of the pandemic in 2020 resulted in fewer COVID deaths or severe infections compared to Europe or North America where dengue is not endemic? Research from the **CSIR-Indian Institute of Chemical Biology**, Kolkata hints at these intriguing possibilities following an analysis of antibodies from people infected with dengue and testing them against a kind of coronavirus called murine hepatitis virus (mouse coronavirus). In research settings, this virus — being part of the same family of human coronaviruses — is considered a good surrogate to study the behaviour of the coronavirus strains that infected people during the pandemic. Their results, published in the peer-reviewed Journal of Medical Virology this week, suggest that the antibodies following a dengue infection were able to 'neutralise' these coronavirus.

Source: The Hindu

Dr. Jitendra Singh to Inaugurate CSIR HealthCare Theme Conclave tomorrow at Srinagar

Dr. Jitendra Singh, Hon'ble Union Minister of State (Independent Charge) for Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space, Vice President of **CSIR** and Chief Guest of the function, will Inaugurate the **CSIR** HealthCare Theme Conclave at Sher-e-Kashmir International Convention Centre (SKICC), Srinagar, tomorrow. The Inaugural function of this two-day conclave from 16-17 November, 2024, will be held from 11:00 am to 1:00 pm on 16-November-2024. Sh. Satish Sharma, Hon'ble Cabinet Minister, J&K Govt. Minister for Food, Civil Supplies & Consumer Affairs, Transport, Science & Technology, Information Technology, Youth Services & Sports and ARI & Trainings Departments of J&K will be present as Guest of Honour. Dr. N. Kalaiselvi Director General, **CSIR** & Secretary DSIR would also grace the function along with Sh. G.N. Singh, Advisor to Hon'ble Chief Minister, UP & Ex Drug Controller General, Dr. Vinay K. Nandicoori, Director, **CSIR-CCMB,** Dr. D. Srinivasa Reddy, Director, **CSIR-IICT**, Dr Vibha Tandon, Director, **CSIR-IICB** and Dr. Zabeer Ahmed, Director, **CSIR-IIIM.**

Source: BrighterKashmir

Foundation day of CSIR celebrated

The 83rd Foundation Day of the **Council of Scientific and Industrial Research (CSIR)** was celebrated today at the **CSIR-Institute of Microbial Technology (IMTECH),** Sector 39, with the prestigious foundation day lecture delivered by Dr Krishnananda Chattopadhyay, Chief Scientist at the **CSIR-Indian Institute of Chemical Biology (IICB),** Kolkata. The lecture focused on the "Conformational fluctuations of proteins: from test tubes to neurodegenerative diseases" and outlined his lab's approach to use single molecule spectroscopy to investigate folding and aggregation of proteins. The work from his lab is an important milestone in developing the process for diagnostics and therapeutics, which is currently absent for major neurodegenerative diseases. In his

address, he outlined that his lab has been developing and using sensitive fluorescence methods at ensemble and single molecule resolution to address the heterogeneity and toxicity of a number of neurodegenerative disorders like Parkinson's Disease and amyotrophic lateral sclerosis.

Source: **Tribuneindia**

Go Back

CSIR-Indian Institute of Chemical Technology (CSIR-IICT)

Students develop solution for arsenic-free drinking water

A group of Bihar-based students through Navmarg Research and Innovation Private Limited have developed Magnetic Arsenic Removal Technology, a device, that is ready for installation in arsenic-affected regions of the country.The research-based startup is supported by the Kilkari Bihar Bal Bhawan, department of education, Bihar. Currently, it operates from Manipal Academy of Higher Education, where two core members Arpit Kumar and Shambhavi are students. "The novel technology works on the principle of molecular magnetism, repelling the diamagnetic arsenic ions and making them adhere to the device. It was developed in collaboration with research and development labs, the Science Department of Bihar Bal Bhavan Kilkari, the education department, and the Training-cum-Research Center Pranjal of the Bihar government." Other students in this project, include Abhijeet Kumar, a class 12 student in Bihar and Akshat Adarsh, a postgraduate geology student at TERI, New Delhi. "The technology has secured five patents at the national and international levels. Further, Bihar's public health and engineering department, Unicef Bihar, and the ICICI Foundation supported the research studies. The technology's minimal sludge and waste generation and its environment-friendly approach underscore its potential as a cost-effective and eco-conscious solution. This innovative solution has been approved by the department of drinking water and sanitation, Ministry of Jal Shakti, India for use in centrally governed regions and other states. It is validated by CSIR-IICT and CSIR -CGCRI in field trials. The technology will soon be available on the GeM portal for procurement through outsourcing. The pilot trials were conducted in arsenic- affected villages in Bihar, treating 29 lakh litres of water," said Arpit.

Source: **The Times of India**

CSIR-IICT and KAMP: Nurturing the Minds of Tomorrow with their Scientific Excursion for Over 150 Students

A Scientific Excursion at the **CSIR-Indian Institute of Chemical Technology**, Hyderabad, Telangana, was conducted by Knowledge and Awareness Mapping Platform with more than 150 students from Ramadevi Public School, Hyderabad and P M Shri Kendriya Vidyalaya Hakimpet, Hyderabad yesterday. This excursion provided the students with a unique opportunity to delve into the world of science, technology, and innovation. It aimed to instill a passion for scientific exploration and discovery within the

students. Dr. Vatsala Rani (Principal Scientist and **CSIR-Jigyasa** Coordinator, **CSIR-IICT,** Hyderabad) and her Team inspired the students in their scientific pursuits through interactive discussion and lab visits. Within the labs, the students learnt several new things in a practical manner with respect to Anaerobic Gas Lift Reactor Technology, Water Purification Technologies, and Pheromone Technology.
Source: Pib

Empowering Educators: CSIR-IICT, KAMP, and CBSE Collaborate for a Cutting-Edge Teacher Training on Scientific Temperament Enhancement

On the 16th of February, a specialized teacher training program took place at the **CSIR-IICT**, Hyderabad, accommodating over 60 educators from diverse schools. The program focused on the theme 'Enhancing Scientific Temperament through Technological Interventions'. This event marked KAMP's fourth Continuous Professional Development program tailored for educators in collaboration with the CBSE. Participating educators engaged in comprehensive training sessions conducted by subject matter experts, covering various dimensions of science education.
Source: Pib

Awaiting Rs 50k cr makeover, Musi now a deadly cocktail of antibiotics: Study

At a time when the Telangana government is planning a Rs 50,000 crore Thames-like makeover for River Musi, new research shows that the water body is steeped in pharmaceutical contaminants. This includes a hazardous cocktail of commonly used antibiotics (Ciprofloxacin), antidepressants and anti-inflammatory (Naproxen and Diclofenac), antifungal medicines (Fluconazole) etc. It also has a high dosage of caffeine - present in several over-the-counter medicines for headaches and pains - shows the study, which was led by researchers from four premiere institutes, including the **Indian Institute of Chemical Technology (CSIR-IICT)** and Australia-based Commonwealth Scientific and Industrial Research Organisation (CSIRO).
Source: Time of India

Union Minister Dr. Jitendra Singh lays foundation stone of the first-ever "Science Experience Centre" and an exclusive "Biofuel Centre" in the premises of CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad

The Union Minister of State (Independent Charge) Science & Technology, MoS PMO, Personnel, Public grievances, Atomic Energy and Space, Dr. Jitendra Singh today said that the first-ever "Science Experience Centre" would contribute to realizing Prime Minister Narendra Modi's vision of Viksit Bharat and dedicated it to young minds and potential Startups. He was addressing the gathering after laying foundation stone of the first-ever "Science Experience Centre" and an exclusive "Biofuel Centre" in the premises of **CSIR-Indian Institute of Chemical Technology (CSIR-IICT),** Hyderabad, along with Shri G. Kishan Reddy, Union Minister of Tourism, Culture and Development of North Eastern Region (DoNER). The Science Experience Centre has been set up by the **Council of Scientific & Industrial Research (CSIR),** India, a premier national R&D organisation that is among the world's largest publicly funded R&D organisation, and the National Council of Science Museums (NCSM), an autonomous society under the Ministry of Culture, Government of India.

Source: Pib

CSIR-IICT demonstrates tech to turn dry leaves into soil conditioner

CSIR-Indian Institute of Chemical Technology (IICT), which had indigenously developed high rate bio-methanation technology-based Anaerobic Gaslift Reactor (AGR) for the generation of biogas and bio-manure from organic waste, has now successfully demonstrated that it can be re-modelled to convert dry leaves into a 'soil conditioner'. This method, called Accelerated Anaerobic Composting (ACC), ensure that only a bio-manure is generated, not the biogas. "This is a much simpler process, four times cheaper and does not require much expertise. It only needs RCC structure and pits without any big machinery," explained **CSIR-IICT** chief scientist A. Gangagni Rao on Sunday. The ₹7.5-lakh 500-kg capacity ACC 'demonstration' reactor was established in a gated community, Maple Town Villas, at Sun City in Bandlaguda on request of the residents' association and is said to be working well for the past couple of months, generating about 10 tonnes of soil conditioner.

Source: The Hindu

MAUD department in talks with IICT for rejuvenation of lakes

The Municipal Administration department is in talks with **Indian Institute of Chemical Technology (IICT)** for lake rejuvenation measures, besides exploring different technologies for biomass and vermicompost generation from municipal and other wastes. A team of **IICT** members held a meeting with Commissioner and Director Municipal Administration (CDMA) D Divya here on Monday. During the meeting, the **IICT** team briefed the CDMA on different technologies that can be used for lake rejuvenation and other aspects. Lakes were important water sources and they need to be protected and rejuvenated. Towards this, the prime agenda was to ensure flow of treated water into the lakes by setting up STPs and adopting different technologies, Divya said.

Source: Telangana Today

Gurugram University chemistry pupils can intern with IICT as institutes ink pact

The Gurugram University (GU) has signed an MoU with the **Indian Institute of Chemical Technology (IICT),** Hyderabad, run by the **Council of Scientific and Industrial Research (CSIR),** to provide better internship opportunities for the students of chemistry and allied subjects.Gurugram University Vice-Chancellor Dinesh Kumar **IICT** Director Srinivas Reddy signed the MoU on Tuesday. The VC said under the agreement, GU students of chemistry and allied subjects would be able to do internships at **IICT**, Hyderabad. For this, a set of standards (criteria) have been designed by both the institutes.The students would be selected for internship at IICT based on these standards. Vice-Chancellor Dinesh said experts of both institutions would guide students on how to secure a seat for internship at the **IICT**. Students would be trained to get knowledge on advanced research techniques at the IICT, V-C Dinesh added.

Source:Tribuneindia

"CSIR-IICT and BHEL partners to advance clean fuel technology: MoU signed on CO2 to DME"

The **Council of Scientific and Industrial Research-Indian Institute of Chemical Technology (CSIR-IICT)** and Bharat Heavy Electricals Limited (BHEL) Corporate R&D have forged a partnership to develop technology for capturing and converting carbon dioxide (CO2) to Dimethyl Ether (DME) through direct catalytic conversion. This collaboration, under the Department of Science & Technology's initiative on Carbon Capture and Utilisation (CCU), aims to harness innovative technologies to combat carbon emissions and promote sustainable energy solutions, a statement said on Friday. The project, funded by the DST, focuses on utilising captured CO2 to produce DME, a clean fuel that can be blended with LPG. This initiative aligns with the global shift towards cleaner energy sources and contributes to India's efforts to address climate change and ensure energy security.

Source: Uni India

IICT and BHEL collaborate on CO2 conversion for cleaner fuel production

The Indian Institute of Chemical Technology (IICT), under the Council of Scientific & Industrial Research (CSIR), has entered into a memorandum of understanding (MoU) with BHEL to develop indigenous technology for converting CO2 into di-methyl ether (DME). Signed in Hyderabad, this collaboration aims to produce cleaner fuel that can be blended with LPG. The collaboration aligns with the Ministry of Science and Technology's initiative to achieve the country's net-zero emissions goals by deploying carbon capture and utilization (CCU) technologies, particularly in sectors like coal gasification. This endeavor contributes to the broader mitigation objectives outlined in the Paris Agreement on climate change.

Source: Manufacturingtodayindia

India ranks as third largest user of plastics: Shishir Sinha

Professor Shishir Sinha, Director General of the Central Institute of Petrochemicals Engineering and Technology (CIPET) under the Ministry of Chemicals and Fertilizers, Government of India, has stated that India is the third largest user of plastics. In his lecture titled "Plastic Waste Management and An Overview of CIPET," organized by the **CSIR-Indian Institute of Chemical Technology (IICT)** on the occasion of "National Technology Day" here on Friday, he mentioned that India's per capita plastic use is about 11 kg, compared to the global average of 28 kg. Given the indispensable nature of plastic in daily life, its elimination shortly is unlikely. Consequently, he emphasized the importance of understanding the science behind plastic use and promoting the collection, segregation, and recycling of plastic waste.

Source: Uni India

INSA recognises Dr Surya Prakash Singh as INSA Associate Fellow 2024

The Indian National Science Academy (INSA) recognizes the potential of young scientists in the country, aiming to motivate and cultivate their excellence by electing INSA Young

Associates/INSA Associate Fellows. For the year 2024, Dr Surya Prakash Singh from **CSIR-IICT** has been selected as an INSA Associate Fellow. Dr Singh's research group at **CSIR-IICT** has been engaged in translational research, developing a wide variety of molecularly engineered photosensitizers for application in various photonic devices, including Dye-Sensitized Solar Cells, Organic Solar Cells, and Perovskite Solar Cells. His interdisciplinary work has fostered extensive collaboration with organic chemists, material scientists, and device engineers. Notably, Dr Singh has developed neutral, room-temperature stable, non-toxic, and highly fluorescent BODIPY dyes as mitochondria trackers, with the process technology being transferred to TCI, a Japanese company.
Source: **Uni India**

GHMC would explore collaborations in deploying CSIR-IICT technologies in GHMC purview: GHMC Commissioner

Greater Hyderabad Municipal Corporation (GHMC) Commissioner Ronald Rose, on Friday, said collaboration in deploying **CSIR-IICT** Technologies would be explored to mitigate the problems faced under the corporation's purview. Ronald Rose visited **CSIR-IICT** here along with a team of Zonal commissioners and sanitation to explore the opportunities of deploying **CSIR-IICT** technologies to mitigate the problems faced under the GHMC purview. **IICT (Indian Institute of Chemical Technology,** a national-level research center in Hyderabad) Director Dr. D Srinivasa Reddy, welcomed the delegation and Dr D Shailaja, Chief Scientist and Chair BDRM presented the overview, success stories and readily available technologies that can be offered in the areas of conversion of waste to Biogas, accelerated anaerobic composting of waste, Lake remediation, Effluent Treatment plants and Sewage Treatment plants. The Commissioner has agreed to go forward on four aspects of collaboration possibilities which will take shape into engagement mode soon.
Source: **Uni India**

CSIR-IICT scientists identify microalgae as a potential protein supplement

CSIR-Indian Institute of Chemical Technology (IICT) scientists have spotlighted the potential of Chlorella Growth Factor (CGF), a protein-rich extract derived from the microalgae ‘Chlorella sorokiniana’, as an ideal ingredient for a wide range of food and feed applications. Microalgae are “under-exploited crops” and do not compete with traditional food crops for space and resources. The latest research study by noted scientists S. Venkata Mohan and M. Hemalatha showed that CGF, with its rich amino acid content and superior protein quality, presents a promising alternative protein source that can significantly contribute to human and animal diets. The scientists at the institute’s bioengineering and environmental sciences lab asserted that its beneficial properties extend beyond basic nutrition, promoting overall health, immunity, and well-being. Hence, CGF could become a valuable supplement for enhancing dietary intake and supporting sustainable food and feed production systems.
Source: **The Hindu**

CSIR-IICT develops new process to manufacture high-energy rocket propellant

CSIR-Indian Institute of Chemical Technology (IICT), in collaboration with Premier Explosives Ltd., has developed an indigenous process to prepare the key material used in CL-20, a high energy material primarily used as propellant in rockets and missiles.CL-20 or China Lake-20 has better oxidiser-to-fuel ratio than conventional RDX and releases 20% more energy than traditional HMX-based propellants. CL-20 is prepared from the key material generally known as TAIW, using a high concentration of expensive noble metal catalysts. India currently importsTAIW to make CL-20.

Source: thehindu

'High antimicrobial resistance in city sewage'

A recent study by city-based **Indian Institute of Chemical Technology (IICT)** has uncovered alarming levels of antimicrobial resistance (AMR) in sewage in Hyderabad, particularly in winter. The study, which was conducted in Tarnaka, Habsiguda and Lalaguda areas, has highlighted serious health implications. The study, 'Temporal dynamics and persistence of resistance genes to broad-spectrum antibiotics in an urban community', published in Nature, revealed that AMR was being aggravated by human activities. The random consumption of antibiotics and discharge of untreated wastewater into environment were key factors in proliferation of antibiotic resistance genes (ARGs). **IICT** scientists Yamini Javvadi and S Venkata Mohan analysed 123 ARGs and 13 mobile genetic elements in wastewater using quantitative real-time PCR. Over five months from Dec 2021 to April 2022, researchers sampled sewage every month to assess the diversity and temporal dynamics of ARGs. The results showed that approximately 50% of the tested ARG subtypes were consistently detected each month, with a frequency ranging from 52% to 61%.

Source: Times of India

International meet on nanomaterials ends at VIT-AP University

The valedictory session of a three-day international conference on advanced nanomaterials and applications (ICANA-2024), jointly organised by VIT-AP University and the University of Southern Denmark on July 13 (Saturday) brought together renowned researchers and academicians from around the globe to discuss the latest advancements and applications in nanomaterials. The participants included Yogendra Kumar Mishra, professor at the University of Southern Denmark; Shankara Radhakrishnan, professor at the University of Pretoria, South Africa; M.M. Nayak, professor at Indian Institute of Science (IISc), Bengaluru; G.A. Basheed, principal scientist at Council of Scientific and Industrial Research **(CSIR)-National Physical Laboratory,** New Delhi; Ajeet Kaushik, assistant professor at Florida Polytechnic University, the U.S.; Leo Cristobal C. Ambolode II, professor at Mindanao State University, The Philippines; Aditya Sadhanala, professor at IISc, Bengaluru; Debasis Chaira, professor at NIT-Rourkela; L. Giri Babu, senior principal scientist at **CSIR-IICT**-Hyderabad; Tomoya Ohno, professor at Kitami Institute of Technology, Japan; Deepak Kumar Dubey, development engineer II at First Solar Inc, the U.S.; Somnath C. Roy, professor at IIT-Madras; Vijay Raj Singh, associate professor

at Central University of South Bihar, India; N. Lakshminarasimhan, senior principal scientist at **CSIR-CECRI**-Karaikudi; P.K. Khanna, professor at DIAT-Pune; and Pradeep G. Siddheshwar, professor at Christ University-Bengaluru.
Source: The Hindu

Hyderabad: 'One Week One Theme' initiative launched at IICT

A 'One Week One Theme' (OWOT) initiative, envisaged by **Council of Scientific and Industrial Research (CSIR)** to showcase innovative approaches and technological progress achieved in the field of chemicals across nine of its laboratories was launched at **Indian Institute of Chemical Technology (IICT)** on Monday. Director **CSIR-CLRI (Central Leather Research Institute),** Dr KJ Sriram said that the vision of OWOT was to drive towards self reliance by bridging gaps between import of chemicals and their availability in the country in collaboration with the industry partners. R K Agarwal, president, Bulk Drug Manufacturers Association of India (BDMA) said that the time has come for shift of gears from volume to value in manufacturing in which **CSIR**, with its scientific capabilities and infrastructure can play a key role. Directors of **CSIR** laboratories, Dr K. Srinivasan, **CSMCRI**, Dr A Tiwari, **NEIST**, Director **IICT**, Dr D Srinivasa Reddy and other senior scientists were present.
Source: Telanganatoday

IICT scientist named RSC Fellow

Dr. Sundergopal Sridhar, a chief scientist at the **Indian Institute of Chemical Technology (IICT)** in Hyderabad, was named a Fellow of the Royal Society of Chemistry, London. His work in chemical engineering, and water purification was the highlight of his career. Dr. Sridhar has created new methods to recycle solvents, clean gases, and improve fuel cells. He also made special filters to help new businesses, produce healthy drinking water. His work on reverse osmosis technology has made water purification better, especially for removing harmful fluoride. He developed systems that provide high-quality water for medical use and devices that make drinking water from air for people in remote areas. During pandemic, he created multilayered masks and face shields to protect healthcare workers and public.
Source: Deccanchronicle

First STI Conclave on "Traditional Knowledge for Sustainable Livelihoods" organised jointly by ISTIC-UNESCO and CSIR

The International Science, Technology, and Innovation Centre for South-South Cooperation (ISTIC) under the auspices of UNESCO together with the **Council of Scientific and Industrial Research (CSIR)** constituents, **Traditional Knowledge Digital Library Unit (CSIR-TKDL Unit),** New Delhi, and **CSIR-Indian Institute of Chemical Technology (CSIR-IICT),** Hyderabad, India is organizing a STI Conclave on "Traditional Knowledge for Sustainable Livelihoods" on 29-31 July 2024 at New Delhi, India. Dr. N. Kalaiselvi, DG, **CSIR** and Secretary, DSIR inaugurated the first STI Conclave. The Guests of Honour were Dr. D. Srinivasa Reddy, Director, **CSIR- IICT**,

Hyderabad and Dr. Benno Boer, UNESCO Natural Science Specialist in New Delhi. The Plenary Talk was delivered by Prof. Anant Darshan Shankar, Founder and Vice Chancellor of the Trans-Disciplinary University (TDU), Bengaluru.
Source: Pib

CSIR-Indian Institute of Chemical Technology scientist Dr. S. Sridhar, Inducted as a Fellow of Royal Society of Chemistry, London

Dr. Sundergopal Sridhar, a Chemical Engineer and Chief Scientist at **CSIR Indian Institute of Chemical Technology**, Hyderabad, has been admitted as a Fellow of the prestigious Royal Society of Chemistry (FRSC), London, UK with a Member ID: 771115. During his 26 years as a research scientist, Dr. Sridhar has developed and transferred several technologies for chemical & allied industries, besides contributing immensely to societal welfare. Major highlights of his career include the commissioning of several membrane pilot plants based on Electrodialysis, Nanofiltration, Gas Permeation, and Reverse osmosis of capacities varying from 500–5000 L/h for solvent recovery, effluent treatment and gas purification in pharmaceutical, steel, textile, aroma chemicals, and petrochemical industries.
Source: Pib

'स्थायी आजीविका के लिए पारंपरिक ज्ञान' पर पहला विज्ञान प्रौद्योगिकी पहल सम्मेलन (STI Conclave) ISTIC-UNESCO और CSIR द्वारा संयुक्त रूप से आयोजित किया गया

संयुक्त राष्ट्र शैक्षिक, वैज्ञानिक और सांस्कृतिक संगठन (यूनेस्को) के तत्वावधान में दक्षिण-दक्षिण सहयोग के लिए अंतर्राष्ट्रीय विज्ञान, प्रौद्योगिकी और नवाचार केंद्र (इंटरनेशनल साइंस टेक्नोलॉजी इनिशिएटिव सेंटर- आईएसटी आईसी), वैज्ञानिक और औद्योगिक अनुसंधान परिषद (**सीएसआईआर**, नई दिल्ली) के घटकों, **पारंपरिक ज्ञान डिजिटल लाइब्रेरी एकक (सीएसआईआर –टीकेडीएल यूनिट)** तथा **सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ केमिकल टेक्नोलॉजी (सीएसआईआर-आईआईसीटी),** हैदराबाद के साथ मिलकर भारत 29-31 जुलाई 2024 से नई दिल्ली, में "स्थायी आजीविका के लिए पारंपरिक ज्ञान" पर पहला विज्ञान प्रौद्योगिकी पहल सम्मेलन (एसटीआई कॉन्क्लेव) का आयोजन किया जा रहा है। अनुसंधान विभाग (डीएसआईआर) की सचिव डॉ. एन. कलैसेल्वी ने पहले एसटीआई कॉन्क्लेव का उद्घाटन किया।
Source: Insamachar

Harnessing sunlight for Hydrogen green energy

Hydrogen is a clean energy source and its energy density as a fuel is said to be approximately 15 times higher than batteries and three times higher than gasoline. The concept of hydrogen replacing conventional fossil fuels with a low-carbon substitute for energy needs has been a quest for scientists. If Hydrogen generation is considered to be the holy grail of artificial photosynthesis, the concept of utilizing sunlight to produce clean

fuel is considered to be one of the holy grails of chemistry. For achieving this non spontaneous reaction, a highly efficient photocatalytic systems is necessary. Scientists at the **CSIR-Indian Institute of Chemical Technology (IICT)** here claimed to have achieved success in designing a new catalyst for producing 'Green Hydrogen' through a catalyst — 'cobalt(III) based bis-terpyridine' — found to be having wide light-harvesting capabilities. The scientists team, including Malapaka Chandrasekharam, Ujwal Pal, Binitendra Naath Mongal Saddam Sk, Amritanjali Tiwari, Saad Mehmood and Yarasi Soujanya, assert that the new design catalyst could effectively harness sunlight to generate hydrogen unlike conventional hydrogen production systems relying on fossil fuels.

Source: **The Hindu**

Industry expresses interest in CSIR-IICT's Compressed Bio Gas technology

Industry partners, already using the Anaerobic Gas Lift Reactor (AGR) biogas technology of **CSIR-Indian Institute of Chemical Technology (CSIR-IICT)** under licence, have expressed interest in adopting the institute's Compressed Bio Gas (CBG) technology as well. At a round-table conference, titled 'Biogas technology: Resilience towards waste management and energy security', held a few days ago on the campus, the importance of biogas in advancing sustainable waste management and securing energy resources was discussed by various stakeholders. **CSIR-IICT** director D. Srinivas Reddy pointed out that biogas technology offers a promising solution to global concerns of climate change, resource scarcity and the growing need for clean energy. He highlighted the successful commercialisation of AGR technology with 30 installations across the country and reaffirmed the institute's commitment to advancing the commercialisation of CBG technologies, developed in collaboration with BPCL and GAIL-India.

Source: **The Hindu**

Antibiotic-resistant genes surge in winter wastewater

Analysis of domestic wastewater from an Indian urban community reveals that antibiotic-resistant genes in disease-causing bacteria increase in winter1. Domestic wastewater systems receive, harbour and spread antibiotic-resistant bacteria and their resistance genes. This wastewater can then contaminate drinking water, allowing these bacteria to re-infect humans. The results of wastewater analysis can help clinicians select the most effective antibiotics for patients, says a research team at the **CSIR-Indian Institute of Chemical Technology** in Hyderabad. The scientists analysed domestic wastewater samples in an urban community of Hyderabad from December 2021 to April 2022. They targeted 123 genes that resist major classes of antibiotics. Half of these genes were detected across all months. The team, which included S. Venkata Mohan and Yamini Javaadi, found genes that confer resistance to third and fourth generation antibiotics such as beta-lactam, aminoglycoside and tetracycline.

Source: **Nature**

CSIR-IICT & OPCW launch analytical skill development course

The **CSIR-Indian Institute of Chemical Technology (CSIR-IICT)** and the Organisation for the Prohibition of Chemical Weapons (OPCW) have launched the Analytical Skill Development Course (ASDC), a two-week training program for analytical chemists from developing or transitioning economies of OPCW Member States. The inaugural event took place at **CSIR-IICT,** Hyderabad, on Monday. This year's course features 20 participants from countries including Algeria, Botswana, Burkina Faso, Burundi, Costa Rica, Côte d'Ivoire, Ghana, Jordan, Kenya, Malawi, Mauritania, Mauritius, Morocco, the Philippines, Sudan, Suriname, Syria, Togo, Uganda, and Zimbabwe, a statement said. In his inaugural address, Dr. Srinivasa Reddy, Director of **CSIR-IICT**, welcomed the participants, highlighted the significance of the course, and expressed hope that they would make the most of the institute's facilities while engaging with its scientists and researchers. In her opening statement, Chief Guest Indra Mallo, Joint Secretary and Head of the National Authority Chemical Weapons Convention, welcomed the participants and emphasised the role of human intent in the peaceful application of chemistry. She remarked, "We are like links in a chain. We are in this together."
Source: **Uni India**

IICT Scientist Dr. Vineet Aniya honoured with INAE Young Associate 2024

Dr. Vineet Aniya, Senior Scientist at Chemical Engineering and Process Technology (CE& PT) Department, **Indian Institute of Chemical Technology (IICT)** has been selected as an Indian National Academy of Engineering (INAE) Young Associate for the year 2024 in the field of chemical engineering. The honor is a recognition to Dr. Aniya's outstanding contributions in the area of process development, reactor design (batch to continuous), and scale-up for industrially and environmentally sustainable technologies, a press release said. Dr. Aniya's work focuses on the development of biodegradable/compostable polymers from renewable resources, waste plastic depolymerization/upcycling and carbon sequestration. Through his innovative research and development efforts, **IICT** has developed a sustainable process route for creating nanocellulose-reinforced biodegradable and durable plastics that can revolutionize the packaging and manufacturing industry with improved mechanical and barrier properties.
Source: **Telanganatoday**

3-day meet on CO2 conversion to value-added chemicals begins at CSIR-IICT

A three-day national conference on "Catalysis for Energy, Environment & Sustainability (CEES-2024)" commenced at the **CSIR- Indian Institute of Chemical Technology (CSIR-IICT)** here on Wednesday, under the patronage of the Catalysis Society of India (CSI) and CO2 India Network. The meeting, being hosted alongside the "CO2 India Network 3rd Annual Meet", aims to advance research and development in catalysis, focusing on CO2 conversion to value-added chemicals, materials for selective CO2 capture, and fine chemicals. **IICT** director D. Srinivasa Reddy, chief scientist N. Lingaiah, **CSIR-CSMCRI** director S. Kannan, TIFR-Mumbai's Vivek Polshettiwar, HPCL-Mumbai Director (Refineries) Bharathan, IIT Roorkee director Kamal Kishore Pant and others

spoke on the inaugural day. Scientists from other **CSIR** labs, IITs, IISERs, IISc, various universities, and professionals from key industries are participating, said a press release.
Source: The Hindu

Students of government schools in Virudhunagar take part in CSIR Jigyasa programme in Hyderabad

Hundred students of government schools, who showed keen interest in chemistry, and toppers in academics along with 10 teachers from Virudhunagar district participated in a two-day residential training programme conducted under **CSIR** Jigyasa programme in Hyderabad. The training programme was organised by **CSIR-Indian Institute of Chemical Technology, CSIR-National Geophyscial Research Institute and The Centre for Cellular and Molecular Biology** on October 17 and 18. Director of **CSIR-National Geophysical Research Institute** Prakash Kumar spoke about mother earth, studying and preserving natural resources and importance of geophysical and geographical research. He touched upon the role of geophysics in ensuring sustainability and resource management for future generations. On the second day, Director of Indian Institute of Chemical Technology Srinivasa Reddy spoke about the importance of chemistry in daily life.
Source: The Hindu

India International Science Festival 2024 to be held in Guwahati: IICT Director

CSIR-Indian Institute of Chemical Technology (IICT) Director Dr. Srinivasa Reddy announced that the India International Science Festival (IISF) 2024 will be held in Guwahati (Assam). In his welcome address at the celebration of the 9th Ayurveda Day alongside the curtain raiser event of the IISF, here on Tuesday, Dr Srinivasa said the curtain raiser event set the stage for the main event to be held from November 30 to December 3. This festival brings together people from scientific and non-scientific backgrounds to engage with science interactively and make it accessible to all, he said. Since 2016, this day has been observed across India to promote Ayurveda as an integral part of our healthcare system. He said this year's theme is ';Ayurveda for Global Health and Innovation'. He stated, "India must work on acquiring evidence based data to validate the efficacy of Ayurveda practices if it wants global recognition." It is an attempt to bring science to the public in an engaging way; he also emphasised adopting the holistic lifestyle of our ancestors to lead healthier lives.In his address about IISF, Dr. Mandara Deshmukh, Senior Principal Scientist, **CSIR** The **Centre for Cellular and Molecular Biology (CSIR-CCMB**) spoke about the various organisations involved in organising IISF, while Dr. Saibal Das, Senior Principal Scientist, gave an introduction to IISF and the thematic events for this year.
Source: Goachronicle

Dr Y Nayudamma memorial lecture

At the Dr Y. Nayudamma Memorial Lecture, group vice chancellor of BITS, Pilani, Prof V. Ramgopal Rao said India's research must focus on real-world impact, guided by the

needs of society and industry rather than being confined to academic repositories. The lecture was organised by the Telangana Academy of Sciences at the **CSIR-IICT's** Vivekananda Auditorium to honour Dr Y Nayudamma, a chemist who transformed India's leather industry. Born in Guntur, Nayudamma rose to become the director of the **Central Leather Research Institute (CLRI)** in Chennai, where his groundbreaking work not only advanced the industry but also improved the lives of countless tanners. The lecture also brought together scientists, industry experts, and academics, with A.V. Rama Rao, chairman of AVRA Laboratories, as the chief guest along with Prof. Rao. In his lecture, Prof. Rao presented the reality of India's research and development (R&D). "We're third in the world in research output but 40th in innovation," he said, referencing data from the slides in his presentation. "That's where we're lacking. We're publishing papers, but we're not translating that knowledge into something useful."
Source: Deccanchronicle

FDDI Hosts Symposium on Footwear Safety

Experts from the government, industry, and academia discussed innovations and challenges, with a focus on meeting global safety norms, at a symposium on safety footwear and standards at the Footwear Design and Development Institute (FDDI) here on Tuesday. Start-ups working on eco-friendly safety footwear and experts addressing the needs of heavy industries and defence were at the forefront of discussions. Dr Narsimhugari Tej Lohit Reddy, FDDI executive director, provided an overview of safety footwear and pointed to its increasing importance in industrial and personal safety. An important moment at the event was the presentation by Earth Tunes, a start-up focusing on sustainable safety footwear solutions. Company founder Santosh, spoke on his vision for balancing innovation and environmental responsibility. Research inputs came from Dr Aruna, senior principal scientist at **CSIR-IICT,** who spoke on materials research for improved safety footwear design. The symposium also included several interactive elements like poster presentations that allowed students to showcase their ideas on improving safety footwear, while the institute's International Testing Lab demonstrated its quality assurance processes.
Source: Deccanchronicle

CSIR Gives Cutting Edge Tech with Eye on Future

"Science should focus on carbon capture utilisation and pollution control measures. The **CSIR** is trying to come up with smog towers that can capture and manage carbon dioxide. But for a country this big, technology could take some time to make an impact," asked Dr N. Kalaiselvi, director-general of the **Council of Scientific and Industrial Research (CSIR)** said. **CSIR** was also working on the technologies that can improve green mobility, she said. Talking to Deccan Chronicle, Dr Kalaiselvi said, "For instance, we are working on supercapacitors for sustainable aviation fuel. We have converted used cooked oil into a sustainable aviation fuel. This year's Republic Day parade had two aircraft in the flypast fuelled by converted used cooking oil." "We have industry collaborations in Maharashtra and Tamil Nadu to commercialise this technology. As to road transportation, the **CSIR-**

National Chemical Laboratory, Pune, in collaboration with KPIT Technologies recently built a hydrogen fuel cell-powered bus," she explained. Dr Kalaiselvi earlier inaugurated the P.M. Bhargava Auditorium at the **CSIR- Cellular and Molecular Biology (CCMB)** on Monday, named after its founder-director Pushpa Mittra Bhargava. The institute will observe its 37th Foundation Day on November 26. Dr Kalaiselvi was joined by Dr D. Srinivas Reddy and Dr Prakash Kumar, directors of **IICT** and **NGRI** respectively. She congratulated **CCMB** on its work on sickle cell anaemia. In her speech, she spoke extensively on climate change.
Source: Deccanchronicle

Hyderabad: NASI fellowships to two IICT scientists

Dr. S. Venkata Mohan, Department of Energy and Environmental Engineering, and Dr. L. Giribabu, Department of Polymers and Functional Materials, from Hyderabad-based **Indian Institute of Chemical Technology (IICT),** were conferred the Fellowship of The National Academy of Sciences, India (NASI) during NASI annual convention held recently at IISER Bhopal. The Fellowships recognizes for their pioneering contributions to environmental bioengineering, circular bioeconomy and excitonic solar cells particularly dye-sensitized and perovskite solar cells respectively. For over two decades, Dr. Mohan has focused on biotechnologies for bioenergy and resource recovery from waste and wastewater, microbial electrochemical systems, hybrid fermentation, renewable chemicals and fuels, algal-based products, decarbonization technologies and wastewater-based epidemiology. Dr. Giribabu has focused on the development of low-cost, efficient and durable materials particularly sensitizers, redox couples, hole transporting materials, cathode materials for excitonic solar cells. Further, the sensitizers that developed for solar cells have successfully applied for photodynamic therapy of cancer, non-linear optical properties.
Source: Telanganatoday

Biodegradable Option To Single-Use Plastics Unveiled

GreenWorksBio, a biopolymer-based compostable solutions provider, launched a compostable and biodegradable alternative to single-use plastics on Friday here, in collaboration with **CSIR-Indian Institute of Chemical Technology (CSIR-IICT).** Telangana IT Minister D Sridhar Babu launched the product while Dr Jitendra Singh, Minister of State (Independent Charge) for Science and Technology, virtually graced the occasion. Highlighting the State's commitment to foster green innovations, D Sridhar Babu said, "Telangana is proud to host and support initiatives that contribute to a cleaner and healthier future. GreenWorksBio's products offer a vital step forward in our collective fight against plastic pollution." Speaking at the event virtually, Dr Jitendra Singh emphasised the importance of science-driven solutions in addressing environmental challenges. "GreenWorksBio's collaboration with **CSIR-IICT** demonstrates how technology can drive sustainable development. This launch marks a significant milestone in our efforts to eradicate single-use plastics." Developed in partnership with **CSIR-IICT,** these products are made from renewable resources like starch and agricultural waste,

and meet national composability standards, Rishika Reddy, Director of Greenworks Bio, said.
Source: **Bizzbuzz**

Hyd co partners with CSIR to innovate sustainable bioplastics from agricultural waste

Greenworksbio, a Hyderabad-based sustainable packaging solutions provider, has joined hands with the **Council of Scientific and Industrial Research – Indian Institute of Chemical Technology (CSIR-IICT)** to develop sustainable, high-performance bioplastics and their composites using agricultural waste. The strategic collaboration leverages advanced research and innovation to harness nano-cellulose and starch-based compostable plastics derived from renewable resources, including agricultural residues and biomass, to offer eco-friendly alternatives to conventional single use plastics, said the company, which is promoted by the kin of Apollo Hospitals group promoters. Through the joint development of advanced mechano-chemical processing techniques, renewable resources are transformed into reinforced thermoplastic starch (R-TPS) and cellulose-derived composites that exhibit exceptional mechanical strength, superior barrier properties, and enhanced thermal resistance, Greenworksbio managing director Rishika Reddy said.
Source: **Times of India**

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: Pib

CSIR-IICT out-licenses tech for nanocellulose engineered compostable plastics

CSIR-Indian Institute of Chemical Technology (CSIR-IICT) has transferred process technology Nanocellulose Engineered Starch-based granules for compostable plastics as an alternative to single-use synthetic plastic to Hyderabad-based Greenworksbio Products (GBPL). The company, headed by Rishika Reddy, consequently has commercialised the developed technology into 19 products and launched them in collaboration with **CSIR-IICT**. Union Minister of State (Independent Charge) for Science and Technology Jitendra Singh virtually participated in the launch recently. Telangana IT and Industries Minister D. Sridhar Babu, Special Chief Secretary-IT and Industries Jayesh Ranjan, CIPET Director General Shishir Sinha, Apollo Hospitals Group Joint MD Sangita Reddy and WE Hub CEO Sita Pallacholla attended the event, **CSIR-IICT** said in a release. Under the leadership of **CSIR-IICT** Director D. Srinivas Reddy, a team led by Senior Scientist of the Chemical Engineering and Process Technology (CEPT) department Vineet Aniya developed the innovative tech solution that aligns with the Government of India's initiatives that have banned high-littering single-use plastic items such as straws, cutlery and thin packaging under 120 microns. The compostable bioplastics are developed based on green chemistry principles and certified by CIPET, ensuring no harmful chemicals are released during the composting process.

Source: The Hindu

BHU, IICT scientists get patent for low-cost membranes for MFCs

Prof Neelam Srivastava, a faculty member from the department of physics, Mahila Mahavidyalaya, Banaras Hindu University, was awarded a patent for the development of 'Low-cost electrolyte membranes for microbial fuel cell applications, synthesized by complexing starch (wheat, corn and rice) with salt." This breakthrough innovation, carried out in collaboration with S Venkata Mohan, chief scientist at the **CSIR-Indian Institute of Chemical Technology (IICT),** Hyderabad, aims to revolutionise microbial fuel cell (MFC) technology. MFCs are increasingly used for wastewater treatment, including sewage and industrial effluents, as they not only treat pollutants, but also generate electricity during the process. Prof Srivastava said that microbial fuel cells offer a sustainable method for wastewater treatment by harnessing the power of bacteria to degrade organic matter while simultaneously producing electricity. However, a significant barrier to scaling up the technology for real-world applications was the high cost of the membrane material used in these systems. Currently, NAFION membranes are typically employed, but they are expensive and not environmentally friendly. The patented work of Prof Srivastava and her team focuses on replacing the costly NAFION membrane with a much more affordable and environmentally benign alternative. The novel membrane is synthesised by complexing starch from common grains such as wheat, corn and rice with salt, resulting in a low-cost, biodegradable material that can perform effectively in microbial fuel cell applications.

Source: Times of India

KingJims Alkaline Water: Setting New Standards in Hydration and Wellness

Since its establishment in 1999, KingJims Alkaline Water Private Limited has been a trailblazer in the bottled water industry, revolutionizing hydration and wellness. The company made its first significant breakthrough in 2001 when its laboratory finalized the advanced formula and developed its proprietary ionizer machine. This innovation, driven by Swiss scientists, set the stage for a global transformation in the way people approach hydration. KingJims' journey of excellence began with the launch of its first alkaline water in Turkey, Switzerland, Spain, Australia, France, the UK, and Canada. The brand expanded its operations to India in 2018, introducing its renowned alkaline water to Indian consumers and solidifying its position as a global leader in wellness. KingJims ionizers are developed in collaboration with **CSIR-IICT**, Ministry of Science & Technology, Govt. of India, and are specifically tailored for Indian water conditions, lifestyle, and habitat. This collaboration reflects KingJims' focus on innovation and its commitment to meeting local needs with world-class solutions.

Source: Aninews

News in Frames | Greens power

Hyderabad's Dr. B.R. Ambedkar Vegetable Market Yard, or Bowen pally market, has always been a hive of activity. But recently, the buzz was not just about the arrival of a variety of vegetables from near and far. The noise and bustle of customers and tractors moving goods blends with the whirring motors of a waste-to-power plant located within the market. The anaerobic gas lift reactor-based plant was developed by the **CSIR-Indian Institute of Chemical Technology (IICT),** the State Department of Marketing, and Ahuja Engineering Services at a cost of ₹3 crore. It has a capacity to produce up to 800-1,000 units of electricity a day using 10 tonnes of waste. The market produces three or four tonnes of organic waste every day. This waste is first placed on conveyor belts which carry it to shredders. After shredding, the waste is converted into a slurry and is put into large containers or pits. These are high-rate biomethanation technology-based reactors. The reactors start the process of anaerobic digestion, where organic waste is converted into biofuel. The fuel is then put into biogas generators that converts it into electricity. The electricity generated from the plant powers more than 100 street lights, 170 stalls, an administrative building, and the market's water supply network — giving the market committee substantial savings in power bills.

Source: The Hindu

Department of Science and Technology Year End Review 2024

- A demo plant is established at Sihphir Venghlun in Meghalaya for post-harvest processing of ginger/turmeric through technological interventions from **CSIR-CMERI** with direct benefit to 128 Tribals and indirect to all the tribals living in project area.
- **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Bhavnagar, Gujarat converted two running solar salt works into model units and developed high purity solar salt technologies for agarias community of Kutch, Gujarat (Halwad Region). A cluster of 50 small scale salt manufacturers (agarias) is formed

and trained for best practices of salt manufacturing and value addition in their salt works by utilizing bittern (liquor remained after salt harvesting).

- DST has supported two Technology Deployment Test beds in PPP mode to be implemented by IIT Delhi – Thermax Ltd and **CSIR-IICT** Hyderabad – BHEL for setting up pilot-scale demonstrations in Coal Gasification plants for Methanol and DME production with industry partnering as solution provider along with a technology designer (knowledge partner) to deploy CCU in hard-to-abate sector like thermal power.
- DST supported pilot plant project titled "Implementation of a Sustainable Bioenergy-Based Model Effluent Treatment Plant for Desiccated Coconut Industries" was inaugurated at the site of M/s. Vittal Agro Industries, Kasargod on September 02, 2024. The project was executed by **National Institute for Interdisciplinary Science & Technology (NIIST),** Thiruvananthapuram, Kerala in collaboration with M/s. Vittal Agro Industries, Kasargod, the Coconut Development Board (CDB).
  Source: Pib

CSIR JIGYASA EPIC Hackathon 2024

The finale event of the **CSIR** Jigyasa EPIC Hackathon was organised on December 20, 2024 at the **CSIR-IGIB,** South Campus, New Delhi. The event was inaugurated by Dr. Souvik Maiti, Director, **CSIR-IGIB**. Dr. Geethavani Rayasam (Head, **CSIR- HRDG),** Dr. D. Shailaja (Chief Scientist, **CSIR-IICT)** and Mr. Anurag Mishra (Head,Cipla Foundation) were among the dignitaries. The event started with the poster presentation of the EPIC Hackathon students who had completed their Summer internship at **CSIR** laboratories across India under the EPIC program. Total 35 teams and 48 students had participated in two-month summer internship at 18 **CSIR** laboratories across the country and out of which 29 students presented their research projects done during the summer internship. At the end of the event, the winners of the **CSIR** EPIC Hackathon were felicitated with prizes and certificates. Workshop on pitch deck and Innovation & Entrepreneurship were also organized for the participants. The winner of **CSIR** Jigyasa EPIC Hackathon 2024 is Mr. Japteg Singh Bamrah, who received a cash prize of Rs. 50,000 for his project Solar-Mech Engine. He did his internship at **CSIR-IIIM**, Jammu. Mr. Uddhav Gupta& Mr. Udbhav Bandhani were the first runner-ups. They did their internship at **CSIR-CSIO,** Chandigarh and won a cash prize of Rs. 30,000 for their joint submission titled "Drishyamitram- Illuminating walkways for visually challenged". Ms. Shreya Vinod and Mr. Soyal Parijawon the third prize of Rs. 10,000 each for their innovative works.
Source: Pib

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CSIR-IIIM

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM)

Vice President to Inaugurate Mega North India StartUp Expo

Disclosing this at a press conference at the National Media Centre here in Delhi, Dr Jitendra Singh said that under the leadership of Prime Minister Shri Narendra Modi, the government is doing everything to ensure that the StartUp ecosystem in the country is sustainable. The Minister said that from over 350 in 2014 the number of StartUps in India today is more than 1.30 lakh and number of unicorns more than 100, while India is rated at number 3 in the world in its StartUp ecosystem. He said that equal participation of all stakeholders and early industry linkage are necessary to ensure sustainable StartUps. He urged the media community to help spread awareness about the enabling StartUp ecosystem in the country. The Startup Expo under the theme, "Emerging Startup Trend in North India", is being organized jointly by Biotechnology Industry Research Assistance Council (BIRAC), DBT, GoI and **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu, wherein a total of 25 Startup from North India, i.e. from Jammu and Kashmir, Himachal Pradesh, Punjab and Delhi would be showcasing their innovations and products.

Source: Pib

Workshop on value addition of floricultural crops commences at CSIR-IIIM

A five-day workshop on value addition of floricultural crops for skill development and entrepreneurship under CSIR Floriculture Mission started at **CSIR Indian Institute of Integrative Medicine** (Br) Srinagar today. A statement said that the workshop is being conducted under the patronage of Dr Zabeer Ahmed, Director, **CSIR IIIM** Jammu and Er Abdul Rahim, Head, **CSIR IIIM**, Srinagar. It said that 75 participants including women self help groups from districts of Pulwama, Budgam, Srinagar, progressive growers and agri-technocrats are participating in the workshop who will be provided technical skill and training in various facets of the value addition technologies for floricultural crops like dry flower technology, floral resin art, floral printing and flower arrangements.

Source: Greaterkashmir

Jammu CSIR lab finds cannabis plant compound has antibiotic effects | Explained

Cannabis has the potential to make a dent in India's fight against the escalating threat of antibiotic resistance. Scientists at **CSIR-Indian Institute of Integrative Medicine (IIIM),** Jammu, have found that phytocannabinoids, a class of compounds found in the cannabis

plant, possess some hitherto unexplored antibiotic properties. Antimicrobial resistance (AMR) is a major health concern worldwide. It refers to when bacteria, viruses, fungi, and parasites no longer respond to medicines used to treat them.
Source: **The Hindu**

CSIR Floriculture Mission workshop concludes

A five day workshop on 'Value Addition of Floricultural Crops for Skill Development and Entrepreneurship' under CSIR Floriculture Mission concluded at **CSIR-IIIM,** Branch Srinagar under the patronage of Dr Zabeer Ahmed, Director, **CSIR-IIIM** and Er. Abdul Rahim, Head **CSIR-IIIM** Srinagar. A statement said that 75 participants from self help groups of JKRLM, floriculture technocrats, and aspiring entrepreneurs were imparted hands-on training on various aspects of value addition of flowers like Dry Floral Technology, Floral Arrangements like bouquets, box bouquet making and table arrangements, Floral Resin Art, Flower Pressing, Floral Jewellery Making and Flower Press Printing.
Source: **Greaterkashmir**

CSIR-IIIM Jammu concludes workshop on science communication, research writing

The seven-day workshop on 'Latest Trends in Scientific, Medical, and Regulatory Writings: Upscaling Skills in Science Communication and Bridging the Gap between Academia And Industry' concluded at **CSIR-Indian Institute of Integrative Medicine** Jammu. Sponsored by SERB under the Accelerate Vigyan Scheme, the workshop aimed to encourage high-end scientific research and enhance skills in scientific document preparation, fostering connections between industry and academia.
Source: **Risingkashmir**

CSIR launches tech-driven initiative to improve productivity, farmers' income

The **Council of Scientific and Industrial Research (CSIR)** has launched a unique mission to develop region-specific smart agro-technologies for paddy in south India, besides for other crops, aiming to improve soil health and productivity and thereby enhance the farmers' income, a senior scientist said. This endeavour will help the Central government to introduce the use of automation, sensors, drones, and Artificial Intelligence gadgets for agriculture in the future. "This is one of the first of the mission mode projects that have been conceived and implemented on the ground," he said. A team of scientists and technologists from **CSIR Fourth Paradigm Institute**, Bengaluru, **CSIR-National Aerospace Laboratories, CSIR-Indian Institute of Integrative Medicine Jammu, and CSIR-Central Mechanical Engineering Research Institute,** Ludhiana, identified the paddy fields of farmers at Chengalam, Thiruvarppu panchayat and Muleppadam Panchayat in Kottayam, Kerala, Senbagaraman Pudur and Navalkadu in Nagercoil, Tamil Nadu, and Hosapete in Karnataka for the mission.
Source: **Deccanherald**

Jammu and Kashmir's Apple, Saffron to Benefit from CSIR's Agro-tech

The **Council of Scientific and Industrial Research (CSIR) has** initiated a mission to boost farmers' income in Jammu and Kashmir by employing precision agriculture techniques for specific crops. The project involves utilizing IoT-based sensors and drone-based imaging for real-time data on soil and crop health. Excelsior reported that Apple, Saffron, Paddy, and Gerbera are the focus crops. The **CSIR-Indian Institute of Integrative Medicine (IIIM)** Jammu will oversee activities. Advanced technologies such as soil Optix and UAV-based multispectral imaging will be used to optimize mineral nutrition, irrigation, and pest management.

Source: **Kashmirlife**

7-day program on 'Value Addition of Medicinal & Aromatic Plants' concludes at JU

The seven-day skill development programme on "Value Addition of Medicinal and Aromatic Plants for health security and entrepreneurial opportunity" concluded today at University of Jammu (JU). The programme was organized by Regional cum Facilitation Centre, Northern Region-II, National Medicinal Plants Board, Union Ministry of AYUSH under the aegis of Sher-e-Kashmir University of Agricultural Sciences and Technology-Kashmir in collaboration with Department of Botany, University of Jammu. During this workshop, the eminent resource persons from SKUAST-J, SKUAST-K, Central University of Jammu, Krishi Vigyan Kendra (Jammu and Reasi), Horticulture and Handicrafts Department (Kathua), Regional Ayurveda Research Institute (Jammu), **CSIR-IIIM** (Jammu), JK Entrepreneurship Development Institute and State/UT Medicinal Plants Board (Jammu) shared their expertise with the participants.

The programme motivated stakeholders to work towards setting up small entrepreneurial set ups and become job providers rather than job seekers.

Source: **Dailyexcelsior**

CSIR-IIIM distributes QPM under Floriculture Mission

CSIR-IIIM Jammu under **CSIR** Floriculture Mission organised a workshop on production and crop management of floricultural crops and QPM distribution programme at KVK, Samba under the able guidance of Dr Zabeer Ahmed, Director **CSIR-IIIM,** Jammu. A statement that around 100 participants were imparted hands-on training of scientific cultivation and crop management of floricultural crops and high-quality seed material of marigold was also distributed among the participating farmers.

Source: **Greaterkashmir**

CSIR-IIIM Jammu celebrates Republic Day with scientific achievements

CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu, marked the 75th Republic Day with fervour, patriotism and a sense of national pride. Dr Zabeer Ahmed, Director of **IIIM**, hoisted the National Tricolour and presided over the ceremonial march past by the Security personnel of **CSIR-IIIM,** Jammu, and the student contingent of Regional Research Laboratory High School. In his address to the Scientific, Technical, and Administrative staff, including the staff and students of RRL High School, Dr Zabeer not

only emphasized the institute's significant contributions to scientific research and innovation but also highlighted its societal impact through projects like 'Floriculture Mission' and 'Aroma Mission' benefiting farmers, the **CSIR** said in a press release.
Source: **Risingkashmir**

Dr Jitendra Singh distributes quality planting material at Kissan Sammelan organised by CSIR IIIM

CSIR-Indian Institute of Integrative Medicine, Jammu on Sunday organised a Kisan Sammelan under **Council of Scientific and Industrial Research (CSIR)** Aroma Mission-III at Hiranagar, Kathua. Union Minister of State (MoS) Dr. Jitendra Singh, holding independent charge of Science and Technology, MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space and Vice President CSIR was Chief Guest at the occasion. DDC Chairman Kathua Mahan Singh, Vice Chairman DDC Kathua Raghunandan Singh, DDC member Karan Attri and Director **CSIR IIIM** Jammu Dr Zabeer Ahmed were among the prominent personalities present at the occasion.
Source: **Greaterkashmir**

Republic Day: ISRO, CSIR tableaux showcase India's science & tech advancements

In the **Council of Scientific and Industrial Research (CSIR)** tableau, the purple revolution in the lavender fields of Bhaderwah, Jammu and Kashmir, was displayed. This revolutionary movement highlights India's scientific advancements and the hard work of the farmers in Bhaderwah and nearby regions who have become successful entrepreneurs in recent years, according to a senior **CSIR** official. The tableau highlighted the story of the development of a superior variety of lavender at the **CSIR-Indian Institute of Integrative Medicine** in Jammu. It showcased the cultivation of lavender and the process of extracting essential oils, perfumes, and incense sticks. Union Minister of Science and Technology, Jitendra Singh, frequently refers to the purple revolution as a prime example of taking lavender from the laboratory to the market and fostering a new culture of agricultural startups in India.
Source: **economictimes**

Jammu and Kashmir Is Emerging as Agri-startup Hub: Jitendra Singh

Union Minister Jitendra Singh, while highlighting that Jammu and Kashmir is rapidly emerging as an agricultural startup hub, urged local youth to become part of this ecosystem. Addressing a Kisan Sammelan by **CSIR-IIIM** at Hiranagar, he emphasised the critical contribution of Himalayan States, particularly Jammu and Kashmir, in pioneering the 'Purple Revolution'. Jitendra Singh shared the success story of lavender farming in the Jammu region, noting that over three thousand youth are now engaged in this mission, experiencing self-employment opportunities with significant earnings. He debunked the notion that only IIT graduates and IT professionals are eligible for startups, stating that the mindset has changed, and Jammu and Kashmir are rapidly becoming an agricultural startup hub.
Source: **Bwdisrupt**

6-month high-end training prog on cGMP inaugurated at IIIM

IIIM-BioNEST Bioincubation Centre and Quality Management & Instrumentation (QMI) Division of **CSIR-Indian Institute of Integrative Medicine**, Jammu jointly organized six-month high-end training program on operation of cGMP facility for phyto pharmaceutical drugs manufacturing. The training program on "cGMP Phytopharmaceutical Drug Development & as inaugurated by Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Jammu at the conference hall of the institute here today which was attended by BOG members of **IIIM-TBI,** faculty members and research scholars of **CSIR-IIIM.** Dr Zabeer Ahmed, Director, **IIIM**, while addressing on the occasion, dealt upon the mandate of **CSIR- IIIM** and threw light on the cGMP facility and discussed the initiatives of **CSIR-IIIM** in imparting the skill training programs offered by the institute. He added that the six months training program under the cGMP facility will upgrade the skills of the students and make them skilled for Pharma industries. He further discussed the opportunities in the cGMP Herbal Plant Manufacturing Industry and explained how the training will benefit them in their professional lives. On this occasion, the dignitaries present released the training manual.
Source: Rising Kashmir

Scientists at IIIM labs aim new skies

As the tableau of **Council of Scientific and Industrial Research (CSIR)** J&K moved in Republic Day Parade-2024 at the National Capital, the country came to know about the purple revolution ushered through lavender cultivation in the Union Territory. The tableau also highlighted agro-technical development and appealed farmers to progress with **CSIR** initiatives as it was very easy to cultivate lavender which yields good returns even on small investments. The all women **CSIR** tableau showcased achievements under government's initiative of scientific development.
Source: Dailyexcelsior

CSIR -IIIM to organise international Ethnopharmacology conference

CSIR-Indian Institute of Integrative Medicine Jammu and Society of Ethnopharmacology (SFE), Kolkata would be organizing an international conference under the theme "Ethnopharmacology in Development of Phytopharmaceutical Drugs" from 16 th to 18 th February, 2024. While talking to the media persons during the curtain raiser event of this Conference held here today, Dr. Zabeer Ahmed, Director, **CSIR-IIIM** and Organising Chairman informed that Dr. Jitendra Singh, Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space and Vice President **CSIR** has been invited to inaugurate the Conference. Padma Prof. Vinod K Singh, Chair Professor, Department of Chemistry, IIT Kanpur, Chairman, **CSIR-RAB** and Mentor of **CSIR-IIIM** from amongst **CSIR** Society, Vd. Rajesh Kotecha, Secretary, Ministry of AYUSH, GoI, Shekhar Dutt and Dr. CP Thakur (Both former Governors of Chhattisgarh and Advisors SFE) besides many distinguished Scientists, technologists, policy makers, industry people, academicians, clinicians, researchers, students from all over India and abroad are expected to participate.
Source: Risingkashmir

International Conference on Traditional Medicines at IIIM from Feb 16

An international conference will be jointly organised by **CSIR-Indian Institute of Integrative Medicine Jammu (IIIM**) and Society of Ethnopharmacology (SFE), Kolkata from February 16 to 18, 2024 on the theme 'Ethnopharmacology in Development of Phytopharmaceutical Drugs.' Dr. Zabeer Ahmed, Director **CSIR-IIIM** and Organising Chairman of the Conference informed that Dr. Jitendra Singh, Union MoS (Independent Charge) Science & Technology; MoS PMO, Atomic Energy and Space and Vice President **CSIR** has consented to be the chief guest at inaugural function. Padma Shri Prof. Vinod K Singh, Chair Professor, Department of Chemistry, IIT Kanpur, Chairman, **CSIR**-RAB and Mentor of CSIR-IIIM from amongst **CSIR** Society, Dr. N Kalaiselvi, Director General **CSIR** & Secretary to Govt of India, DSIR will be guests of honour.
Source: Dailyexcelsior

Dr Jitendra hails CSIR IIIM Jammu's decades-long contribution to society

Dr Jitendra Singh, Union Minister of State (Independent Charge) for Science & Technology, MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space, on Friday highlighted the historical significance of **CSIR Indian Institute of Integrative Medicine (IIIM)** Jammu and its contributions to society and pioneering research conducted over seven decades. He praised the institute's efforts in utilizing biodiversity for societal good and industrial development, particularly through mission programs like **CSIR** Phyto-pharma Mission, **CSIR** Aroma Mission, and **CSIR** Floriculture Mission.
Source: Risingkashmir

Int'l conference at CSIR-IIIM highlights efficacy, safety of plant-based medicines

The inaugural International Conference on Traditional Medicine and Phytopharmaceuticals and the 11th International Congress of the Society for Ethnopharmacology concluded on Sunday at **CSIR-IIIM** here. The event, jointly organized by CSIR-Indian Institute of Integrative Medicine, Jammu, and the Society for Ethnopharmacology, India (Jammu Chapter), provided a platform for extensive discussions and collaborations on cutting-edge research in traditional medicines and phytopharmaceuticals. The conference, inaugurated on February 16 by Dr Jitendra Singh, Union Minister of State (Independent Charge), Ministry of Science and Technology and Vice President, **CSIR,** witnessed the participation of distinguished scientists, technologists, policymakers, industrialists, academicians, clinicians, and researchers from India and abroad, including the USA, Malaysia, Bangladesh, the United Kingdom, Australia, Italy, and Ghana.
Source: Risingkashmir

CSIR-IIIM Aroma Mission has empowered farmers for sustainable future: Dr Jitendra

Jitendra Singh, Union Minister of State (Independent Charge) for Science & Technology, and Minister of State for PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space and Vice President, **CSIR**, on Sunday inaugurated an awareness, training and lavender quality planting material (QPM) distribution programme here. The programme is being held under the **Council of Scientific and Industrial Research–Indian Institute**

of Integrative Medicine (CSIR–IIIM) Aroma Mission at Basohli. Speaking on the occasion, Dr Jitendra, who was the chief guest, said, “The agri-startup from the region is the outcome of **CSIR-IIIM** activities under Aroma Mission which now takes root in Basohli thus empowering the farmers for a sustainable future.” Appreciating the efforts of **CSIR-IIIM** achievement under the Aroma Mission, the minister said the lavender cultivation now has been spread to Himachal Pradesh, Uttarakhand and other north-eastern states. “Such initiatives not only promote sustainable farming practices but also create new income opportunities for the community,” he said.
Source: **Rising Kashmir**

International Conference at CSIR-IIIM enlightens scientists on Traditional & Phytopharmaceutical drugs

CSIR-Indian Institute of Integrative Medicine (IIIM) is a premier research institution, under the aegis of **Council of Scientific and Industrial Research (CSIR),** Union Ministry of Science & Technology, located in Jammu with its Branch Lab in Srinagar and five experimental field stations located at different geo-climatic zones across J&K and Ladakh Union Territories. Since its establishment in 1941, this organization has made a huge impact by contributing more than Rs. 4000 crore to Indian economy by conducting research on various crops like Mint, Hops, Pyrethrum, Artemisia Annua, Lavender and Rose. In order to harness the potential of natural resources of J&K for prosperity of farmers, **CSIR-IIIM** has undertaken various mega research projects like J&K Aroma Arogya Gram (JAAG), **CSIR** Aroma and Floriculture Missions.
Source: **Dailyexcelsior**

Three-day symposium on Smart Technologies in Agriculture begins at CSIR-IIIM

As soft initiative under **CSIR** Mission on Region Specific Smart Agro-technologies for enhancing Soil and Plant Health, the **CSIR-Indian Institute of Integrative Medicine** organised a three-day symposium on the theme “Translating Technology into Practice: The Smart Know-Hows of Soil and Crop Management” at its Branch Lab. here on Monday. Dr Zabeer Ahmed, Director **CSIR IIIM** Jammu, the chief guest inaugurated this three-day event in presence of Prof Raihana Habib Kanth, Dean Faculty of Agriculture, SKUAST, guest of honour, subject matter specialists and scientists of **CSIR-IIIM** and SKUAST Kashmir. About 70 participants including research scholars, agricultural engineers, agricultural and horticultural technocrats are registered in the Symposium.
Source: **Rising Kashmir**

“Jammu and Kashmir born "Aroma Mission" will be among the torchbearers of "Viksit Bharat", said Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh in Jammu today

Dr Jitendra Singh said, J&K has also become a role model for the rest of India, which was exemplified by the depiction of lavender farms of Bhaderwah town of district Doda, through a tableau on Kartavya Path in the national capital on the occasion of the Republic Day. He said the youth of J&K associated with the Aroma StartUps ecosystem have emerged as brand ambassadors of Purple Revolution across the country. The Union Minister was speaking after chairing the first-of-its-kind meeting with PRIs, including

members from DDCs. The meeting, aimed at fostering connect with the society for StartUp promotion in the region, was held at **CSIR-Indian Institute of Integrative Medicine,** Jammu today.
Source: Pib

National Science Day: Dr Jitendra hails CSIR-IIIM's efforts in fostering scientific inquiry, innovation

The **CSIR-Indian Institute of Integrative Medicine (IIIM),** Jammu on Wednesday celebrated National Science Day in memory of the birth anniversary of Nobel Laureate Sir C. V. Raman. The event, graced by eminent scientists, academicians, innovators, startups, researchers, and students, aimed to foster scientific inquiry and innovation. More than 350 students from various academic institutions in the region participated, igniting curiosity and emphasizing the pivotal role of science in societal development.
Source: Rising Kashmir

CSIR-IIIM Srinagar Branch kick starts Training workshop on Advances Techniques in Natural Products and Medicinal Chemistry

CSIR-Indian Institute of Integrative Medicine Srinagar is hosting a Three-Days Hands on Training in Natural Products and Medicinal Chemistry under CSIR-Integrated Skill Initiatives. The training program was inaugurated by Dr. Zabeer Ahmed, Director **CSIR-IIIM** Jammu today. Participants from different institutions have been selected to undergo training in different facets of Natural Products and Medicinal Chemistry. During the workshop, participants will delve into various techniques involved in the isolation and purification of natural products. These techniques include column chromatography, thin-layer chromatography (TLC), and flash chromatography.
Source: Brighterkashmir

IIIM celebrates 'Purple Revolution' with farmers

CSIR-Indian Institute of Integrative Medicine, Jammu celebrated the success of lavender cultivation, "Purple Revolution" with farmers in an impressive function held at Sports Stadium here today. Dr. Jitendra Singh, Union Minister of State and Vice President, **CSIR** was the chief guest of the event, and inaugurated a Startup Exhibition in presence of Dhanater Singh Kotwal, DDC Chairman Doda, Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Harvinder Singh, IAS Deputy Commissioner, Doda and Sangeeta Rani Bhagat, Vice Chairperson, DDC Doda. The purpose of the event was to acknowledge and promote sustainable agriculture, particularly in the context of 'Lavender Cultivation'. The occasion highlighted the positive impact of lavender cultivation on the local economy and agricultural landscape, symbolizing a significant step forward for farmers in Doda and nearby regions.
Source: Risingkashmir

Skill Development Program on "Drug Discovery & Development" Concludes at CSIR-IIIM Jammu

CSIR- Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, successfully concluded its Three-day skill development training program which saw participation of

more than 20 participants from different Universities of J&K region. The valedictory function was chaired by Dr Zabeer Ahmed, Director **CSIR-IIIM** Jammu who in his address underscored the need of obtaining S&T skills as he termed Science-A way of thinking and said that in order to achieve SDG goals and success towards Viksit Bharat,the role of Science has to be pivotal. While addressing the participants, Dr Ahmed fostered scientific temperament among participants and encouraged them to pursue research as their career, emphasizing the importance of science & technology for future.
Source: Kashmirconvener

Director IIIM Inaugurates Skill Development on OECD Principles in GLP

A three day Skill Development Programme on OECD Principles in GLP was inaugurated at **CSIR-Indian Institute of Integrative Medicine** Jammu under CSIR-Integrated Skill Initiatives. Dr Zabeer Ahmed, Director **CSIR-IIIM** was the chief guest at the event while Dr SG Ramachandra, Chief Research Scientist, IISC Bangalore and Dr PV Mohanan, Scientist G & Head, Toxicology SCTIMST Kerala were the distinguished key resource persons. Dr Zabeer Ahmed during his inaugural address endorsed the critical need of implementing the GLP not only in non-clinical studies but also in the exploratory and basic research which would have a strong bearing for the global acceptance of the data ensuring the reproducibility and uniformity. He further said that the event is a significant step towards enhancing the quality, reliability, and integrity of laboratory research practices, aligning with global standards set by the Organisation for Economic Co-operation and Development (OECD).
Source: Jammulinksnews

Training program on 'Tissue Culture Techniques' begins at CSIR-IIIM

A three days skill development training programme on Tissue Culture Techniques commenced at **CSIR-Indian Institute of Integrative Medicine** here today. About **30** participants from diverse backgrounds of Biotechnology, Life sciences, Agribusiness management and agriculture enrolled for the workshop, which was inaugurated by Dr Zabeer Ahmed, Director **CSIR-IIIM** Jammu. In his inaugural address, Dr Zabeer said that tissue culture techniques have emerged as a pivotal aspect of modern biotechnology, playing a crucial role in crop improvement, pharmaceuticals, and horticulture. Recognizing the significance of this discipline in the contemporary scientific landscape, IIIM, following the NEP guidelines has taken the initiative to introduce a specialized Skill Development programme aimed at equipping individuals with the necessary skills and knowledge in tissue culture methodologies, he said.
Source: Dailyexcelsior

CSIR-IIIM Jammu signs MoUs with NHAI, Anphar Labs, JK Aroma, HEOPCL

CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu, on Saturday forged partnerships with National Highways Authority of India (NHAI), Anphar Laboratories (P) Limited, JK Aroma Farmers Producer Cooperative Limited, and Himalayan Essential Oils Producer Company Limited (HEOPCL) by signing Memoranda of Understanding (MOUs) in a ceremony graced by Dr Jitendra Singh, Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space and Vice President **CSIR.** Dr Jitendra Singh commended IIIM's

collaborative efforts with industries and agri-entrepreneurs, stressing the significance of such partnerships in driving innovation and economic growth in the region. He hailed the exchange of MOUs as a catalyst for mutually beneficial partnerships that foster innovation, economic development, and societal impact.
Source: Risingkashmir

Lavender revolution in Himachal Pradesh, Northeast to boost entrepreneurship: Govt

The planting of lavender, also known as the 'purple revolution' has spread to states, such as Himachal Pradesh, Nagaland, and Meghalaya to have put these hill states on the world map of progressive farming, Union Minister Jitendra Singh said on Saturday. Singh lauded agri startups-turned-agri entrepreneurs for planting lavender on both sides of a national highway and on its divider over an area of more than 1 lakh sq km. Meanwhile, **CSIR-Indian Institute of Integrative Medicine,** Jammu, on Saturday signed Memoranda of Understanding (MoUs) with the National Highways Authority of India (NHAI), Anphar Laboratories (P) Ltd, JK Aroma Farmers Producer Cooperative Ltd, and Himalayan Essential Oils Producer Company Ltd (HEOPCL).
Source: Republicworld

Job oriented skill development programmes inaugurated at IIIM

As part of **CSIR** Integrated Skill Initiatives, two job-oriented skill development programmes under the theme "Industrial Microbiology" and "Cloning and Protein Expression" commenced at **CSIR-Indian Institute of Integrative Medicine,** here today. Fifty participants drawn from all over India, including states of Uttarakhand, Uttar Pradesh, Himachal Pradesh, Punjab, Gujarat, Bihar, Goa, Ladakh and UT of Jammu and Kashmir participated in these programmes. Prof Kuldeep Krishan Sharma (Vice Chancellor, Himalayan University, Itanagar, Arunachal Pradesh) was the chief guest at the inaugural event. While addressing the participants on the occasion, Prof Sharma said that such types of hands-on training for youngsters would indeed have a significant impact on their career and job opportunities.
Source: Dailyexcelsior

CSIR-IIIM Jammu concludes skilling programs on industrial microbiology, cloning

The **CSIR-Indian Institute of Integrative Medicine,** Jammu successfully concluded two skilling programs "Industrial Microbiology" and "Cloning and Protein Expression", each spanning three days, with participation from across India. Dr Zabeer Ahmed, Director of **CSIR-IIIM,** graced the valedictory ceremony as the chief guest, extending congratulations to the participants for their successful completion of the training programs. He commended their dedication and emphasized the significance of such workshops in providing practical, job-oriented training while fostering scientific curiosity among participants. Dr Ahmed highlighted the role of these workshops in promoting research careers among young students, aligning with the objectives of Viksit Bharat.
Source: Risingkashmir

Purple Revolution: IIIM Jammu, local artisans promote lavender cultivation in Poonch for sustainable agriculture

In a pioneering effort to promote sustainable agriculture and economic growth, the **Indian Institute of Integrated Medicine (IIIM)** Jammu, in collaboration with local sericulturists and esteemed artisan Dr Rubia Bukhari, organized an enlightening Awareness Programme on Lavender Cultivation. The event saw the distribution of quality planting material of lavender among farmers in Mendhar Poonch. The initiative garnered an overwhelming response from the community, with around 130-150 enthusiastic farmers participating. These individuals showed keen interest in venturing into lavender cultivation, recognizing its potential to revolutionize the agricultural landscape of the region. Over 1.5 lakh units of quality planting material of lavender were distributed among the farmers by Dr Siya Ram Meena, Senior Technical Officer at **IIIM** Jammu, Dr Rubia Bukhari, Dr Wajid Shah, Mr Akash Verma, Technical Assistant at **IIIM** Jammu, and Mr Vinod Phogat, Project Assistant at IIIM Jammu.
Source: Risingkashmir

KU's initiative on promoting entrepreneurship, building start-ups reaches North Kashmir

To unlock the potential of medicinal and aromatic plants in North Kashmir, the Department of Botany, North Campus, Kashmir University (KU), organised a two-day capacity building programme here. Titled, "Cultivation, Processing and Marketing of High Value Medicinal and Aromatic Plants concluded on March 23 at the Campus in Delina, Baramulla, an official statement issued here read. The participants also visited the field station of **CSIR-IIIM** situated at Boonera where they learned how to transform raw plant materials into value-added products. The final session focused on marketing strategies, providing valuable insights into market demand, consumer preferences and branding techniques, the statement added.
Source: Brighterkashmir

Identifying Genes for Stress Management in Licorice Plants

Understanding the complex network of proteins that transport various substances across cellular membranes is crucial for advancing our knowledge of plant biology and improving agricultural practices. Among these proteins, ATP-binding cassette (ABC) transporters play a pivotal role. They are a large family of proteins that use energy from ATP hydrolysis to transport a wide range of substrates across biological membranes, affecting processes from growth and development to stress responses[2). Researchers at **CSIR-IIIM** Jammu have conducted a groundbreaking study[1) focusing on a particular plant, Glycyrrhiza glabra, commonly known as licorice. The study has expanded our understanding of ABC transporters by identifying a total of 181 members of this protein family in G. glabra, which they have classified into six subfamilies. This discovery is significant as it provides a more comprehensive view of the diversity and potential functions of these transporters in a species not previously studied in this context.
Source: Naturalsciencenews

CSIR IIIM Initiates Tulip Cultivation In Pulwama Under CSIR Floriculture Mission

The **CSIR Indian Institute of Integrative Medicine** has made significant strides in the cultivation of various Tulip varieties at its Field Station Bonera in South Kashmir's

Pulwama district as part of the **CSIR** Floriculture Mission. This initiative marks a noteworthy achievement as it's the first time the Field Station has undertaken the trial cultivation of multiple Tulip cultivars. Eight distinct varieties of Tulips are currently blooming enchantingly in the sprawling Field Station, adding vibrant hues to the landscape. The primary objective of this initiative is to develop and standardize agro-technologies for mass-producing quality tulip bulbs in open field conditions. Leveraging the favorable agro-climatic conditions of the Kashmir valley, the initiative aims to enhance income generation for farmers through both cut flower and bulb production, thereby empowering them for import substitution.
Source: Statetimes

How lavender turned small farmers into big businessmen in J-K's Doda

When lavender cultivation was first introduced to Bhaderwah subdivision in Jammu and Kashmir's Doda district in 2015, most farmers were sceptical and just a handful gave it a go. Today, these early adopters have significantly expanded cultivation, employ 30-40 people each on a full-time basis, have their own distillation units for making lavender oil, and market their products in different parts of the country. Once a small-scale farmer, Bharat Bhushan from Lehrote village is among the success stories. Having dropped out of school after class 10, he now earns Rs 1-1.5 lakh a month. In 2018, he bought the family's first car – for his son – and later, another one for himself. The crop was officially introduced in Bhaderwah by the **Council Of Scientific and Industrial Research-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu, in 2015.
Source: Indianexpress

CSIR-IIIM kickstarts 'Lavender Hub Project' at NH 44

The **CSIR-IIIM** collaborated with National Highway Authority of India (NHAI) to kickstart the "Lavender Hub Project" near the south end of the Banihal-Qazigund Road Tunnel (Navyug Tunnel) at Banihal today. The first-ever project aimed at beautifying the National Highway 44 and fostering sustainable development along this corridor was initiated earlier this year. Dr Zabeer Ahmed, Director, **CSIR-IIIM**, and Ashok Kumar Jain, Advisor (Plantation and Clearances) from the Green Highways Division of NHAI, jointly inaugurated the project activities by planting lavender plants near Navyug Tunnel. Dr Zabeer highlighted that **CSIR-IIIM's** efforts have uplifted the local economy by introducing lavender plantation, putting the region on the global map.
Source: Dailyexcelsior

AIC - IIIM organizes two-day training programme on design, manufacture of leather goods

A two-day capacity building cum training programme on design and manufacture of leather goods was organized at **CSIR-Indian Institute of Integrative Medicine** at its branch Srinagar under the Atal Incubation Centre (AIC-**IIIM)** and CSIR-Integrated Skill Initiative. Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Jammu who is ex-officio Chairman of AIC-IIIM Bio-Innovation Foundation, inaugurated the programme in which more than 60

participants were provided knowledge and imparted training on the different avenues of income and livelihood generation in the domain of leather technology through production of value-added products. The two day programme included practical demonstration for manufacturing leather goods like pouches, sling bags and other range of products.
Source: Earlytimes

IIIM's Atal Incubation Centre inks MoUs with Startups

In a significant step to advance and support the innovation ecosystem in the Jammu and Kashmir region, Atal Incubation Centre (AIC) of **CSIR Indian Institute Integrative Medicine** on Saturday signed four Memoranda of Understanding (MoUs) with four promising start-ups of Union Territories of J&K and Ladakh. The four start-ups -Mama Agro of Leh, Arsh Mushrooms of Kathua, Gulmarg Mushroom Farms of Baramulla and Khorasan Hi-Tech Food Processing of Pulwama are involved in the cultivation of medicinal mushrooms and fermentation products. Through this, AIC-IIIM has connected with various regions of J&K as well as Ladakh to promote entrepreneurship, thereby taking the total number of its incubatees to five.
Source: Uni India

CSIR-IIIM, NDTL Extend MoU on Collaborative Work

In their collective endeavour to work together to achieve excellence in the field of Dope Testing in Sports in India and to promote the Anti-Doping Science and Research in the country, **CSIR-Indian Institute of Integrative Medicine (IIIM),** Canal Road, Jammu and the National Dope Testing Laboratory (NDTL), Government of India on Saturday renewed their Memorandum of Understanding (MoU) for another three years. Dr. Zabeer Ahmed, Director of **CSIR-IIIM** and Dr. Puran Lal Sahu, Director, NDTL New Delhi have signed the MoU on behalf of their respective institutes, for the continuance of their collaborative research and reference standard synthesis work for the next term. While giving detail of the work to be done under the MoU, Dr. Zabeer said that in 2021, a groundbreaking scientific collaboration was initiated jointly by CSIR-IIIM and NDTL for the synthesis of reference standards and cells-based and pharmacokinetics studies on the metabolites with the main emphasis on the national goals in the area of Dope Testing and Global Positioning.
Source: Statetimes

Director CSIR-IIIM launches Swachhata Pakhwada

In its staunch to enthusiastically work for Swachh Bharat Abhiyan, the **CSIR-Indian Institute of Integrative Medicine** has launched a fortnightly cleanliness drive here today at its main campus at Jammu. An official spokesperson of the institution said the Swachhata Pakhwada activities were inaugurated by Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** with the plantation of saplings, followed by administrating the Swachhata Pledge to scientists, technical, administrative staff, research scholars and other workers. It is pertinent to mention that Swachhta Pakhwada is an initiative of the Prime Minister started

in 2014 with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging GOI Ministries/Departments in their jurisdictions.
Source: Jammulinksnews

Teachers inspired by the innovative training to teach Science

A two days training workshop for the capacity building of Science teachers concluded today at Army Goodwill School, Wyne Kupwara. **CSIR – Indian Institute of Integrated Medicine** organized this training workshop in collaboration with the Royal Society of Chemistry (RSC), UK with the support of Army Goodwill School (AGS) on 2nd and 3rd May, 2024. Total 49 Science teachers from various government schools of Kupwara / Tangdhar participated along with the teachers from AGS, Kupwara. The program was organized under the patronage of Dr. Zabeer Ahmed, Director IIIM and guidance of Er. Abdul Rahim, Head IIIM (Br.) Srinagar under the flagship of IIIM Jigyasa program.
Source: Brighterkashmir

CSIR-IIIM distributes seed material to farmers of Chenab Valley

CSIR – Indian Institute of Integrative Medicine Jammu organized a quality seed distribution programme for the farmers of the district Doda as part of the area expansion vertical of the CSIR-Floriculture Mission here today at community hall Doda. The event was organized under the patronage of Dr Zabeer Ahmed, Director **CSIR IIIM** Jammu. 150 farmers from different areas of the district participated in the day long programme where in training and skill was imparted to the farmers for scientific crop production and management of marigold, who were also provided with the quality seeds of marigold.
Source: Risingkashmir

IIIM organizes Rashtriya Boudhik Sampada Mahotsav

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM) successfully organized the Rashtriya Boudhik Sampada Mahotsav (National Intellectual Property Festival) here today at CK Atal Auditorium of the institute. This event, which brought together intellectual minds to explore the significance of intellectual property rights in fostering innovation, coincided with the World IP Day. With the theme "IP and the SDGs: Building Our Common Future with Innovation and Creativity," the festival aimed at delving into how innovative ideas could contribute to sustainable development Goals.
Source: Brighterkashmir

CSIR-IIIM celebrates ‘National Technology Day’

CSIR-Indian Institute of Integrative Medicine (IIIM) Jammu celebrated the National Technology Day, to commemorate the success of nuclear test conducted in 1998 and to mark significant achievements in innovation, technology and scientific advancement. In this connection, a daylong event was event was organised, observing the open day at the institute which marked a significant convergence of academic institutions, signaling a collaborative effort towards advancing scientific understanding and innovation. A total of more than 500 students drawn from various schools, colleges and universities who toured

various research divisions and facilities of IIIM, were provided a unique opportunity to interact with the scientists, technologists and young researchers & to explore the cutting-edge R&D activities being done here.
Source: Risingkashmir

CSIR-IIIM organised health check-up under Phenome India

CSIR-Indian Institute of Integrative Medicine organised a health check-up camp called Phenome India CSIR Health Cohort Knowledge Base (PI-CHeCK) for the staff & pensioners of CSIR-IIIM and their spouses at Jammu here on Wednesday. The significant objectives of this initiative of Council of Scientific and Industrial Research (CSIR) are to ensure swasth bharat viksit bharat through health and wellness check. Director, CSIR-IIIM, Dr. Zabeer Ahmed inaugurated this health check-up camp of very unique type which is specifically aimed to integrate state-of-the-art AI/ML models with comprehensive health data, laying the foundation for precision medicine with personalized disease risk scores, for the Indian population. While speaking during the inaugural event, Dr. Zabeer Ahmed said that **CSIR** is one of the largest research and development organisations of India and has a network of 37 laboratories situated across the whole country.
Source: Risingkashmir

CSIR-IIIM observes Swachhata Pakhwada

CSIR-Indian Institute of Integrative Medicine has celebrated Swachhata Pakhwada from May 1 to 15. Swachhata Pakhwada is a significant initiative of the government under Swachh Bharat Mission with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging GOI Ministries/Departments in their jurisdictions. The Pakhwada activities were organised by **CSIR-IIIM,** Jammu as per the Calendar of Swachhata Pakhwada for the year 2024, released by the Department of Drinking Water & Sanitation, Government of India. As part of the Swachh Bharat Mission mandate, it is imperative for government offices to provide a clean and healthy working environment for its employees/visitors.
Source: Greaterkashmir

CSIR-IIIM launches 'Phenom India' Health PI-CHeCK camp in Srinagar

The **CSIR-Indian Institute of Integrative Medicine**, Jammu on Monday launched a health check-up camp under 'Phenome India CSIR Health Cohort Knowledge Base (PI-CHeCK)' for their staff, pensioners, and their spouses at its branch at Srinagar. The initiative is part of CSIR's broader mission to ensure "Swasth Bharat, Viksit Bharat" (Healthy India, Developed India) through comprehensive health and wellness assessments. The camp was inaugurated by Dr Zabeer Ahmed, Director, **CSIR-IIIM,** in the presence of Dr Fayaz A Malik (Coordinator), Dr A S Shawl (Ex, Head IIIM-Branch Srinagar); Dr Hemant Gautam and Dr Vamsi Yenamandra, scientists from IGIB New Delhi. While interacting with the scientists, staff and visiting pensioners, Director Dr Zabeer said, "**CSIR** being one of India's largest research and development organizations, with a network of 37 laboratories across the country has launched a unique initiative of

PI-CHeCK that aims to integrate state-of-the-art AI and ML models with extensive health data to establish precision medicine frameworks with personalised disease risk scores tailored to the Indian population."
Source: Risingkashmir

IIIM holds workshop on IPR, entrepreneurship, startup ecosystem

BioNEST Bioincubation Centre (**IIIM**-TBI) under the aegis of **CSIR-Indian Institute of Integrative Medicine**, Jammu today organized one day workshop on "Intellectual Property Rights (IPR), Entrepreneurship & Startup Ecosystem" in which 40 students drawn from Law School, University of Jammu and Dogra Law College, Jammu participated. Dr. Zabeer Ahmed, Director, CSIR-IIIM, in his presidential address, highlighted the importance of enhancing awareness of IPR and patents among the students. He also spoke on the significance of acquiring patents, copyrights and trademarks by the scientific establishments. Further, talking about IIIM initiatives, he underscored the significant role of the IIIM BioNEST incubator in creating awareness among the local community in the UT of Jammu & Kashmir via its road shows, city camps, workshops and similar initiatives. Such workshops are pivotal to achieve the goals of Viksit Bharat, he added. Earlier Dr. Saurabh Saran, Principal Investigator, IIIM-TBI in his welcome address provided an overview of the workshop organized. He encouraged participants to take maximum benefit of one day workshop on Intellectual Property Rights (IPR), entrepreneurship and Startup ecosystem.
Source: Dailyexcelsior

CSIR IIIM imparts capacity building to floriculture farmers in Batote

Indian Institute of Integrative Medicine Jammu under the flagship initiative of **CSIR** Floriculture Mission organized capacity building workshop on scientific and innovative crop production and management technologies in commercial floriculture for the farmers of Ramban, here at Batoteon Friday. 96 farmers which included women farmers participated in the workshop, that was organized in collaboration with Department of Agriculture, Batote. The farmers were also provided with the quality planting material of the high yielding variety of Marigold and package of crop production and management practices. Speaking to our correspondent, Dr Zabeer Ahmed, Director **CSIR IIIM**, Jammu said that the significant work being done under the Mission since past three years has given impetus to the commercial floriculture sector in the UT and has led to the increased income generation and livelihood opportunities for farmers.
Source: Risingkashmir

CSIR IIIM distributes Quality Marigold Seed to Farmers in Chenani, Udhampur

The **CSIR Indian Institute of Integrative Medicine,** Jammu, continuing with its outreach under the flagship initiative of **CSIR** Floriculture Mission conducted a training workshop on scientific crop production, management and post-harvest processing for the farmers of Chenani and Udhampur. 85 farmers participated in the programme who were informed about the various methods and practices for raising floricultural crops under open field

conditions. The participating farmers were also provided with quality marigold seed material. The event was conducted with the active coordination of Department of Agriculture, Jammu. Dr Zabeer Ahmed, Director CSIR IIIM while speaking to our correspondent said that Marigold flowers holds significant economic potential in J&K for its tremendous demand and use as religious offering in the temples, spiritual events and other sacred places.
Source: Risingkashmir

`Where Aroma Meets Ambition…': Come, Smell The Lavenders At Bhaderwah Campus

Two-day Lavender Fest-2024 today commenced at the Bhaderwah Campus, University of Jammu in Doda. Organized under the theme "Lavender Blooms, Business Blooms: Where Aroma Meets Ambition," the festival celebrates the vibrant lavender cultivation in the region. Prime Minister Narendra Modi, in the 99th Edition of Mann ki Baat, appreciated the efforts of the **Council of Scientific & Industrial Research- Indian Institute of Integrative Medicine (CSIR-IIIM)** in supporting farmers in the cultivation of Lavender in Bhaderwah Aroma Mission. **CSIR**-Aroma Mission is a flagship project of CSIR under which Lavender cultivation is being promoted in the temperate regions of J&K. The aim of the project is to increase the income of small and marginal farmers and develop agriculture-based Startups. The project is being directly monitored by Dr. Jitendra Singh, Union Minister of State (IC) of the Ministry of Science & Technology. Under his directions, CSIR-IIIM is implementing Lavender cultivation in Bhaderwah and other parts of J&K.
Source: Thekashmirmonitor

Lavender Festival in Bhaderwah attracts buyers, investors

On the concluding day of the third instalment of the â€˜Lavender Festivalâ€™, a field visit for buyers, investors, and industrialists from different parts of the country was organised in Jammu and Kashmirâ€™s Bhaderwah.The two-day festival celebrated the success of farmers and aimed to further boost lavender cultivation, and value addition, and attract international buyers.
Source: GreaterKashmir

CSIR-IIIM inks pact with UP-based company for joint development of aromatic products

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu entered into a memorandum of agreement (MoA) with an Uttar Pradesh-based private company to collaborate on the value addition of selected aromatic crops of Jammu and Kashmir, its spokesperson said.The pact with Aromatic & Allied Chemicals, Bareilly, would facilitate the joint development of innovative aromatic products, he said.The spokesperson said the MoA signing ceremony, held at CSIR-IIIM, marked a significant milestone in the synergy between these two esteemed organisations.
Source: takeonedigitalnetwork

IIIM celebrates the 10th International Day of Yoga

CSIR-Indian Institute of Integrative Medicine (IIIM), Canal Road, Jammu, a premier Research and Development organization, under Council of Scientific and Industrial Research, Ministry of Science and Technology, Govt. of India, celebrated the 10th International Day of Yoga (IDY) with this year theme "Yoga for self and society" at its main campus with fervour, gaiety and zeal. During the celebration, a yoga session was conducted byRajesh Kumar, Gupta, Administrative Officer, **CSIR-IIIM** and various Asanas such as Tadasana, Katichakrasana, Trikonasana, Konasana, Pavanmuktasana, Makarasana, Yogasana, Sarpasana, Bhujangasana, Hasya Kriya, and Pranayama Kriya, including AnulomVilom were performed in which scientists, researchers, scholars, staff, and their families actively participated. On this occasion, Dr. Zabeer Ahmed, Director, **CSIR-IIIM**, Jammu, said that in this era 'Yoga' is very crucial and imperative for physical and mental health, and we must append it to our daily lives to get the fruitful benefits and live a healthy life. Further, Dr. Ahmed said that this year's celebration emphasized the dual benefits of yoga in enhancing personal well-being and fostering societal harmony.
Source: Rising Kashmir

Summer Science Camp begins at IIIM

A five days long Summer Science Camp was inaugurated today by **CSIR- Indian Institute of Integrative Medicine,** Jammu, in association with the Royal Society of Chemistry (RSC), India under the flagship of Yusuf Hamied Chemistry Camps and **CSIR** Jigyasa program. The camp has been specially designed for the students of class 9th and 10th from Govt Schools of all districts of Jammu Division. The aim of this Summer Camp is to inculcate scientific temperament among the budding students and is specifically designed to provide students an immersive experience of hands on trainings and an exposure in Scientific and Technological interventions in chemistry, biology and allied sciences. Participants will have the opportunity to engage in hands-on activities of basic scientific principles in well-equipped laboratories. On the occasion, Ashok Kumar Sharma, Director, School Education, Jammu, was the chief guest. He said that this is an exceptional opportunity for the students to have exposure of the scientific institute and hands on basis scientific experiments.
Source: Dailyexcelsior

First half-yearly TOLIC meeting held at CSIR-IIIM

First half-yearly meeting of the Town Official Language Implementation Committee (TOLIC), Jammu for the financial year 2024-25 was held on June 27, 2024 at **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu. Dr. Zabeer Ahmed, Director, **CSIR-IIIM** and Chairman, TOLIC, Jammu chaired the meeting in which 50 representatives from various member offices of TOLIC, Jammu were present. The main objective of this meeting was to review the Hindi related work of the last two quarters of the member institutions of the committee and to collect their other important information for uploading it on the official TOLIC portal of the Ministry of Home Affairs. Sanjay Sharma, Member-Secretary, TOLIC, Jammu commenced the meeting with a review of various Central

Government offices located in Jammu region. The review was done on the basis of quarterly progress reports submitted by member institutions during the period October-December, 2023 and January-March, 2024. Later, the attendees discussed the topics of progressive use of Hindi in their respective offices and making necessary improvements in the implementation strategies.
Source: Risingkashmir

Joint Indo-China study traces history of weakening monsoon back to 12 million years

Even as India and China are slugging it out on the Himalayas and the Indian Ocean for regional supremacy, ocean scientists from Beijing and Goa have collaborated for an international study that examine the erratic rains caused by weak monsoon, which we have been witnessing in recent times due to climate change, traced back as far as 12 million years. This study titled, 'Weakening of the South Asian summer monsoon linked to inter-hemispheric ice-sheet growth since 12 Ma', gives insights into the changing pattern of the monsoon system, caused by climate warming. It has been published in the journal 'Nature Communications'. The study has been co-authored by Zhengquan Yao and Xuefa Shi, from the First Institute of Oceanography, Ministry of Natural Resources, Qingdao, China; Zhengtang Guo from Key Laboratory of Cenozoic Geology and Environment, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, China along with B Nagender Nath from **CSIR-National Institute of Oceanography (NIO),** Goa and others.
Source: Heraldgoa

Lavender revolution: Boosting economy, employment in Kashmir's agriculture sector

Kashmir is perceived as the hub of medicinal plants. Lavender, particularly, shows promising potential as a therapeutic and aromatic herb that can positively contribute towards India's and Kashmir's economic and medical prospects. The valley's lavender is captivating both domestic and international markets. Findings have indicated that lavender farming can prove profitable for farmers given a sustained demand and organized farmer activities. To boost lavender production and export, the Government of India has been taking transformational steps. The **CSIR-aroma Mission** has been instrumental in promoting lavender cultivation in the temperate regions of Jammu and Kashmir. Its primary goal is to increase the income of small and marginal farmers and foster the development of agriculture-based startups. The Purple Revolution or Lavender Revolution, launched by the Ministry of Science & Technology, aims to promote the indigenous aromatic crop-based agro economy through the 'aroma mission' of the **Council of Scientific and Industrial Research (CSIR).**
Source: Risingkashmir

"Change of mindset and exploration of regional resources are the key to StartUps in Jammu & Kashmir", says Dr Jitendra Singh

"Change of mindset and exploration of regional resources are the key to StartUps in Jammu & Kashmir". This was stated by Union Minister of State (Independent Charge) for Science and Technology, Minister of State (Independent Charge) for Earth Sciences, MoS PMO, Department of Atomic Energy and Department of Space, and MoS Personnel, Public Grievances, and Pensions, Dr. Jitendra Singh while addressing the valedictory function of the 2-day National StartUp Conference RASE 2024 at National Institute of Technology(NIT) Sringar, today. As far as J&K is concerned, Dr. Jitendra Singh said, it could be possible to explore the areas of agri Start-ups also in floriculture sector for which the **CSIR** has started a floriculture mission. He also referred to handcraft horticulture and textile Start-ups as rich domains of J&K. Dr. Jitendra Singh said one of the important catalysts for startup success was a close integration between academia, research, industry and for this he called upon the various research institutes as well as the industrial agencies to come together on a single platform. He said, to begin with, the different institutions in J&K ranging from **CSIR**, IIT, IIM, AIIMS, SKIMS, SKUAST, NIT, Government Medical Colleges, could come together for joint StartUp endeavours.
Source: Pib

Director CSIR-IIIM inaugurates CEL sponsored Leather training program

A six month training program on design and manufacture of leather goods and garments was inaugurated at **CSIR-Indian Institute of Integrative Medicine** branch Srinagar. Dr. Zabeer Ahmed, Director **CSIR-IIIM,** inaugurated the "Employability to Women through Skill Development and Entrepreneur Support in Manufacturing & Designing of Leather Goods and Garments" programme which is supported by Central Electronics Limited (CEL) through its CSR initiative. Under the program, 10 trainees shall be provided training for 6 months with a monthly stipend of ₹5000. The training will be imparted at the leather training centre of **CSIR – IIIM,** Srinagar which is equipped with high-end machinery and facilities required for the course. The programme includes comprehensive theory and practical classes for manufacturing leather goods and garments like pouches, jackets, sling bags etc.
Source: Takeonedigitalnetwork

Exploration of regional resources key to build startup ecosystem in J&K: Dr Jitendra Singh

As far as J&K is concerned, it could be possible to explore the areas of agri startups in the floriculture sector too, for which **CSIR** has started a floriculture mission: Minister Change of mindset and exploration of regional resources are the keys to build a startup ecosystem in Jammu & Kashmir, Union Minister of State (Independent Charge) for Science and Technology Dr.Jitendra Singh has said. Addressing the 'National StartUp Conference RASE 2024' at the National Institute of Technology (NIT) in Srinagar, the minister said the agriculture sector can be the main area of startups in the region. Citing the example of 'Aroma Mission', Dr Singh said the 'Purple Revolution' was born in the small towns of Bhaderwah and Gulmarg, and is now being talked about countrywide.

Nearly 5,000 youngsters have taken up lavender farming as agri startups and are making handsome incomes in the region.
Source: Bizzbuzz

IIIM conducts Faculty Development Programme

The District Development Commissioner (DDC) Pulwama, Dr. Basharat Qayoom today visited the Field Station Bonera, Pulwama of the CSIR – Indian Institute of Integrative Medicine and conducted a comprehensive review of the various activities and societal outreach programs being implemented at the station. During his visit, Dr. Basharat interacted with the scientific and technological staff and toured different sectors of the station. Dr. Basharat emphasized the significant role of the **Council of Scientific and Industrial Research (CSIR)** in shaping the developmental landscape of the country through its scientific and technological capabilities. He commended the scientists at **CSIR-IIIM** field station Pulwama for their contributions to regional development and affirmed his support for the successful execution of the station's programs and projects.
Source: Greaterkashmir

Lavender: Bhaderwah's Answer To Climate Change Woes

Tipri, a village in scenic Bhaderwah, called Chota Kashmir for its beauty, was once predominantly a maize-growing area. However, the crop was not fetching much return as monkeys and bears would damage the crop extensively. The villagers decided to switch to a different crop but had no idea what to do. In 2010, Touqeer Baghban, 37, started cultivating lavender in his fields in Bhaderwah. He had obtained the crop from Kashmir, where it has been cultivated for the past forty years at **CSIR IIIM** Field Station Bonera, Pulwama in South Kashmir. Lavender oil was in demand, and with climate change and wildlife interference affecting their maize crops, Baghban saw lavender as a promising alternative. Year after year, he gave up cultivating maize and adopted lavender. Lavender, a perennial shrub, is a hardy, robust crop that thrives in dry areas with abundant sunshine and temperate places like Bhaderwah proved heaven for the crop. With rivers and streams drying up during summers, and untimely glacial discharge, farmers in Bhaderwah followed Baghban and slowly switched over to lavender. Lavender requires less water and is more resilient to these changing climatic conditions.
Source: Outlookindia

Ten days long workshop commences at CSIR-IIIM

The workshop was organised under the aegis of **CSIR-Indian Institute of Integrative Medicine,** Jammu. The workshop started today and will culminate on 25th July 2024. During the workshop 160 students from 03 colleges of Jammu & Udhampur districts are participating. Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** (Chairman, BioNEST Bioincubation Centre) in his presidential address, welcomed students at **CSIR-IIIM** on World Youth Skills Day and highlighted the importance, and the need of such Karyashala (workshop) in the UT of Jammu & Kashmir. He said that **CSIR-IIIM** is constantly working for the promotion of skill development and entrepreneurship ecosystem in this region. Further,

he emphasized that the aim of the workshop is to inculcate scientific temperament among the budding students and this workshop is specifically designed for the students with an immersive experience of hands on trainings and provide them an exposure in scientific and technological interventions in chemistry, biotechnology and allied sciences, in the line of NEP-2020.
Source: **Dailyexcelsior**

Two days National Seminar on Innovation in Regimenal therapy organises in Srinagar

Two days National Seminar on Innovation in Regimenal therapy - Combining traditional methods with contemporary research was inaugurated today at, University of Kashmir, Srinagar. The seminar is being organized by Regional Research Institute of Unani Medicine, Srinagar a peripheral institute of Central Council for Research in Unani Medicine New Delhi, Ministry of Ayush, Government of India. During the inaugural session two MoUs were also signed by CCRUM with **CSIR-IIIM,** J&K and SKIMS, Srinagar. Both the Vice Chancellors and Director SKIMS expressed their willingness to collaborate with CCRUM in the area of research and development of Unani Medicine. Dr. N. Zaheer Ahmed, DG, CCRUM, New Delhi presided over the inaugural function. Prof. Nilofer Khan, Vice Chancellor, University of Kashmir was Special Guest of Honour, Prof. Shakeel Ahmed Ramshoo, Vice Chancellor, IUST Awantipora was distinguished guest of Honour, Prof. M. Ashraf Ganie, Director, SKIMS, Srinagar was Guest of Honour in the inaugural function.
Source: **Pib**

Lavender Cultivation: J&K's New Agricultural Gold

Many local farmers receive income and employment from saffron farming, which has long been an important aspect of the region's agricultural character. Nonetheless, the introduction of the Purple Flowers Revolution—fueled by the growing of lavender—has brought about a profound shift in Jammu and Kashmir's agricultural environment in recent years. The Indian government, through the **Council of Scientific and Industrial Research (CSIR),** launched the Aroma Mission in 2016, with the goal of encouraging the cultivation of aromatic crops to lessen reliance on imported aromatic oils and boost the country's agro-economy. This initiative has played a major role in driving this change. The region's unique climate, characterized by mild summers and abundant sunshine, proved to be ideal for lavender cultivation. Initially met with skepticism, the idea gradually gained traction as the economic benefits of lavender farming became evident. Unlike traditional crops such as corn, rice, and millet, which require significant investment and agricultural inputs, lavender thrives in marginal soils and requires less irrigation, making it an attractive option for farmers dealing with shrinking land holdings and water scarcity.
Source: **Boldnewsonline**

Ten days Yuva Kaushal Karyashala concludes at IIIM

Ten days Yuva Kaushal Karyashala on “Industrial Biotechnology”, “Medical Microbiology” and “Natural Products Chemistry” concluded here at **CSIR-Indian Institute of Integrative Medicine**, Jammu, wherein 150 students drawn from various colleges of Jammu & Udhampur participated. Dr Zabeer Ahmed, Chairman, BioNEST Bioincubation Centre and Director, **CSIR-IIIM,** was the chief guest at the valedictory session. He emphasized on the importance of these Karyashalas (workshops) in providing job-oriented practical training, as well as raising scientific temperament among participants. He also said that these workshops also provide a flavour of research to young college students and may encourage them to take up research as a career. During the Karyashala, 150 participants drawn from Govt College for Women, Gandhi Nagar, GGM Science College, Jammu and Govt. Degree College, Udhampur, underwent these 10 days trainings organised by BioNEST Bioincubation Centre under the aegis of **CSIR-Indian Institute of Integrative Medicine**, Jammu.
Source: Dailyexcelsior

IIIM conducts Faculty Development Programme

A two-day workshop sponsored by SERB, DST under the “Scientific Social Responsibility” programme was organized by **CSIR-IIIM** at its Branch Srinagar from June 28, 2024 to June 29, 2024. The workshop was designed to impart technical training to the 25 faculty members from 13 different colleges of Kashmir and focused on the Application of Real-Time PCR and High Performance Liquid Chromatography. In the inaugural session, Dr Phalisteen Sultan while welcoming the participating faculty members gave insights into the proceedings of this two-day workshop and expressed his gratitude to them for their active participation in the workshop. Dr. Syed Riyaz-Ul-Hassan, Coordinator of the workshop, in his introductory address highlighted the importance of the workshop for pursuing academic excellence in higher education and developing collaborative research programmes between the Academic Institutes and **CSIR-IIIM.** This was followed by a presentation on the overview of **CSIR**, India and **CSIR-IIIM,** by Dr. Qazi Parvaiz Hassan, who highlighted the transformative role of **CSIR** in Healthcare, Agriculture, and Drug discovery.
Source: Thekashmirmonitor

Lavender revolution: Boosting economy, employment in Kashmir’s agriculture sector

Kashmir is perceived as the hub of medicinal plants. Lavender, particularly, shows promising potential as a therapeutic and aromatic herb that can positively contribute towards India’s and Kashmir’s economic and medical prospects. The valley’s lavender is captivating both domestic and international markets. Findings have indicated that lavender farming can prove profitable for farmers given a sustained demand and organized farmer activities. To boost lavender production and export, the Government of India has been taking transformational steps. The **CSIR-aroma Mission** has been instrumental in promoting lavender cultivation in the temperate regions of Jammu and Kashmir. Its primary goal is to increase the income of small and marginal farmers and

foster the development of agriculture-based startups. The Purple Revolution or Lavender Revolution, launched by the Ministry of Science & Technology, aims to promote the indigenous aromatic crop-based agro economy through the 'aroma mission' of the **Council of Scientific and Industrial Research (CSIR).**
Source: Risingkashmir

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Source: Takeonedigitalnetwork

GDC Udhampur emerges winner of Hackathon 4.0 organised by CSIR-IIIM

The students of the Department of Biotechnology of the Government Degree College, Udhampur participated in the comprehensive 10-days hands-on workshop titled "Yuva Kaushal Karyashala" organized by **CSIR-Indian Institute of Integrative Medicine (IIIM),**

through its Technology Business Incubator (TBI) BioNEST Bio incubation Centre from 15th July 2024 to 25th July 2024.This workshop focused to train participants about Industrial Biotechnology, Medical Microbiology, and Natural Products Chemistry thus providing them with practical training and exposure in these crucial fields. The workshop saw active participation of a total of 160 students across the various colleges of Jammu Division. The students of B.Sc. Biotechnology of Government Degree College, Udhampur participated under the able guidance of Dr. Sanjay Verma, Principal, GDC, Udhampur and supervision of Dr. Richa Sharma (Head, Dept. Of Biotechnology) taking part in both the 10-day training and the associated Hackathon 4.0. During the workshop, students were engaged in various practical sessions and lectures conducted by eminent scientists and researchers from **CSIR-IIIM**.
Source: **Earlytimes**

Chemical Profile and Health Benefits of Compounds from Ashwagandha Fungi

The search for new therapeutic agents continues to be a crucial endeavor in medical research. One promising area of study is the exploration of medicinal plants, which have long been recognized for their therapeutic potential. A recent study conducted by the **CSIR-Indian Institute of Integrative Medicine** has shed light on the potential of Withania somnifera (L.) Dunal, a plant known for its medicinal properties in Ayurveda, to provide new drug scaffolds[1). The study focused on isolating and analyzing microorganisms associated with Withania somnifera, specifically epiphytic fungi from the plant's leaves, stem, and fruits. Among the five filamentous fungi identified, Aspergillus aculeatus S20 was found to produce an indole alkaloid known as okaramine H. This compound was isolated using advanced chromatographic techniques, including High-Performance Thin-Layer Chromatography (HPTLC) and High-Performance Liquid Chromatography (HPLC). The structure of okaramine H was confirmed through Nuclear Magnetic Resonance (NMR) and Mass Spectrometry (MS), revealing a high purity of over 90%.
Source: **Naturalsciencenews**

CSIR IIIM conducts two-day hands-on workshop under CSIR Jigyasa Program

Under **CSIR** Jigyasa programme a ‘Two Day Hands-on Workshop’ was organised for the students of Army Goodwill School Wayne Kupwara and Army Goodwill School Hajinar, Tanghdar from 8th to 9th August 2024. The workshop was organized under the patronage of Dr Zabeer Ahmed, Director **CSIR IIIM** Jammu and supervision of Er Ab Rahim, Head **IIIM** (Br) Srinagar. The event was inaugurated in presence of the Scientists and Technologists of the Institute. 55 students and accompanying faculty members from AGS Wayne Kupwara and AGS Hajinar Tanghdar participated in the programme. During the programme, the participating students were given exposure to various scientific and technological activities undertaken at the Institute. The participants were introduced to the techniques of DNA isolation, electrophoresis, microscopy and cell culture in Microbiology lab. They were also demonstrated with the methods for pH testing of solutions, TLC, Acid base Titration, Aldol condensation, Isolation of binary organic mixture and solvent recovery using rotavapor in Chemistry lab.

Source: Risingkashmir

IIIM celebrates 78th Independence Day at Jammu and Br. Lab Srinagar

CSIR Indian Institute of Integrated Medicines (IIIM) Jammu celebrated the 78th Independence Day with great enthusiasm and gaiety at its main campus, Jammu Branch Lab. Srinagar and field stations at Jammu, Srinagar & Leh. The main programme was held at Jammu campus where Dr Zabeer Ahmed, Director **CSIR-IIIM** hoisted the National Flag on the occasion and took salute at the ceremonial march past by security men of the Institute and students of Regional Research Laboratory High School. Dr Zabeer Ahmed on the occasion extended warm greetings to the audience and recalled the supreme sacrifices of the national heroes like Mahatma Gandhi, Dr. Rajinder Prashad, Lal Bahadur Shastri, Lala Lajpat Rai, Chandra Shekhar Azad, Bhagat Singh, Rani Lakshmibai, Khudiram Bose, Sukhdev Thapar, Vallabhbhai Patel, Mangal Pandey, Tantya Tope, Ashfaqullah Khan, Ram Prasad Bismil, Udham Singh, Bal Gangadhar Tilak, Gopal Krishna Gokhale, who laid down their lives for the country.

Source: Risingkashmir

Women Boost Self-Reliance Through Marigold Farming in Ramban, J&K

Women in Ramban district of Jammu and Kashmir are increasingly turning to marigold farming to achieve self-reliance. This shift comes under the 'Mission Floriculture' scheme spearheaded by the **Council for Scientific Industrial Research (CSIR)** under the Union Ministry of Science & Technology. The initiative offers farmers, most of whom are women, training through workshops and provides free hybrid seeds. Dr. Iqra highlighted that marigold farming benefits soil health and is resilient against monkey attacks, making it a preferred crop in affected areas. Floriculture expert Tejinder Singh informed ANI, "It was a joint exercise. Marigold can maximize the potential of Batote, a promising agricultural area. Previously, 100-150 farmers cultivated marigold; this season, the number appears to be rising." Women are shifting from traditional maize farming to marigold due to its convenience, profitability, and shorter cultivation time. The flowers are quickly sold in places like Katra and Jammu, where demand is high due to the presence of temples, including the Mata Vaishno Devi shrine.

Source: Devdiscourse

CSIR-IIIM celebrates 142nd Birth Anniversary of Col Sir RN Chopra

The **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu celebrated 142nd Birth Anniversary of Col Sir RN Chopra, the Founder Director of **IIIM**, here today. Dr Zabeer Ahmed (Director, **CSIR-IIIM** Jammu) along with Scientists, Technical & Administrative Staff, Scholars and other workers paid homage to Col Sir RN Chopra by offering floral tribute to his statue. The **CSIR-IIIM** family proudly commemorated his Birthday to cherish the vision & excellence of this great son of the soil. While addressing the staff, Dr Zabeer recalled Colonel Chopra's great contributions toward advancement of Indian Systems of Medicine. The recommendations of the Committee on Indigenous

Systems of Medicine at which he had presided and brought focus on the Indian systems and the process for their consolidation started during his time only.
Source: **Dailyexcelsior**

CSIR-IIIM ने कर्नल सर आरएन चोपड़ा की 142वीं जयंती मनाई

सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ इंटीग्रेटिव मेडिसिन (सीएसआईआर-आईआईआईएम), जम्मू ने आज यहां **आईआईआईएम** के संस्थापक निदेशक कर्नल सर आरएन चोपड़ा की 142वीं जयंती मनाई। डॉ. ज़बीर अहमद (निदेशक, **सीएसआईआर-आईआईआईएम** जम्मू) ने वैज्ञानिकों, तकनीकी और प्रशासनिक कर्मचारियों, विद्वानों और अन्य कार्यकर्ताओं के साथ कर्नल सर आरएन चोपड़ा की प्रतिमा पर पुष्पांजलि अर्पित कर उन्हें श्रद्धांजलि दी। **सीएसआईआर-आईआईआईएम** परिवार ने इस महान धरतीपुत्र की दूरदर्शिता और उत्कृष्टता को संजोने के लिए गर्व के साथ उनका जन्मदिन मनाया। कर्मचारियों को संबोधित करते हुए डॉ. ज़बीर ने भारतीय चिकित्सा पद्धतियों Indian systems of medicine के विकास में कर्नल चोपड़ा के महान योगदान को याद किया।
Source: **Jantaserishta**

IIIM-TBI organizes Global Bio-India Road Show

IIIM-BioNEST Bio-Incubation Centre under the aegis of **CSIR-Indian Institute of Integrative Medicine**, Jammu along with its key ecosystem partner, Biotechnology Industry Research Assistance Council (BIRAC), DBT, Government of India, today organized a one-day Global Bio-India Road Show. The event was conducted under the patronage of Dr Zabeer Ahmed, Director of **CSIR-IIIM** Jammu and Chairman BioNEST Bioincubation Centre who also presided over the program. Dr Madhavi Rao, Chief Manager, National Biopharma Mission, BIRAC was the guest of honour. Dr Zabeer Ahmed, in his presidential address, highlighted the need of innovation nurturing and entrepreneurship development in J&K and shared with the audience how **CSIR-IIIM** is constantly working for the promotion of the startup ecosystem in the region. Dr Madhavi Rao discussed about the major initiatives taken by the BIRAC, Department of Biotechnology by organizing Global Bio-India Road Show in all the 75 BioNEST Incubators across the country as the precursor events of the mega show which is going to be held at Pragati Maidan, New Delhi between 12th – 14th September.
Source: **Dailyexcelsior**

SKIMS hosts top experts for academic brainstorming

The Sher-i-Kashmir Institute of Medical Sciences (SKIMS), Soura, today held an interactive session featuring some of the country's leading clinicians and scientists. The event, part of the two-day "Inter-University Academic Brainstorming" jointly organized by SKIMS and SKUAST-K, took place at the SKIMS Auditorium. The session provided a valuable platform for SKIMS faculty to engage with distinguished experts from various fields. Notable attendees included Dr. N. K. Mehra, Vice President (International Affairs),

INSA, and Former Dean, AIIMS New Delhi; Dr. Abdul Masood Khan, Director Incharge of ICMR-JALMA; A. K. Pradhan, Advisor, CDSCO; Dr. Ashok Kumar, Director, IIT Kanpur; Dr. Anu Raghunathan, Senior Principal Scientist, **CSIR-NCL** Pune; Dr. Bushra Ateeq, Professor & Joy-Gill Chair, Senior Fellow, DBT-Welcome Trust India Alliance; and Dr. M. Jamal, Principal Scientist, **CSIR-IIIM** Jammu.
Source: Dailyexcelsior

New Mutation in Saffron Gene Affects Plant Color, Growth, and Stress Resistance

Crocus sativus, commonly known as saffron, is renowned for its unique apocarotenoids such as crocin, picrocrocin, and safranal. These compounds are responsible for saffron's distinctive color, flavor, and aroma, making it a valuable crop. Enhancing the biosynthesis of these apocarotenoids can improve the quality of saffron and increase its resilience to changing climatic conditions. A recent study conducted by the **CSIR Indian Institute of Integrative Medicine** has made significant progress in this area by introducing a novel mutation in the stigma-specific lycopene-β-cyclase of Crocus (CstLcyB2a)[1]. Lycopene-β-cyclase is an enzyme that plays a crucial role in the carotenoid biosynthetic pathway. Carotenoids are pigments found in plants that are essential for photosynthesis and provide important nutrients to humans, such as vitamin A. In Crocus sativus, lycopene-β-cyclase converts lycopene into β-carotene, a precursor for the synthesis of apocarotenoids. The study introduced a mutation at position A126 in the CstLcyB2a enzyme, which sterically hinders its binding of δ-carotene without affecting lycopene binding. This mutation diverts the metabolic flux towards β-carotene formation, thereby enhancing the production of apocarotenoids.
Source: Naturalsciencenews

XITE Gamharia Boosts Tribal Farming with Aromatic Crop Training

A specialized training program focused on the cultivation and processing of aromatic crops, particularly lemongrass, was successfully held in Gamharia, West Singhbhum. The program, a joint effort by XITE Gamharia, **CSIR-NML** Jamshedpur, and **CSIR-IIIM** Jammu, aims to uplift tribal communities by introducing sustainable agricultural practices. The training program was part of the Department of Science and Technology's (DST) Science, Technology, Innovation (STI) Hub project. It provided local farmers with the tools and knowledge needed to improve their farming methods and economic prospects. During the program, farmers were introduced to nine different varieties of lemongrass, with more than 30 saplings planted in each category. The hands-on demonstration allowed participants to directly apply the techniques they learned in cultivating these aromatic plants. Dr. Sanchita Chakravarty, Chief Scientist at **CSIR-NML**, and the project's Principal Investigator, highlighted the initiative's focus on enhancing the living standards of tribal farmers.
Source: Townpost

In J&K's purple revolution, a blooming of agri start-ups

India is now celebrated as the world's third-largest start-up ecosystem, and boasts of some of the fastest-growing unicorns. This impressive expansion can be traced back to Prime Minister (PM) Narendra Modi's clarion call of "Start-up India, stand up India" that he gave in 2016, in a speech delivered from the Red Fort. Since then, the number of start-ups has skyrocketed from just over 350-400 in 2014 to more than 130,000 in 2024, with each of the over 110 unicorns being the landmarks of this journey of enterprise in the country. Under the Modi government, the **Council of Scientific and Industrial Research (CSIR),** ministry of science and technology, launched the Jammu and Kashmir Aroma Arogya Gram (JAAG) project to address some of these agricultural challenges or offer a workaround through alternative crops. This ground-breaking initiative, popularly known as Aroma Mission, introduced the cultivation and processing of medicinal and aromatic plants (MAPs) using advanced **CSIR** technologies. This, in turn, has paved the way for India's Purple Revolution.
Source: Hindustantimes

Purple Prosperity: How Lavender is changing J&K's agricultural landscape

A vibrant transformation is underway in Jammu and Kashmir. Fields once barren or struggling with traditional crops are now awash in a sea of purple, as lavender cultivation takes root across the Union Territory (UT). This agricultural shift, aptly named the "Purple Revolution," rapidly positions J&K as a key player in India's aromatic crop industry. The journey of lavender in J&K began as an experimental crop but has since blossomed into a full-fledged agricultural movement. Dr Zabeer Ahmed, Director of **CSIR-IIIM** Jammu, explains the expansion: "What started in the Kashmir Valley has now spread to the temperate regions of the Jammu division, four neighbouring states, and even the high-altitude Union Territory of Ladakh. This widespread adoption is a testament to the crop's adaptability and economic potential." Central to this agricultural revolution is the proactive support from the J&K government. Recognising the potential of lavender as a high-value crop, authorities have implemented a comprehensive strategy to encourage its cultivation:
Source: Greaterkashmir

CSIR-IIIM Jammu inks MoU for value addition of aroma crops

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, and Agrovoltic Power Solutions Private Limited, Dehradun, (APSPL), have entered into a Memorandum of Understanding (MoU) to collaborate on the value addition of aromatic crops and extension of aromatic crops across North-Eastern region including Uttarakhand. According to a **CSIR- IIIM** spokesperson, the MoU signing ceremony at **CSIR-IIIM** Jammu today marked a significant milestone in the synergy between these two esteemed organizations. This collaboration aims to leverage **CSIR-IIIM's** expertise in natural product research and APSPL proficiency in the procurement of aromatic plants and providing the significant value addition, meeting market demands and enhance agricultural sustainability. It will also bring the close connect among the farmers of local region of UT of J&K and the aromatic industries, ultimately will enhance the already booming agri-startup and agri-economy of the region. In a statement at the event, Dr

Zabeer Ahmed, Director of **CSIR-IIIM,** expressed enthusiasm about the new partnership with APSPL.
Source: Dailyexcelsior

सीएसआईआर-सीरी में 72वां स्थापना दिवस: कार्यक्रम में वक्ताओं ने कहा "केवल सीएसआईआर प्रयोगशालाएं ही कर सकती हैं देश के समक्ष खड़ी चुनौतियों का समाधान"

भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के अधीन सेवारत **वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (सीएसआईआर)** की पिलानी स्थित राष्ट्रीय अनुसंधान प्रयोगशाला **सीएसआईआर-केंद्रीय इलेक्ट्रॉनिकी अभियांत्रिकी अनुसंधान संस्थान (सीएसआईआर-सीरी)** के 72वें स्थापना दिवस पर आज समारोह का आयोजन किया गया। इस अवसर पर प्रोफेसर चंद्रभास नारायण (निदेशक, आरजीसीबी) मुख्य अतिथि थे। डॉ. कन्नन श्रीनिवासन (निदेशक, **सीएसआईआर-सीएसएमसीआरआई,** भावनगर) एवं डॉ ज़बीर अहमद (निदेशक, **सीएसआईआर-आईआईआईएम**, जम्मू) समारोह के विशिष्ट अतिथि थे। आयोजन की अध्यक्षता **सीएसआईआर-सीरी** के निदेशक डॉ पी सी पंचारिया ने की। इस अवसर पर मुख्य अतिथि प्रोफेसर चंद्रभास नारायण ने अपने उद्बोधन में देश के औद्योगिक, कृषि एवं वैज्ञानिक विकास पर प्रकाश डालते हुए **सीरी** संस्थान द्वारा कोर इलेक्ट्रॉनिक्स के साथ अन्य विभिन्न क्षेत्रों में किए जा रहे शोध कार्यों की सराहना की। उन्होंने **सीरी** और आरजीसीबी के शोध सहयोग की संभावनाओं की चर्चा करते हुए संस्थान के वैज्ञानिकों को इस नवीन शोध यात्रा का सहभागी बनने के लिए आमंत्रित किया। **सीएसआईआर** प्रयोगशालाओं की शोध विविधताओं पर प्रकाश डालते हुए उन्होंने कहा कि देश के समक्ष खड़ी चुनौतियों का समाधान केवल **सीएसआईआर** प्रयोगशालाएँ ही कर सकती हैं, आईआईटी जैसे शीर्ष शिक्षण या शोध संस्थान नहीं।
Source: Samacharjhunjhunu24

CSIR-IIIM celebrates 83rd Foundation Day of CSIR

As part of **CSIR** 83rd Foundation Day celebrations which held at New Delhi, an open day was observed by the **Indian Institute of Integrative Medicine, (IIIM),** Jammu, in which more than 450 students and faculty members from 11 schools of Jammu region, including KV Gandhi Nagar, KV Chennani, GHSS Muthi, GHSS Miran Sahib, GBHS Bakshi Nagar, RRL High School, Presentation convent school, BVM Hiranagar, BVM Amphalla, APS Jammu Cantt, DAV Collegiate school, visited the institute. During the campus tour, students interacted with scientists and research scholars of the institute with great enthusiasm. They were also briefed about the ongoing R&D activities of the institute through demonstrations and made aware about the contributions and efforts being made towards Sustainable Development Goals and Viksit Bharat – 2047. **CSIR** is a premier research and development body of the country, which has 37 research laboratories, 39 outreach centres, 3 innovation centres & 5 units which spread all across the country. It

was established on 26th September, 1942, before independence, and Dr. Shanti Swarup Bhatnagar was the founder Director General.
Source: Brighterkashmir

IIIM organizes Blood Donation Camp

As part of "National Voluntary Blood Donation Day", which falls on 1st October, the **CSIR-Indian Institute of Integrative Medicine (IIIM),** Jammu, in collaboration with the Department of Blood Transfusion Medicine, Govt. Medical College, Jammu, organized a Blood Donation Camp in the campus of IIIM here today, in which more than 30 units of blood were collected by the team of GMC, Jammu. During the camp, staff members, research scholars and students actively participated and donated the blood for the welfare and safety of the humanity. Speaking on the occasion, Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Jammu, told that blood donation is one of the best ways to thank the humanity and God. Besides, saving precious lives of our fellow citizens during the tough time, it helps the donor by activating the bone marrow, lower blood pressure and other various health benefits. Further, appreciating the donors and team of medical and para-medical staff of IIIM and GMC, he said, blood donation is a noble cause; everyone should take part voluntarily. We will also organize such type of camps in the future for the wellbeing of humanity, he added.
Source: Jammulinksnews

IIIM celebrates 83rd CSIR Foundation Day

The **CSIR-Indian Institute of Integrative Medicine (IIIM)** today marked the 83rd Foundation Day of the **Council of Scientific and Industrial Research (CSIR)** with enthusiasm. **CSIR**, India's largest research and development organization, boasts a network of 38 national laboratories. A statement said that Dr Jitendra Sharma, Managing Director and Founder CEO of Andhra Pradesh MedTech Zone (AMTZ), Hyderabad, delivered the keynote lecture on "Medical Technology and Universal Health Coverage." He stressed the importance of affordable healthcare technologies and the need for collaborative research between **CSIR-IIIM** and AMTZ in the fields of medical devices and drug discovery. **CSIR-IIIM** Director Dr Zabeer Ahmed introduced Dr Sharma and highlighted AMTZ's rapid establishment as a key player in the medical devices sector. He noted that AMTZ was set up in just 342 days under Dr Sharma's leadership. During the event, employees who retired in the past year and staff members who completed 25 years of service were honoured with Samman Patra and mementoes.
Source: Dailyexcelsior

IIIM inks pact with HAPICO Industries, IGC for joint products development

The **CSIR-Indian Institute of Integrative Medicine (IIIM)** Jammu, and M/s HAPICO Industries Private Limited, IGC, have entered into a Memorandum of Understanding (MoU) to collaborate on products testing/quality control, quality assurance, and the joint development of novel healthcare and nutraceutical products. According to a **CSIR-IIIM** spokesperson, this collaboration aims to leverage **CSIR-IIIM's** expertise in quality control

and quality assurance and HAPICO's proficiency in the development of agri and nutraceutical products. Farmers in the local region of UT of J&K may also benefit from this collaboration, as it will contribute to the growing agri-economy of the UT. During the MoU signing event, Dr Zabeer Ahmed, Director of **CSIR-IIIM**, expressed keenness about the new partnership with HAPICO. "This collaboration perfectly aligns with **CSIR-IIIM's** mission to translate scientific discoveries into practical applications," he remarked, adding: "By leveraging HAPICO's industry expertise, we aim to harness the full potential of our resources, fostering both economic growth and environmental sustainability."
Source: Dailyexcelsior

IIIM ने CSIR का 83वां स्थापना दिवस मनाया

सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ इंटीग्रेटिव मेडिसिन (आईआईआईएम) ने आज **वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर**) के 83वें स्थापना दिवस को उत्साह के साथ मनाया। भारत का सबसे बड़ा अनुसंधान एवं विकास संगठन **सीएसआईआर** 38 राष्ट्रीय प्रयोगशालाओं के नेटवर्क का दावा करता है। एक बयान में कहा गया है कि हैदराबाद स्थित आंध्र प्रदेश मेडटेक जोन (एएमटीजेड) के प्रबंध निदेशक और संस्थापक सीईओ डॉ. जितेंद्र शर्मा ने "चिकित्सा प्रौद्योगिकी और सार्वभौमिक स्वास्थ्य कवरेज" पर मुख्य व्याख्यान दिया। उन्होंने किफायती स्वास्थ्य सेवा प्रौद्योगिकियों healthcare technologies के महत्व और चिकित्सा उपकरणों और दवा खोज के क्षेत्र में सीएसआईआर-आईआईआईएम और एएमटीजेड के बीच सहयोगी अनुसंधान की आवश्यकता पर जोर दिया। **सीएसआईआर-आईआईआईएम CSIR-IIIM** के निदेशक डॉ. ज़बीर अहमद ने डॉ. शर्मा का परिचय दिया और चिकित्सा उपकरण क्षेत्र में एक प्रमुख खिलाड़ी के रूप में एएमटीजेड की तेजी से स्थापना पर प्रकाश डाला। उन्होंने कहा कि डॉ. शर्मा के नेतृत्व में एएमटीजेड की स्थापना मात्र 342 दिनों में की गई थी।
Source: Jantaserishta

UT level Vigyan, Ganit, Computer Mela 2024 held

Bhartiya Shiksha Samiti J&K organised its 21st UT Level Vigyan, Ganit, Computer Mela at Bhartiya Vidya Mandir Ambphalla, from 16th to 18th October, 2024. The programme was inaugurated today by Dr. Diyansh Yadav IAS Commissioner Jammu Muncipal Corporation. In the august presence of Ved Bhushan Sharma, President BSS J&K, Satish Mittal - Vice President, Guest of honour Dr. Asha Chobhey Sr. Principal Scientist **CSIR - IIIM,** Senior Prant Samiti Members- Ajit Kumar harma,Retd. Joint Director Education, Vijay Kumar Sharma, Retd. CEO, Sh.Shiv Prasad Raina, P. L Pandita Treasurer, Samir Krishan Sapru Office Secretary, Pradeep Singh, Prant Sanyojak Vigyan, NareshSingh Sanyojak Ganit, & Kashi Nath Raina Pramukh Vedic Ganit, Munshi Ram, Secretary SMC, Suneet Raina, Ex- corporator JMC, Rina Bhagat SMC Member, Reena Rajput Principal BVM Senior Sec. School Ambphalla and all other Prant Samiti & School Management Committee members. Samir Krishan Sapru, Office Secretary presented the aim & theme of Vigyan Mela, welcomed & introduced the chief guest and other dignitaries with the

audience. The senior team of scientists, Dr. Asha Chobey, Dr. Amit Nargotra, Dr. P.N. Gupta, Dr. Prashan Mishra, Dr. Yogesh P Bhartkar, Dr. Vinod Kumar, Dr. Manu Khajuria from **CSIR-IIIM** Jammu under the patronage of Dr. Zabeer Ahmed Ji, Director **CSIR-IIIM** Jammu & Shivani Sharma, Pradeep Shrivastava, Rishi Kumar Sharma (Senior Mathematics Experts) where the judges for the programme.
Source: **Earlytimes**

IIIM launches Agarbatti production unit to support local entrepreneurs

CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu, inaugurated its new Agarbatti Production Unit, an initiative established under the Value Addition Vertical of **CSIR** Aroma Mission at here on Monday. The facility aims to create high-quality, value-added aromatic products and is dedicated to supporting local farmers, Self Help Groups (SHGs), women, youth, and budding startups in the region. The Agarbatti Production Unit inaugurated by Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Jammu, in the presence of Heads of Departments, Senior Controller of Administration, Controller of Finance & Accounts, and other senior officials of the institute. Dr. Ahmed spoke on the occasion that **CSIR-IIIM** is committed to advancing economic growth and livelihood opportunities in Jammu and Kashmir through sustainable business models and innovative agro-technological initiatives. The inauguration of this new facility under the **CSIR** Aroma Mission highlights the dedication of IIIM to advancing scientific research while also creating meaningful benefits for the local community. By establishing this production unit, the institute aims to empower local farmers, youth, and Self Help Groups (SHGs) to engage in and gain from the expanding aromatic industry.
Source: **Risingkashmir**

CSIR-IIIM Jammu celebrates Rashtriya Ekta Diwas with a Run for Unity

CSIR-Indian Institute of Integrative Medicine (IIIM) Jammu celebrated Rashtriya Ekta Diwas (National Unity Day) to honour Sardar Vallabhbhai Patel's legacy of integrity, unity, and national cohesion. Led by Director Dr. Zabeer Ahmed **CSIR-IIIM**, the **CSIR-IIIM** team took a pledge to promote diversity and harmony within the institution, reflecting Sardar Patel's vision of a united India. The day concluded with an enthusiastic Run for Unity, symbolizing the institute's commitment to solidarity and collective strength. During the event, Dr. Zabeer Ahmed addressed the staff and highlighted the importance of unity and purpose as key drivers of progress and collaboration within **CSIR-IIIM.** Dr. Ahmed noted that Sardar Patel's vision for a united India remains as significant today as ever. On Rashtriya Ekta Diwas**, CSIR-IIIM** pledged to uphold diversity, integrity, and a harmonious environment—values that are essential in both professional and societal spheres. The Run for Unity, held in the evening, drew enthusiastic participation from **CSIR-IIIM's** staff and students, who rallied together, embodying shared purpose and mutual respect. Participants gathered with energy and commitment, their steps symbolizing the drive for unity that underpins both the institute's mission and India's diverse society.
Source: **Risingkashmir**

Media Delegation From Hyderabad Visits Indian Institute Of Integrated Medicine-CSIR

A media delegation from Hyderabad visited **CSIR- Indian Institute of Integrated Medicine (IIIM)** and **CSIR-IIIM** fields at Bonera, Pulwama dist today. Dr.Shahid Rasool, Senior Scientist & other scientists of **IIIM-CSIR** welcomed the media delegation and shared the vision of the Institute. While interacting with delegation, Dr.Shahid Rasool said **IIIM** is to discover new drugs and therapeutic approaches from Natural Products, both of plant and microbial origin, enabled by biotechnology, to develop technologies, drugs and products of high value for the national and international markets. The cultivation of different Tulip varieties was successfully initiated at **CSIR-IIIM** fields at Bonera, Pulwama dist, under **CSIR** Floriculture Mission. The cultivation of the highly valued ornamental crop marks a significant achievement as it is the first time that **CSIR IIIM's** Field Station in Bonera has undertaken the cultivation of multiple Tulip cultivars. Under the initiative, eight distinct varieties of Tulips are enchantingly blooming in the sprawling Field Station, adorning the landscape with their vibrant hues, he said.

Source: Kashmirobserver

IIIM celebrates Ayurveda Day

CSIR-Indian Institute of Integrative Medicine (IIIM), celebrated the 9th Ayurveda Day, hosting an Ayurveda medical camp at its Jammu campus. The camp was organized by Regional Ayurveda Research Institute (RARI), Bantalab, Jammu, led by Dr Aditya Shah and his team. The event was inaugurated by Dr Prabodh Kumar Trivedi, Director, **CSIR-CIMAP** Lucknow & Dr Sudesh Kumar Yadav, Director, **CSIR-IHBT** along with, Dr Zabeer Ahmed, Director, **CSIR-IIIM** Jammu who highlighted the significance of Ayurveda in promoting holistic health. The medical camp provided valuable health consultations and treatments, showcasing the rich heritage and scientific origin of Ayurvedic practices. In a remarkable initiative to foster collaboration between scientists and students, 40 Ayurveda students from the Government Ayurvedic Medical College (GAMC) visited the **CSIR-IIIM**. They participated in a "Students: Scientist Connect" program, which allowed them to engage with various research areas of the institute and gain insights in to ongoing research in the field of Ayurveda.

Source: Dailyexcelsior

IIIM organizes One Week One Theme of Agri-Nutri Biotech

The **CSIR-Indian Institute of Integrative Medicine (IIIM),** Jammu, kicked off its "One Week, One Theme" (OWOT) program under the Agri-Nutri Biotech (ANB) theme, aiming to advance aromatic and floriculture crop development across India. The event seeks to catalyze partnerships, promote technology transfer, and inspire new ventures in the sector. Dr. Prabodh Kumar Trivedi, Theme Director (ANB) and Director, **CSIR-CIMAP** Lucknow, graced the occasion as the Chief Guest, while Dr. Sudesh Kumar Yadav, Director, **CSIR-IHBT**, Palampur, was the Guest of Honor. The two-day event, which concludes on November 7, began with the symbolic planting of saplings, led by the dignitaries and Dr. Zabeer Ahmed, Director of **CSIR-IIIM,** in support of the "Ek Ped Maa

Ke Naam" initiative by the Government of India. Dr. Trivedi emphasized the transformative role of innovation in uplifting rural communities, pointing out the economic potential of value-added crops like lavender. He stressed the impact of ANB projects in driving agricultural advancements. Meanwhile, Dr. Yadav highlighted the benefits of the Purple and Golden Revolutions for the bio-economy of the Himalayan region, underscoring the event's importance as a hub for knowledge exchange and collaboration.
Source: Risingkashmir

IIIM organized Curtain Raiser and Outreach Event for IISF

The **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu, successfully organized the Curtain Raiser and Outreach Event of the 10th India International Science Festival (IISF) Outreach Program 2024. The event showcased a series of inspiring and engaging activities, setting the stage for the 10th IISF-2024, scheduled to take place at IIT-Guwahati. Prof. Rajni Kant, Patron of VIBHA (J&K) and Former Vice Chancellor of Rabindranath Tagore University, Bhopal was the Chief Guest besides Prof. Pawanesh Abrol, Vice President of VIBHA (J&K) was the Guest of Honour, on the occasion. Dr Zabeer Ahmed, Director, **CSIR-IIIM,** presided over the function. In his address, Chief Guest, Prof. Rajni Kant emphasizing the role of science and technology in solving societal challenges. He highlighted the need for innovative thinking to address various societal issues through the application of science and technology. Prof. Kant shared his rich experiences and thought-provoking insights, presenting various interesting ideas to inspire students and enhance their belief systems.
Source: Jammulinksnews

Cultivating Potential: Ladakh's Blossoming Future with Medicinal Plants

In a significant move to boost the agricultural potential of Ladakh, the **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM)** has partnered with the Ladakh Autonomous Hill Development Council (LAHDC) to cultivate medicinal, aromatic, and flowering plants. Announced on Tuesday, the agreement, signed by **CSIR-IIIM** Director Dr. Zabeer Ahmed and LAHDC's Executive Councilor Stanzin Chosphel, will see the establishment of a demonstration farm to test these economically vital crops. Emphasizing agri-entrepreneurship, the initiative aims to integrate these crops into Ladakh's farming system, promoting industrially-important agriculture for local farmers, thereby fostering the socio-economic growth of the region.
Source: Devdiscourse

CSIR-IIIM, LAHDC to set up demonstration Farm for MAPs

To promote medicinal, aromatic and flowering plants cultivation in Ladakh, the **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** the **Council of Scientific and Industrial Research (CSIR)** signed a Memorandum of Understanding (MoU) with the Ladakh Autonomous Hill Development Council (LAHDC) to set up a demonstration Farm for MAPs cultivation at Palam in Leh.

The MoU was signed by Dr. Zabeer Ahmed, Director from **CSIR-IIIM** side and Stanzin Chosphel, Executive Councillor (Agriculture) for and on behalf of LAHDC, Leh in the presence of Tashi Gyalson, Chairman/Chief Executive Councillor, LAHDC. Speaking on the occasion, Gyalson emphasized that besides implementing the objectives of societal mission programmes of **CSIR**, the job-oriented training and skill development to the local farmers and unemployed youths should also be taken up on priority by **CSIR-IIIM,** which would have great bearing on the income generation and employment. During the signing event, Dr. Zabeer Ahmed highlighted ongoing initiatives of **CSIR-IIIM** and the other labs of **CSIR** under Agri-Nutri Biotech theme to support the region's upliftment through scientific advancements in agriculture and cultivation of Medicinal, Aromatic and flowering crops.
Source: Dailyexcelsior

Indian Red Cross Society, holds First-Aid Awareness Program

The Indian Red Cross Society, J&K today on the 14th of November, 2024 organized a comprehensive First-Aid Awareness Program at the CSIR-Indian **Institute of Integrative Medicine (IIIM),** Jammu. The event, which aimed at enhancing safety knowledge and emergency response skills among **IIIM** staff, scholars and researchers, received an enthusiastic response from the participants. The program began with underscoring the importance of first-aid training in workplaces and research environments. "Accidents and medical emergencies can happen at any time, even in well-regulated environments like research institutes. Having the right knowledge and confidence to respond quickly can save lives, and we are committed to making this vital skill accessible to all". Dr. Manpreet Kaur, Medical Officer and Ms. Vironica Marwah, Field Officer from the Indian Red Cross Society, J&K conducted the session, covering essential first-aid techniques, including CPR (Cardiopulmonary Resuscitation), managing burns, handling fractures, controlling bleeding, and providing immediate care for common workplace injuries. The hands-on session included practical demonstrations and interactive discussions, where participants had the opportunity to practice key techniques under expert supervision.
Source: Earlytimes

डॉ. जितेंद्र आज CSIR हेल्थकेयर थीम कॉन्क्लेव का उद्घाटन करेंगे

केंद्रीय विज्ञान एवं प्रौद्योगिकी राज्य मंत्री **Union Minister of State (**स्वतंत्र प्रभार**);** प्रधानमंत्री कार्यालय**,** कार्मिक**,** लोक शिकायत**,** पेंशन**,** परमाणु ऊर्जा और अंतरिक्ष राज्य मंत्री डॉ. जितेंद्र सिंह कल श्रीनगर के शेर-ए-कश्मीर अंतर्राष्ट्रीय कन्वेंशन सेंटर (एसकेआईसीसी) में **सीएसआईआर** हेल्थकेयर थीम कॉन्क्लेव का उद्घाटन करेंगे। 16-17 नवंबर**,** 2024 तक चलने वाले इस दो दिवसीय सम्मेलन का उद्घाटन समारोह शनिवार को सुबह 11:00 बजे से दोपहर 1:00 बजे तक होगा। जम्मू-कश्मीर सरकार के खाद्य**,** नागरिक आपूर्ति और उपभोक्ता मामले**,** परिवहन**,** विज्ञान और प्रौद्योगिकी**,** सूचना प्रौद्योगिकी**,** युवा सेवा और खेल तथा एआरआई और प्रशिक्षण विभाग के मंत्री सतीश शर्मा और कृषि उत्पादन**,** ग्रामीण

विकास, पंचायती राज, सहकारिता और चुनाव विभाग के मंत्री जाविद अहमद डार मुख्य अतिथि के रूप में उपस्थित रहेंगे। यह जानकारी **सीएसआईआर-आईआईआईएम**, जम्मू के निदेशक डॉ. ज़बीर अहमद ने दी, जिनकी देखरेख में वैज्ञानिक और औद्योगिक अनुसंधान परिषद के संरक्षण में यह कार्यक्रम आयोजित किया जा रहा है। आज यहां मीडियाकर्मियों से बात करते हुए डॉ. ज़बीर अहमद ने कहा कि सम्मेलन एक सप्ताह एक थीम (ओडब्ल्यूओटी) अभियान के तहत आयोजित किया जा रहा है, जिसका मुख्य उद्देश्य स्वास्थ्य सेवा क्षेत्र में नवाचार और स्टार्टअप पारिस्थितिकी तंत्र को बढ़ावा देना है।

Source: Jantaserishta

IIIM celebrates Janjatiya Gourav Divas

The **CSIR-Indian Institute of Integrative Medicine**, Jammu, has proudly celebrated the Janjatiya Gourav Divas here today. As part of the celebrations, the institute organized an educational tour for about 60 tribal students drawn from the various divisions of Jammu region. The students were exposed to various scientific activities at the institute, providing them with a real-time, hands-on experience in basic research laboratories. During the event, lectures on the scientific and career progressions were also delivered by Dr. Saurabh Saran, Principal Scientist and Dr. Deepika Singh, Principal Scientist and Head, QMI. As Keynote speaker, Dr Javaid Rahi, a noted tribal scholar, explained the genealogy and development of tribal culture and societies through the ages. He emphasized the importance of preserving indigenous ways of life and culture, encouraging students to take pride in their identity and achieve their true potential. He also exhorted the students to preserve the traditional knowledge available within the tribal groups so that the coming generations are not deprived of this vast knowledge base. On this occasion, Dr Zabeer Ahmed, Director of **CSIR-IIIM,** welcomed the tribal students and briefed them about the institute's mandate and activities, emphasizing the importance of their visit for gaining knowledge and awareness.

Source: Jammulinksnews

A new leaf: Unlocking cannabis' therapeutic value

grows in vast swathes of Jammu and Kashmir naturally, as in many other parts of country, thanks to favourable climatic conditions. Earlier this year, a study by scientists at the **Council of Scientific and Industrial Research-Indian Institute of Integrative Medicine (CSIR-IIIM)** in Jammu highlighted cannabis' potential to play a crucial role in the country's battle against the growing threat of antibiotic resistance. Its research uncovered that phytocannabinoids, a group of compounds derived from the cannabis plant, possess previously unrecognised antibiotic properties. The findings have opened the door to the exploration of cannabis' therapeutic potential, particularly when the world is grappling with the growing challenge of drug-resistant bacteria, viruses, fungi, and other parasites. In fact, a study published by The Lancet this year found that between 3 lakh and 10.4 lakh people died in India in 2019 as a result of bacterial antimicrobial resistance, a condition where pathogenic bacteria no longer respond to antibiotics. The report also

estimated that by 2050, antibiotic-resistant infections could lead to more than 39 crore deaths globally, either directly or indirectly.
Source: **Frontline.thehindu**

IIIM holds Town Official Language Implementation Committee Jammu Meeting

The second half-yearly meeting of the Town Official Language Implementation Committee (TOLIC), Jammu for the year 2024-25 was held on Wednesday at **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu. Dr. Zabeer Ahmed, Director, **CSIR-IIIM** and Chairman, TOLIC, Jammu chaired the meeting. The objective of this meeting was to review the performance of Hindi related works being carried out in the TOLIC during the preceding two quarters i.e. April-June, 2024 and July-September, 2024. Speaking on the occasion, Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** Jammu and Chairman TOLIC emphasized the significant role of Hindi Language which represents the rich ethos of our nation. He stressed upon all the members to actively participate in the meetings of TOLIC and contribute to the annual contribution of TOLIC. Dr. Ahmed highlighted and appreciated the progress made by all the members and organization of TOLIC's, Jammu during the past six months. Further, he conveyed optimism about expanding its activities in the future while promising to take care of training and workshops to be conducted at institutional level. The decision was unanimously well regarded. Earlier, Sanjay Sharma, Member-Secretary, TOLIC, Jammu welcomed all the representatives of the various departments and commenced the meeting with a review of various Central Government offices located in Jammu region.
Source: **Jammulinksnews**

One-day Demonstration/ Data Acquisition programme held at Pinjora & Allowpora

CSIR-IIIM Jammu in collaboration with Krishi Vigyan Kendra Shopian today conducted a one day demonstration cum data acquisition programme at Pinjora and Allowpora villages of Shopian district. The programme was attended by a team of scientists from both the collaborating organizations, expert and project leader Dr. Shahid Rasool, Senior Scientist, **CSIR-IIIM** Jammu, Dr. Zaffar Afroz Badri, Senior Scientist & Head, KVK-Shopian, Dr. Bilal Ahmad Pandit, Scientist Horticulture, KVK- Shopian, Dr. Pradeep Rajan, Principal Scientist **CSIR-CMERI** Ludhiana Dr. Dev Shree Kumar, Principal Scientist, **CSIR-National Aerospace Laboratories,** Bangalore and their team and more than fifty students from Horticulture background. At the outset the expert and team leader, Dr. Shahid Rasool deliberated upon the use of Drone in the orchards systems for disease forecasting and its timely management with minimum use of inputs and keeping the disease incidence below economic threshold level. The programme was conducted under the aegis of the project '**CSIR** Mission on Region Specific Smart Agro Technologies for Enhancing Soil and Plant health.'
Source: **Jammulinksnews**

Dr. Jitendra Singh to Inaugurate CSIR HealthCare Theme Conclave tomorrow at Srinagar

Dr. Jitendra Singh, Hon'ble Union Minister of State (Independent Charge) for Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space, Vice President of **CSIR** and Chief Guest of the function, will Inaugurate the **CSIR** HealthCare Theme Conclave at Sher-e-Kashmir International Convention Centre (SKICC), Srinagar, tomorrow. The Inaugural function of this two-day conclave from 16-17 November, 2024, will be held from 11:00 am to 1:00 pm on 16-November-2024. Sh. Satish Sharma, Hon'ble Cabinet Minister, J&K Govt. Minister for Food, Civil Supplies & Consumer Affairs, Transport, Science & Technology, Information Technology, Youth Services & Sports and ARI & Trainings Departments of J&K will be present as Guest of Honour. Dr. N. Kalaiselvi Director General, **CSIR** & Secretary DSIR would also grace the function along with Sh. G.N. Singh, Advisor to Hon'ble Chief Minister, UP & Ex Drug Controller General, Dr. Vinay K. Nandicoori, Director, CSIR-CCMB, Dr. D. Srinivasa Reddy, Director, **CSIR-IICT**, Dr Vibha Tandon, Director, **CSIR-IICB** and Dr. Zabeer Ahmed, Director, **CSIR-IIIM.**
Source: BrighterKashmir

CSIR-IIIM Jammu celebrates 84th Foundation Day

The **CSIR-Indian Institute of Integrative Medicine (IIIM**), Jammu, marked its 84th Foundation Day with fervor, commemorating its legacy since its establishment as the Drug Research Laboratory by Ram Nath Chopra in pre-independence India. Dr Manoj Kumar Dhar, Director Academy of Scientific and Innovative Research (AcSIR) Ghaziabad and ex Vice-Chancellor of University of Jammu was the chief guest on the occasion. He delivered the Foundation Day lecture on "Creating an Ecosystem to Produce NextGen Science Leaders", wherein he delved upon various opportunities available to the budding young science leaders, as well as the requirement for grooming and mentorship to rise up to the challenges to become leaders of the Viksit Bharat 2047. Dr Nirpendra Chauhan, Director, Centre for Aromatic Plants, Dehradun, was the guest of honour. In his address, he dealt with the advancement of MAPs cultivation and opportunities for collaboration between both the institutions.
Director **CSIR-IIIM**, Dr Zabeer Ahmed, highlighted the Institute's achievements over the past year, including an increase in patent outputs, hosting significant conferences, and organizing a Start-up Expo inaugurated by India's Vice President. Certificates of recognition were presented for notable research accomplishments, including patents in drug discovery and process innovation for combating diseases like Alzheimer's, cancer, and viral infections.
Source: Dailyexcelsior

CSIR-IIIM Lavender kit included in souvenir at conference of CSs

CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, today informed that its Lavender kit, developed under the **CSIR** Aroma Mission Phase – III, was showcased in the souvenir at the 4th National Conference of Chief Secretaries. The event, chaired by the Prime Minister Narendra Modi in New Delhi, highlighted India's progress in innovation and sustainability. The Lavender kit is designed to provide a refreshing and

revitalizing experience. It includes a selection of aroma products such as Perfume, Roll-on Perfume, Agarbatti, a dried Lavender flower packet, and a car diffuser. Each product is crafted to offer practical benefits while promoting relaxation, well-being, and a harmonious atmosphere. Giving the details of Aroma Mission activities, Dr Zabeer Ahmed, Director, **CSIR-IIIM** Jammu, expressed pride in this achievement, emphasizing that the recognition of the Lavender Kit at such a prestigious platform reflects the institute's commitment to scientific innovation and sustainability. Dr Ahmed further highlighted that the Purple Revolution is not merely about lavender cultivation but also about empowering farmers, startups, and entrepreneurs through the intervention of science and technology. The CSIR Aroma Mission was launched by Dr Jitendra Singh, Union Minister of State (I/C) for Science & Technology, and Minister of State for PMO, Personnel, Public Grievances, Pensions, Atomic Energy, and Space and Vice President, **CSIR**.

Source: Dailyexcelsior

State Level Camp of Vidyarthi Vigyan Manthan concludes

The State Level Camp (SLC) of Vidyarthi Vigyan Manthan (VVM) 2024-25, India's largest digital science talent search program concluded at RRL High School, Jammu. The prize distribution and valedictory ceremony were held at the **CSIR-IIIM** Jammu Auditorium, marking the culmination of a one-day camp. The event saw the participation of 131 students who excelled in the first-level exam held in October 2024, selected from over 2,500 participants. These students showcased their scientific aptitude in the State Level Camp, with the event inaugurated by Dr. Zabeer Ahmed, Director, **CSIR-IIIM** Jammu, as the chief guest. Other dignitaries included Prof. B.N. Tripathi, Vice Chancellor, SKUAST-J, and Prof. Rajnikant, Patron, VP, J&K, among others. The event featured sessions on Vidyarthi Vigyan Manthan, reports on camp activities, and speeches from key figures. Dr. Zabeer Ahmed emphasized the importance of fostering scientific curiosity and critical thinking in students, while Prof. Tripathi highlighted the need for young minds to strengthen India's scientific future. The camp tested students through various rounds, including the Application Oriented Scholastic Aptitude Test (AOSAT) and an Experimental Skill Test (EST). A total of 18 students were declared winners, with 12 selected to represent Jammu & Kashmir in the national camp scheduled for May 2025.

Source: Dailyexcelsior

CSIR-IIIM Jammu hosts successful Hindi workshop to enhance linguistic skills and promote national language awareness

In order to promote awareness about the national language in the government institutions, **CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM),** Jammu, successfully organized one day Hindi Workshop in Dr. C.K. Atal Auditorium here today. The workshop was inaugurated by Dr. Zabeer Ahmed, Director, **CSIR-IIIM.** The workshop aimed to foster a deeper connection and knowledge of Hindi and enhance the linguistic skills of its staff and other stakeholders. The workshop marked another significant step in **CSIR-IIIM's** commitment to exercising Hindi in official, academic, and day-to-day work of the

institution. Speaking on the occasion, Dr. Zabeer Ahmed, Director, **CSIR-IIIM,** emphasized the importance of Hindi as a medium to bridge diverse communities and enhance inclusivity in professional and academic domains. Further, Dr. Ahmed reiterated **CSIR-IIIM's** dedication to integrating Hindi into day-to-day operations and encouraged all attendees to actively participate in such initiatives. Prof. (Dr.) Rajni Bala, HoD, Department of Hindi, University of Jammu, graced the occasion as the key note speaker. Her enlightening session on "आज के दौर में हिन्दी का वर्चस्व" delved into the growing prominence of Hindi on global platforms. She highlighted how Hindi not only serves as a unifying language within India but also holds immense potential to connect with audiences worldwide.

Source: Jkmonitor

CSIR JIGYASA EPIC Hackathon 2024

The finale event of the **CSIR** Jigyasa EPIC Hackathon was organised on December 20, 2024 at the **CSIR-IGIB,** South Campus, New Delhi. The event was inaugurated by Dr. Souvik Maiti, Director, **CSIR-IGIB**. Dr. Geethavani Rayasam (Head, **CSIR- HRDG),** Dr. D. Shailaja (Chief Scientist, **CSIR-IICT)** and Mr. Anurag Mishra (Head,Cipla Foundation) were among the dignitaries. The event started with the poster presentation of the EPIC Hackathon students who had completed their Summer internship at **CSIR** laboratories across India under the EPIC program. Total 35 teams and 48 students had participated in two-month summer internship at 18 **CSIR** laboratories across the country and out of which 29 students presented their research projects done during the summer internship. At the end of the event, the winners of the **CSIR** EPIC Hackathon were felicitated with prizes and certificates. Workshop on pitch deck and Innovation & Entrepreneurship were also organized for the participants. The winner of **CSIR** Jigyasa EPIC Hackathon 2024 is Mr. Japteg Singh Bamrah, who received a cash prize of Rs. 50,000 for his project Solar-Mech Engine. He did his internship at **CSIR-IIIM**, Jammu. Mr. Uddhav Gupta& Mr. Udbhav Bandhani were the first runner-ups. They did their internship at **CSIR-CSIO,** Chandigarh and won a cash prize of Rs. 30,000 for their joint submission titled "Drishyamitram- Illuminating walkways for visually challenged". Ms. Shreya Vinod and Mr. Soyal Parijawon the third prize of Rs. 10,000 each for their innovative works.

Source: Pib

Go Back

CSIR-Indian Institute of Pertroleum (CSIR-IIP)

EIL celebrates R&D Day

Engineers India Limited (EIL) radiated enthusiasm during its 2nd 'R&D Day' at EIL Office Complex, Gurugram on Friday. EIL's C&MD Vartika Shukla graced the inaugural session as chief guest along with functional directors with the spirited participation of senior officials and employees of EIL. Esteemed guests including EIL's Director (**CSIR-IIP)** Dr Harender Singh Bisht, Indian Oil's (Director- Planning & BD) Sujoy Chaudhury, HPCL's ED (R&D) VK Maheswari, BPCL's Head (R&D) Dr Ravi Kumar, HPCL's CGM (R&D) S Shriram and **CSIR-NCL** Dr Thirumalaiswamy Raja among other guests from the industry graced the occasion. The event was illuminated by inspiring words from EIL C&MD and luminaries participated in the event focusing on future perspectives.
Source: Psuwatch

एसजीआरआरयू और आई.आई.पी. मिलकर संवारेंगे भविष्य

श्री गुरु राम राय विश्वविद्यालय (एसजीआरआरयू) एवम् **सी.एस.आई.आर. इंडियन इंस्टीट्यूट ऑफ पेट्रोलियम** के बीच एमओयू साइन हुआ। एमओयू के बाद दोनों संस्थानों के छात्र-छात्राओं को उच्च शिक्षा में हो रहे कौशल प्रशिक्षण तथा शोध एवम् अनुसंधानों को जानने समझने का अवसर मिलेगा।. इस अवसर पर आई. आई. पी के निदेशक डॉ. हरेन्द्र सिंह बिष्ट, व्यवसाय विकास प्रमुख डॉ अतुल रंजन एवम् श्री गुरु राम राय विश्वविद्यालय की ओर से कुलपति डॉ. यशबीर दीवान, कुलसचिव डॉ. अजय कुमार खण्डूड़ी, आई.क्यू.ए.सी. निदेशक डॉ सुमन विज, डीन शोध डॉ. लौकेश गंभीर, डीन, स्कूल ऑफ बेसिक एंड एप्लाइड साइंसेज, डॉ. अरुण कुमार, विभागाध्यक्ष रसायन विज्ञान, डॉ. शीतल त्यागी आदि उपस्थित रहे
Source: Shininguttarakhandnews

Council of Scientific &Industrial Research(CSIR)-Indian Institute of Petroleum (IIP)celebrated its 65th Foundation Day

Council of Scientific & Industrial Research (CSIR)-Indian Institute of Petroleum(IIP), Dehradun, celebrated its 65th Foundation Day on its campus today. It is a premier R&D organization established on 14th April 1960. Padma Bhushan DrV K Saraswat, Hon'ble Member NITI Aayog and Mentor **CSIR-IIP,** graced the occasion as the Chief Guest. The celebration marked the institute's rich history of pioneering research, innovative technologies, and industry collaborations. Dr V.K. Saraswat while speaking on the

occasion congratulated the team **CSIR-IIP** and conveyed his best wishes on the 65thFoundation Day of the Institute. He also delivered a lecture on the "Energy Transition in India". In his talk,Dr Saraswat emphasized the cleaner and carbon-free technologies that will drive the world in the near future. He also invited scientists to undertake challenging research in e-Methanol and Green Hydrogen. The takeaway from the talk could be summarized as follows: For Indian technologies to remain competent around the globe, we need to start working on carbon neutrality rigorously.
Source: Pib

Airbus & CSIR-IIP ink pact for green aviation

French aviation biggie Airbus has inked a memorandum of understanding (MoU) with **CSIR-Indian Institute of Petroleum (CSIR-IIP)** to develop new technology pathways as well as test and qualify indigenous sustainable aviation fuel (SAF) in India. The collaboration will address the Indian aerospace industry's decarbonisation ambitions by supporting SAF production and commercialisation, using a new HEFA technology pathway and locally sourced feedstocks.
Source: Times of India

Two Dornier IAF aircraft to fly on alternative fuel at RD Parade flypast

At the Republic Day flypast, two Dornier aircraft will take to the skies in historic 'Tangail formation' to showcase not only the Indian Air Force's (IAF's) attempt to cherish the successful military strategy that outfoxed Pakistan during the 1971 war by paradropping a battalion into the hostile territory but also its willingness to embrace an eco-friendly practice. Both the Dornier 228s will be flying on a type of sustainable aviation fuel (SAF) produced by the **Council of Scientific and Industrial Research's (CSIR's)** Indian Institute of Petroleum (IIP), indicating that the IAF is willing to join the government's efforts to align with the global agenda of having net zero aviation by 2050, IAF sources told businessline.
Source: The Hindu Business Line

विभिन्न देशों के 40 भारतीय प्रवासी युवाओं ने देखी ऊर्जा क्षेत्र में भारत की प्रगति यात्रा

भारत सरकार के भारत को जानो कार्यक्रम (केआईपी) के एक अंश के रूप में विभिन्न देशों के भारतीय मूल के 40 प्रवासी युवाओं ने सोमवार को **सीएसआईआर-आईआईपी** का दौरा किया। वर्ष 2003-04 में प्रारंभ भारत को जानो कार्यक्रम भारत सरकार के विदेश मंत्रालय की एक पहल है। इसका उद्देश्य 21 से 35 वर्ष के आयु वर्ग के प्रवासी भारतीय युवाओं को अपनी मातृभूमि के साथ जुड़ाव की भावना का अनुभव कराना, उन्हें भारत में हो रहे अभिनव परिवर्तनों से प्रेरित करना और उन्हें समकालीन भारतीय कला, विरासत, संस्कृति, अर्थव्यवस्था, नवाचार, विज्ञान और प्रौद्योगिकी आदि के विभिन्न पहलुओं से अवगत कराना है।
Source: Dailyhunt

CSIR-Indian Institute of Petroleum signs MoU with UCOST to deploy the Pine Needles-based fuel-making technology in Champawat

Under the directions and guidance of Hon'ble Chief Minister Shri Pushkar Singh Dhami, an MoU was signed on Tuesday, 5th March, between **CSIR Indian Institute of Petroleum**, Dehradun and UCOST under the aegis of the "Adarsh Champawat" mission. On this occasion, Dr Harendra Singh Bisht, Director of the Indian Institute of Petroleum and Professor Durgesh Pant, Director General of UCOST, signed the MoU documents and inaugurated a historic project on deploying the technology of making fuel from Pine Needles in Champawat. Under this agreement, the **CSIR - Indian Institute of Petroleum** will implement two major technologies at the grassroots level in Champawat. The selected technologies include a briquetting unit with a capacity of 50 kg per hour based on Pine Needles and 500 units of Improved Cookstoves for rural households. An extended field trial study will be conducted regarding energy conservation and its environmental impact. The briquetting unit will be established in the Energy Park in Champawat as a part of the Women Empowerment initiative. The briquettes produced will be used as fuel in homes and local industries.
Source: **Pib**

CSIR-IIP hosts DRDO Scientists

As a part of the Mandatory Specialized Training on Essential Management Skills (STEMS-21.3), around 40 Scientist G rank officials from different laboratories of DRDO visited **CSIR-IIP** on 6th March 2024. The Institute of Technology Management, Mussoorie – DRDO organized the visit. The objective of the visit was to provide the participants with valuable insights into the processes and innovative technologies involved in developing and refining petrochemical/chemical products. Director **CSIR-IIP,** Dr H.S. Bisht, formally welcomed the participants and presented a brief overview of the Institute, covering its mandate and vision. Dr. Sanat Kumar, Head of Research Planning and Project Management, presented the past and present research initiatives undertaken by **CSIR-IIP** and highlighted various success stories of the Institute. The participants then visited the Advanced Gas Separation laboratory, Domestic Combustion Laboratory, Bio-Jet fuel pilot plant, and Waste plastics to fuel pilot plants. They interacted with the scientists and technical personnel.
Source: **Pib**

Airbus and SDC Foundation Launched Plastic Bank In Dehradun

Dehradun-based Social Development for Communities (SDC) Foundation launched its revolutionary Plastic Bank Project. With a fervent spirit and unwavering determination, they rallied government officials, educators, businesses, and citizens alike to join forces in a noble endeavor to combat plastic Pollution in the city. As the Plastic Banks flourished, so did the spirit of collaboration and innovation. Dr. Harendra Bisht, Director of **CSIR-IIP,** shed light on the transformative potential of plastic waste, igniting a spark of optimism among participants. Gaurav Kumar, Commissioner Nagar Nigam Dehradun, rallied citizens to action, emphasizing the urgent need for collective effort in waste segregation.
Source: Himbumail

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Source: Pib

एसजीआरआरयू और आई.आई.पी. मिलकर संवारेंगे भविष्य

श्री गुरु राम राय विश्वविद्यालय **(**एसजीआरआरयू**)** एवम् **सी.एस.आई.आर. इंडियन इंस्टीट्यूट ऑफ पेट्रोलियम के** बीच एमओयू साइन हुआ। एमओयू के बाद दोनों संस्थानों के छात्र-छात्राओं को उच्च शिक्षा में हो रहे कौशल प्रशिक्षण तथा शोध एवम् अनुसंधानों को जानने समझने का अवसर मिलेगा।**.** इस अवसर पर आई**.** आई**.** पी के निदेशक डॉ**.** हरेन्द्र सिंह बिष्ट**,** व्यवसाय विकास प्रमुख डॉ अतुल रंजन एवम् श्री गुरु राम राय विश्वविद्यालय की ओर से कुलपति डॉ**.** यशबीर दीवान**,** कुलसचिव डॉ**.** अजय कुमार खण्डूड़ी**,** आई**.**क्यू**.**ए**.**सी**.** निदेशक डॉ सुमन विज**,** डीन शोध डॉ**.** लौकेश गंभीर**,** डीन**,** स्कूल ऑफ बेसिक एंड एप्लाइड साइंसेज**,** डॉ**.** अरुण कुमार**,** विभागाध्यक्ष रसायन विज्ञान**,** डॉ**.** शीतल त्यागी आदि उपस्थित रहे

Source: Shininguttarakhandnews

Council of Scientific and Industrial Research (CSIR)- Indian Institute of Petroleum (IIP) celebrates National Technology Day

Council of Scientific and Industrial Research (CSIR)- Indian Institute of Petroleum (IIP) celebrated the 'National Technology Day' on 10th May 2024. India celebrates its National Technology Day on 11th May each year to signify the technical prowess India achieved . It also inspires young minds and creates awareness of the technological supremacy of the country. Dr. D.K. Aswal, Director, Health, Safety and Environment Group, BARC, Mumbai graced the celebration. He delivered a lecture on “Nuclear Energy for a Clean Environment and a Sustainable Future”. In his lecture, Dr Aswal clarified various myths associated with the safety hazards and use of nuclear radiation. Dr Aswal emphasized that Nuclear energy is far more safe and more economical than coal-based energy.

Source: Pib

The 3rd Indian Analytical Congress (IAC) inaugurated at the Council of Scientific and Industrial Research-Indian Institute of Petroleum (CSIR-IIP) Dehradun

The 3rd Indian Analytical Congress (IAC) was inaugurated today at the **Council of Scientific and Industrial Research-Indian Institute of Petroleum (CSIR-IIP)** in Dehradun. It is a three-day International Conference cum Exhibition IAC-2024 being jointly organized by **CSIR-IIP** and the Indian Society of Analytical Scientists (ISAS-Delhi Chapter). "Role of Science and Technology in Green Transitions" is the theme of conference. Prof. S.K.Mehta, Vice-Chancellor, Ladakh University addressing the inaugural session presented an overview of the role of newly developed educational infrastructure in Ladakh. He also showcased the advanced research facilities recently developed at Ladakh University through the research funds obtained from DST, DBT, and other funding agencies.

Source: Pib

The Council of Scientific and Industrial Research – Indian Institute of Petroleum successfully concluded "One Week, One Theme" Campaign on Energy and Energy Devices Theme

The **Council of Scientific and Industrial Research - Indian Institute of Petroleum (CSIR-IIP)** successfully concluded the "One Week, One Theme" campaign, which focused on the pivotal theme of Energy and Energy Devices (EED) today at IIP Dedradun. Following the success of the 'One Week One Lab' (OWOL) program conducted by all CSIR laboratories in 2023, Dr Jitendra Singh, Hon'ble Minister (S&T), proposed the observance of the 'One Week One Theme' event in 2024. The OWOT event aims to showcase innovative approaches and technological advancements developed by CSIR laboratories focused on each of the eight themes of CSIR. Each Theme's road map and activities focus on substantial contributions toward public, private, strategic, and societal benefits.

Source: Pib

IIP's 'One Week, One Theme' Campaign on Energy & Energy Devices Theme concludes

The **Council of Scientific and Industrial Research – Indian Institute of Petroleum (CSIR-IIP)** witnessed the successful conclusion of its "One Week, One Theme" campaign, which focused on the pivotal Theme of Energy and Energy Devices (EED). Rajiv Agrawal, Director, Technical, Engineers India Ltd., was the Chief Guest. Dr MO Garg, President, Petchem R&D, Reliance Industries Ltd., was the Guest of Honour. The OWOT event aims to showcase innovative approaches and technological advancements developed by **CSIR** laboratories focused on each of the eight themes of **CSIR**. Each theme's road map and activities focus on substantial contributions toward public, private, strategic, and societal benefits. The verticals in this Theme are Hydrogen, Batteries (and other energy storage technologies), Alternative fuels (with a particular focus on biofuels), Solar and Wind (with a specific emphasis on non-silicon and offshore technologies) and many **CSIR** labs are participating in the various R&D programmes on this theme.

Source: Garhwalpost

दुनिया में घटेगा फॉसिल फ्यूल का इस्तेमाल, पेट्रोकेमिकल इंडस्ट्री में जगी नई संभावनाएं, जानें CSIR-IIP देहरादून में हुई क्या चर्चा

काउंसिल ऑफ साइंस एंड इंडस्ट्रियल रिसर्च का देहरादून में मौजूद केंद्रीय संस्थान आईआईपी में वन वीक वन टीम प्रोग्राम के तहत दुनिया भर में ऊर्जा के बढ़ते स्वरूप को देखते हुए पेट्रोकेमिकल के क्षेत्र में नई संभावनाओं पर चर्चा की गई. चर्चा में पेट्रोकेमिकल और रिफाइनरी इंडस्ट्री से जुड़े विशेषज्ञ शामिल रहे. देहरादून IIP में जुटे पेट्रो केमिकल इंडस्ट्री विशेषज्ञ: गुरुवार को देहरादून इंडियन इंस्टीट्यूट ऑफ पेट्रोलियम में वन वीक वन टीम के तहत इंडस्ट्रियल मीट का आयोजन किया गया. इसमें देश भर के पेट्रोकेमिकल और रिफाइनरी इंडस्ट्रीज जुड़े 7 बड़े इंडस्ट्रियल रिसर्चर मौजूद रहे. पूरे दिन चली इस इंडस्ट्रियल मीट में मुख्य अतिथि के रूप में आईआईपी देहरादून के निदेशक डॉक्टर HS बिष्ट मौजूद रहे. ईटीवी भारत से खास बातचीत करते हुए उन्होंने बताया कि इस इंडस्ट्रियल मीट में ज्यादातर लोग पेट्रोकेमिकल और रिफाइनरी इंडस्ट्री से शामिल हुए. उन्होंने बताया कि केंद्रीय ऑर्गनाइजेशन काउंसिल ऑफ साइंस एंड इंडस्ट्रियल रिसर्च यानी CSIR की देश में मौजूद सभी लैब में वन वीक वन थीम प्रोग्राम के तहत यह कार्यक्रम आयोजित किया जा रहे हैं. देहरादून IIP में पेट्रोकेमिकल और रिफाइनरी सेक्टर के लिए जीवाश्म ईंधन के उपयोग को और अधिक बेहतर बनाने साथ ही उन्होंने बताया कि जिस तरह से आज पूरी दुनिया कार्बन उत्सर्जन को कम करने की दिशा में आगे बढ़ रही है और उसके बाद फॉसिल फ्यूल की उपयोगिता धीरे-धीरे पूरी दुनिया में घटेगी.

Source: Etvbharat

IIP's 'One Week, One Theme' Campaign on Energy & Energy Devices Theme concludes

The **Council of Scientific and Industrial Research – Indian Institute of Petroleum (CSIR-IIP)** witnessed the successful conclusion of its "One Week, One Theme" campaign, which focused on the pivotal Theme of Energy and Energy Devices (EED). Rajiv Agrawal, Director, Technical, Engineers India Ltd., was the Chief Guest. Dr MO Garg, President, Petchem R&D, Reliance Industries Ltd., was the Guest of Honour. The OWOT event aims to showcase innovative approaches and technological advancements developed by **CSIR** laboratories focused on each of the eight themes of **CSIR**. Each theme's road map and activities focus on substantial contributions toward public, private, strategic, and societal benefits. The verticals in this Theme are Hydrogen, Batteries (and other energy storage technologies), Alternative fuels (with a particular focus on biofuels), Solar and Wind (with a specific emphasis on non-silicon and offshore technologies) and many **CSIR** labs are participating in the various R&D programmes on this theme.

Source: Garhwalpost

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

Council Scientific and Industrial Research (CSIR)-National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the **NPL** campus, as part of its 'One Week One Theme' initiative with participating labs **CSIR-CSIO, CSIR-CEERI**, and **CSIR-IIP**. Prof. Venugopal Achanta, Director of **CSIR-NPL**, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of **CSIR-NAL** and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme. Dr. P. C. Panchariya, Director of **CSIR-CEERI,** highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.

Source: Pib

Govt Paving Way for Use of Bio-bitumen to Build National Highways: 1 Road Test, 2 Research Projects Underway

The ministry of road transport and highways (MoRTH) has sanctioned two research projects to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen, union minister Nitin Gadkari said on Wednesday. Further, a test section was laid on the Shamli-Muzaffarnagar portion of NH-709AD in November 2022 for performance monitoring for a period of three years to assess the suitability of bio-bitumen in road construction, the minister said in the Rajya Sabha. Bitumen is a black solid or viscous substance obtained from petroleum and is used for covering roads. Bio-bitumen, also known as bio-asphalt, is a sustainable, petroleum-free alternative to traditional bitumen derived from fossil fuels. “Ministry has sanctioned two (02) research projects, one each to IIT Roorkee, and **Central Road Research Institute (CRRI)** New Delhi in collaboration with **Indian Institute of Petroleum (IIP)** Dehradun to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen,” Gadkari said.

Source: News18

One-day awareness program on “The environmental hazards of polymers” under “Jigyasa 2.0 program” organized at CSIR-Indian Institute of Petroleum, Dehradun.

A One-day awareness program on “The environmental hazards of polymers” under “Jigyasa 2.0 program” in association with Social Development for Communities (SDC) Foundation was successfully organized on 06 August 2024 at **CSIR-Indian Institute of Petroleum**, Dehradun. In this awareness program students (150 no.) from IXth -XIIth class of different government schools viz. Mahaveer Jain kanya Paathshala, Tilak Road; GIC, Khurbura; Shri Guru Ram Rai Public School, Bindal; Sanatan Dharm Kanya Inter College, Geeta Bhawan; Mangla Devi Inter College, EC Road; Sophia High School,

Neshvilla Road; GIC, Dhobhalwala, Government Girls Inter College, Rajpur Road; Shri Guru Ram Rai, Racecourse; Shri Gurunanak Doon Vale School, Racecourse; Ambawati Doon Valley Inter College, Panditwari; Bhawani Ballika Inter College, Ballupur; Mount Fort Academy, Indra Nagar; Shri Guru Ram Rai, Patel Nagar of Dehradun region have participated. The main objective of the program is to make the students aware about the Plastic waste and how we can reuse or recycle to minimize its environment impact and to keep our city clean.
Source: Uknationnews

Government to allow up to 35% bio-bitumen mixing, to save ₹10,000 crore of foreign exchange outflows

Union Road Transport Minister Nitin Gadkari on Wednesday (August 7, 2024) said the government will allow mixing of lignin up to 35% in petroleum-based bitumen, a large part of which is imported from other countries. Bitumen is a black substance produced through the distillation of crude oil and is widely used for making roads and roofs. The minister said the farmers are now not only producing foodgrains, but they have become energy producers. **Central Road Research Institute (CRRI)** and the Indian Institute of Petroleum, Dehradun, had developed bio-bitumen from paddy straw. In the written reply, he said the ministry has sanctioned two research projects, one each to IIT Roorkee, and **Central Road Research Institute (CRRI)** New Delhi in collaboration with the **Indian Institute of Petroleum (IIP)** Dehradun to evaluate bio-bitumen in the laboratory and to assess the long-term performance of pavement constructed with bio-bitumen.
Source: The Hindu

VP to interact with scientists, faculty members and students at CSIR-IIP, Dehradun

The Vice-President of India, Shri Jagdeep Dhankhar will be on a two-day visit to Uttarakhand on August 31-September 01, 2024. During his tour, Shri Dhankhar will interact with scientists, faculty members and students at **CSIR-Indian Institute of Petroleum,** Dehradun. On the second day of his tour, Shri Dhankhar will visit Rashtriya Indian Military College, Dehradun. The Vice-President will also visit AIIMS Rishikesh, where he will interact with the students and faculty members of the institute.
Source: Pib

Sustainable development key to tackling climate threats: V-P Dhankhar

Sustainable development is the only way to deal with the challenges of climate change, biodiversity loss and resource depletion, Vice-President Jagdeep Dhankhar said on Saturday. Addressing scientists, faculty and students of **CSIR-Indian Institute of Petroleum (IIP),** Dhankhar said collaborative solutions were needed to address the challenges that threatened "our very existence". "The challenges of today demand bold action and an institution like **CSIR-IIP** can serve as an effective platform for researching effective technologies that can help grapple with the challenges," Dhankhar said. The vice-president criticised people who were at one time in positions of authority and governance for "subserving partisan interests and floating anti-national narratives".

Dhankhar also condemned the observation that what was happening in the neighbouring country (Bangladesh) could happen in India as well. "How can anyone who has faith in the vibrant and robust democracy of the country subscribe to such a view?" he asked.
Source: Business-Standard

Text of the Vice-President's address at CSIR-IIP, Dehradun

Shri Anjum Sharma, Senior Controller of Administration, distinguished members of the faculty, staff, and most important, my dear students, Imagine LPG sweetening catalyst at 11 Indian refineries and also two foreign refineries. What a performance! Look at new R&D initiatives of this institute, fully aligned with the Government of India's vision of Viksit Bharat, net zero emissions by 2070, and the United Nations Sustainable Development Goals. It is, as a matter of fact, realising the statement of the Prime Minister when he was reflecting in the context of the Paris Agreement. India is in the lead. Look at sustainable aviation fuel produced and that was used in the first Indian demo flight from Dehradun to Delhi and what a spectacle it was, I had the occasion to witness it fly past the Republic Day parade in 2019 and 2024 when I was there. This was reflected.
Source: Pib

उपराष्ट्रपति जगदीप धनखड़ ने देहरादून में CSIR-IIP में छात्रों और संकाय सदस्यों को किया संबोधित

उपराष्ट्रपति Jagdeep Dhankhar ने आज कहा कि यह अफसोस की बात है कि हमारे लोकतंत्र और राष्ट्रवाद की भावना को चुनौती देने वाले लोग वे हैं जो कभी सत्ता में थे या महत्वपूर्ण पदों पर थे। उन्होंने कहा है कि संकीर्ण पार्टीगत हितों की पूर्ति के लिए वे देश विरोधी Narratives फैला रहे हैं और हमारे महान लोकतंत्र की तुलना पड़ोसी देशों की प्रणालियों से कर रहे हैं। उपराष्ट्रपति Jagdeep Dhankhar ने यह भी कहा कि भारत, जो सबसे बड़ा और सबसे जीवंत लोकतंत्र है, और PM जो लगातार तीसरी बार कार्यरत हैं, को ऐसी अवमाननाओं का सामना नहीं करना चाहिए। “ऐसा विचार किसी भी व्यक्ति के मन में कैसे उत्पन्न हो सकता है जो इस राष्ट्र, राष्ट्रवाद और लोकतंत्र में विश्वास करता है?” उन्होंने ऐसे Narratives को “दुष्ट” और “शब्दों से परे” करार दिया। साथ ही देहरादून में **CSIR-IIP** में छात्रों और संकाय सदस्यों को संबोधित करते हुए,उपराष्ट्रपति धनखड़ ने जलवायु परिवर्तन और प्राकृतिक आपदाओं की चुनौती पर जोर दिया।
Source: Totaltv

Himalaya Day Celebration held at IIP

As a part of Himalaya Conservation Week (2-9 September), **CSIR-IIP** hosted a panel discussion today on “Technological Advancements and Development Perspectives in Management of the Himalayan Ecosystem”. The panellists included Padma Bhushan awardee Dr Anil Prakash Joshi (HESCO), Dr R P Singh (Director, IIRS), Prof Durgesh Pant (Director General, UCOST), Dr GS Rawat, (former Director, WII and Founder, HAST), Dr Reema Pant (Director, Graphic Era Hill University), Dr Abhishek Rajvansh,

(Head, CIPET, Dehradun), Professor Govind Singh Rajwar and Dr Sanat Kumar. CM Pushkar Singh Dhami, in his message, stressed the need for a holistic approach and united efforts for sustainable development of the Himalayan region. Dr Harender Singh Bisht, Director, **CSIR-IIP,** highlighted the need to identify appropriate solutions, customised for a region, to ensure its easy and faster adoption. He cited an example of pine needle briquetting work done by IIP for Champawat region. Dr Anil Prakash Joshi stated the need to balance both the science and means to achieve equitable and sustainable growth of Himalayan region.
Source: Garhwalpost

CSIR-Indian Institute of Petroleum, Dehradun Celebrates 83rd CSIR Foundation Day

The **CSIR-Indian Institute of Petroleum (IIP)** proudly commemorated the 83rd Foundation Day of the **Council of Scientific and Industrial Research (CSIR)** with a ceremony on October 7, 2024 that showcased its achievements in research and commitment to sustainability. Sh. Chandrasekhar N, ED and Head (R&D), BPCL graced the Event as Chief Guest while Sh. Rama Rao Marri, VP & MD of Lummus Technology was the Guest of Honor. The celebration began with the ceremonial lighting of the lamp, a symbol of enlightenment and new beginnings. In his inaugural address, Director **CSIR-IIP** Dr. H S Bisht, highlighted the importance of developing sustainable technologies to address pressing challenges as India approaches its centenary of independence. He emphasized the need for innovative solutions that will pave the way for a sustainable future. Chief Guest Sh. Chandrasekhar N discussed the critical necessity of collaboratively utilizing resources to meet India's net-zero targets. He stressed the vital role of partnerships between research institutions and industry in fostering innovation and driving meaningful change in sustainability practices
Source: Pib

नेट जीरो के लक्ष्यों को पूरा करने के लिए साझा प्रयास की जरूरत : नारायणमूर्ति

सीएसआईआर-भारतीय पेट्रोलियम संस्थान में 83वां **सीएसआईआर** स्थापना दिवस समारोह आयोजित किया गया। कार्यक्रम में मुख्य अतिथि अनुसंधान एवं विकास बीपीसीएल प्रमुख चंद्रशेखर नारायणमूर्ति ने कहा कि भारत के नेट जीरो के लक्ष्यों को पूरा करने के लिए सहयोगात्मक और साझा प्रयास की जरूरत है। उन्होंने कहा कि नवाचार को बढ़ावा देने और संवहनीय पद्धति में सार्थक परिवर्तन लाने में अनुसंधान संस्थानों और उद्योगों की साझेदारी महत्वपूर्ण भूमिका निभाएगी। संस्थान के निदेशक डॉ. हरेंद्र सिंह बिष्ट ने वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद के इतिहास एवं उपलब्धियों की जानकारी दी। कहा कि वर्तमान और भविष्य की चुनौतियों के मद्देनजर विकसित की जा रही संवहनीय प्रौद्योगिकी अत्यंत महत्वपूर्ण है। समारोह के विशिष्ट अतिथि उपाध्यक्ष एवं मैनेजिंग डायरेक्टर ल्यूमस टेक्नोलॉजी रामा राव मारी ने प्लास्टिक अपशिष्ट-प्रदूषण, विकार्बनीकरण नीतियों के कार्यान्वयन और हरित प्रौद्योगिकियों

एवं अनुसंधान के महत्वपूर्ण विषयों पर प्रकाश डाला। इस दौरान परिषद में 25 वर्ष की सेवा कर चुके कर्मचारियों को सम्मानित किया गया। इस अवसर पर एक सांस्कृतिक संध्या में कर्मचारियों, उनके बच्चों एवं पीएचडी शोध छात्रों आदि ने उत्साह के साथ हिस्सा लिया। विज्ञान संचार एवं प्रसार निदेशालय प्रमुख डॉ. हेमंत कुलकर्णी ने आभार जताया।

Source: Amarujala

Curtain Raiser event for IISF 2024 at CSIR-IIP Dehradun, India

CSIR Indian Institute of Petroleum (CSIR-IIP), Dehradun hosted the curtain raiser event for the India International Science Festival (IISF) 2024 on October 30, 2024. The event was graced by Prof. Hemwati Nandan Pandey, professor, Garhwal University, Srinagar and Secretary Vijnana Bharati (VIBHA),Uttarakhand, Dr Ravindra Singh Bisht, Doon Medical College and senior colleagues from AIIMS Rishikesh DIT University, Wadia Institute of Himalayan Geology. Uttarakhand Science Education and Research Centre (USERC), Vijnana Bharati – Shakti. This curtain raiser provided an insightful preview of the upcoming IISF 2024, which will focusing on “Transforming India into a science and technology driven global manufacturing hub”. The curtain raiser highlighted the 25 thematic events planned during IISF 2024. It was also highlighted that this year **Council of Scientific & Industrial Research (CSIR)** is given the responsibility of coordination of this mega event. Dr. Harender Singh Bisht in his welcome address said that India International Science Festival (IISF 2024) is a significant step towards showcasing our scientific capabilities and fostering the culture of innovation. Director **CSIR-IIP** also shared his insights on the pivotal role of science and technology in driving India's growth and global competitiveness. He also gave a brief presentation on the preview of IISF 2024. Director **CSIR-IIP** requested all organizations present to maximize participation in IISF-2024.

Source: Pib

Curtain Raiser event for IISF 2024 held at CSIR-IIP

CSIR Indian Institute of Petroleum (CSIR-IIP) hosted the curtain raiser event for the India International Science Festival (IISF) 2024 on 30 October. The event was graced by Prof Hemwati Nandan Pandey, Garhwal University, Srinagar, and Secretary Vijnana Bharati (VIBHA), Uttarakhand, Dr Ravindra Singh Bisht, Doon Medical College, and senior colleagues from AIIMS Rishikesh, DIT University, Wadia Institute of Himalayan Geology. Uttarakhand Science Education and Research Centre (USERC), Vijnana Bharati – Shakti. This curtain raiser provided an insightful preview of the upcoming IISF 2024, which will focus on “Transforming India into a science and technology driven global manufacturing hub”. The curtain raiser highlighted the 25 thematic events planned during IISF 2024. It was also highlighted that, this year, **Council of Scientific & Industrial Research (CSIR)** is given the responsibility of coordination of this mega event. Dr Harender Singh Bisht in his welcome address said that India International Science Festival (IISF 2024) is a significant step towards showcasing our scientific capabilities

and fostering the culture of innovation. Director **CSIR-IIP** also shared his insights on the pivotal role of science and technology in driving India's growth and global competitiveness. He also gave a brief presentation on the preview of IISF 2024. Director **CSIR-IIP** requested all organisations present to maximize participation in IISF-2024.
Source: Garhwalpost

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.
Source: Pib

'Vikalp', Hindi Magazine of IIP, released

The Hindi magazine, 'Vikalp', of **CSIR-Indian Institute of Petroleum (IIP),** Dehradun, was released on Monday. The magazine is showcases the institute's research and development activities, as well as literary works. The release of the magazine was done during the meeting of the institute's Rajbhasha Implementation Committee. The meeting was chaired by Dr Harendra Singh Bisht, Director of **IIP**. The magazine's second issue of 2024 features articles on various topics, including the conversion of waste plastic into transportation fuel, advanced indigenous visbreaking technology, and the depletion of groundwater. The issue also includes poems and literary works. Editor of 'Navodit Pravah', Rajneesh Trivedi 'Alok', was the Guest of Honour at the function. Someshwar Pandey, Member-Secretary and Senior Hindi Officer, conducted the meeting and presented a report on the institute's Rajbhasha activities and achievements during the past quarter. Rajneesh Trivedi 'Alok' congratulated the Director and the **IIP** family on

receiving the first prize (Rajbhasha Shield) from the Town Official Language Implementation Committee (Office-2), Dehradun, and shared his experiences on Rajbhasha implementation. Dr Harendra Singh Bisht, Director of **IIP**, emphasised the importance of each employee's contribution to the implementation of Rajbhasha Hindi and encouraged everyone to work more in the language.
Source: **Garhwalpost**

Go Back

CSIR- Indian Institute of Toxicology Research (CSIR-IITR)

CSIR-IITR Unveils New Miyawaki Forest: A Step towards Combating Climate Change

On a mission to combat climate change and biodiversity loss, **CSIR-Indian Institute of Toxicology Research (CSIR-IITR)** in Lucknow has inaugurated a vibrant Miyawaki forest at its CRK Campus. Marked by the planting of a thousand trees, this 100 square meter forest stands as a testament to the power of innovative reforestation methods and their potential to reshape our urban landscapes.

Source: **BNN Breaking**

National Science Day | Science Expo on 'Indigenous Tech' to be held at IITR Lucknow today

Exhibiting the indigenous technologies developed by the institute's researchers, a Science Expo will be held at Lucknow's **Indian Institute of Toxicology Research (IITR)** on the occasion of National Science Day, i.e., today. It is noteworthy that the Science Day celebrations take place at the institute every year, on a fresh theme. And this year's theme will be 'Indigenous Technologies for Viksit Bharat'. Visitors and students at the event will get to learn about the scientific achievements of the researchers at the institute and the huge leaps that India has taken in the fields of Science. Apart from this, the institute will also be holding an interactive session for the visiting students where they will get to interact with prominent scientists at IITR Lucknow.

Source: **Knocksense**

Waste management in Lucknow, CSIR-IITR's offers to assess impact

The **CSIR-Indian Institute of Toxicology Research (CSIR-IITR)** has offered to make an assessment of the ecological impact of treating 20 lakh tonnes of waste at the Shivri waste management site in Lucknow district. A proposal to this effect has been received by Lucknow Municipal Corporation (LMC). The plan integrates chemical profiling, bio-remediation and toxicological assessments and employing advanced techniques. The project aims to scrutinize waste for harmful substances pre and post-processing, while assessing air pollution impact through quarterly sampling and advanced modelling. Wastewater, groundwater and bio-soil will undergo thorough analysis to gauge pollution levels. The team plans to expedite the natural breakdown process of waste and evaluate its safety post-treatment by studying its effects on earthworms and zebrafish.

Source: **Daijiworld**

WARM-TH 2024 inaugurated at CSIR-IITR in Lucknow

Themed on a gender-equal world, free of bias, stereotypes, and discrimination while also being equitable, and inclusive is everyone's dream, a three-day conference on 'Women in Academia, Research and Management of Toxicology and Health-Wellness (WARM-TH 2024)' was inaugurated at **CSIR–IITR** here on Wednesday. The conference is being organized in collaboration with **CSIR–Central Drug Research Institute (CSIR–CDRI),** King George Medical University (KGMU), National Institute of Pharmaceutical Education and Research (NIPER) Raebareli and Association of Food Scientists and Technologists of India (AFSTI) Lucknow Chapter. The inaugural programme was graced by the presence of Pramoda Devi Wadyar, Maharani of Mysore, as the Chief Guest of the day.
Source: The Statesman

UPSIFS & CSIR-IITR join hands for cooperation in educational activities

The Uttar Pradesh State Institute of Forensic Sciences (UPSIFS) and **CSIR-Indian Institute of Toxicology Research** signed an MoU on Friday to collaborate on educational activities, training, and capacity building for professionals. This partnership also involves the exchange of faculties and subject experts, as well as research collaboration in domains of mutual interest. Speaking on the occasion, UPSIFS Director and senior IPS officer Dr. G K Goswami stated that "this association with the **IITR,** which is a prestigious academic and research organisation, will surely leapfrog the city and state in identifying and developing emerging technologies in critical areas like toxicology, safeguarding health and environment, S&T aspects of crime investigations, forensics, etc." He added that the UPSIFS and **CSIR-IITR** have a joint vision that aims to provide quality education and training to professionals, including judicial and police officers, forensic experts, and mass media.
Source: Thestatesman

Heatwave key reason for high air pollution in city: Report

Heatwave conditions was a contributing factor to the high air pollution levels in the state capital, stated a report by the Lucknow-based **Indian Institute of Toxicology Research (IITR). IITR**, a unit of the **Council for Scientific and Industrial Research (CSIR),** on Monday released its annual pre-monsoon report for this year. "The primary reason for the increase in particle pollution in the city's atmosphere is extreme heatwaves during April and May," the report said. The 24-hour average concentrations of PM10 and PM 2.5 in the city in the said period were 118.8 and 85.9 micrograms per cubic metre (µg/m ^{3}), respectively, as per the report. The report further reasoned that high ambient temperature dried the atmospheric air and increased the wind speed, resulting in the resuspension of loose soil and road dust into the atmosphere.
Source: Hindustantimes

Indiranagar and Chowk areas are noisiest in city

While the sound of a hair dryer or a vacuum cleaner is likely to irritate you after a while, Lucknow residents are forced to bear the same noise level (70-75 decibels) throughout the day. The situation is worse during night when the level rises to 85-90 decibels — the same level of noise produced by a farm tractor. The alarming data has been released by

the **CSIR-Indian Institute of Toxicology Research (IITR)** in its pre-monsoon noise monitoring reports of four residential and commercial and one industrial localities in the city. At all places, the noise levels recorded are above the permissible limits, both during the day and night — the levels which can harm the physical and mental well-being of human beings. As per data, Indiranagar and Chowk were the noisiest areas, both during the day and night.
Source: Times of India

Centre of excellence set up at IIT-P for coating technology

A centre of excellence for wear- and corrosion-resistance coating technology that finds usage in a number of industries like manufacturing, aerospace, agriculture and automotive, was set up at Indian Institute of Technology (IIT)-Patna on Thursday with support from the department of science and technology, Govt of India. The centre, first of its kind in eastern India, was inaugurated by IIT-P director T N Singh at the inaugural function of a four-day international conference on “Advances in Thermal Spray”. Singh said the initiative will develop “pioneering solutions that will revolutionize industries such as manufacturing, aerospace and automotive". Ramanuj Narayan, director of **CSIR-IMMT,** Bhubaneswar; Goutam Sutradhar, director of NIT-Jamshedpur; Naresh Chanda Murmu, director of **CSIR-CMERI,** Durgapur; and Anup Kumar Keshri, principal coordinator of the centre of excellence among others were present on the occasion.
Source: Times of India

FSSAI to check microplastic contamination in Indian foods

The Food Safety and Standards Authority of India (FSSAI) on Sunday launched an innovative project to tackle the growing concern of microplastic contamination in food. Microplastics are tiny pieces of plastics that range in size — from five millimetres to one micrometre. From human blood to testicles, to flora and fauna, these have long been known as a significant environmental and health concern worldwide. “While global studies have highlighted the presence of microplastics in various foods, it is imperative to generate reliable data specific to India. This project will help understand the extent of microplastic contamination in Indian food and guide the formulation of effective regulations and safety standards to protect public health,” FSSAI said. The project is being implemented in collaboration with leading research institutions across the country, including the **CSIR-Indian Institute of Toxicology Research** (Lucknow), ICAR-Central Institute of Fisheries Technology (Kochi), and the Birla Institute of Technology and Science (Pilani), FSSAI said.
Source: Munsifdaily

खाने की चीजों में माइक्रोप्लास्टिक पर FSSAI गंभीर, लोगों के सुरक्षित भोजन के लिए शुरू की नई योजना

फूड सेफ्टी एंड स्टैंडर्ड अथॉरिटी ऑफ इंडिया ने खाद्य पदार्थों में माइक्रोप्लास्टिक की मौजूदगी से निपटने के लिए एक नई योजना पर काम शुरू किया है। योजना में माइक्रो-नैनो-प्लास्टिक विश्लेषण के लिए स्टैंडर्ड

प्रोटोकॉल तैयार करना, इंट्रा और इंटर लैबोरेटरी तुलना करना और उपभोक्ताओं के बीच माइक्रोप्लास्टिक जोखिम के बारे में जागरूकता अभियान चलाना शामिल है। एक स्टडी भी की जा रही है, जिसमें **CSIR**, इंडियन इंस्टीट्यूट ऑफ टॉक्सिकोलॉजी रिसर्च लखनऊ, ICAR, केंद्रीय मत्स्य प्रौद्योगिकी संस्थान कोच्चि और. में माइक्रो और नैनोप्लास्टिक का पता लगाने के लिए विश्लेषणात्मक तरीकों को तैयार किया जा रहा है। हाल ही में FAO ने एक रिपोर्ट में चीनी और नमक जैसे आम खाद्य पदार्थों में माइक्रोप्लास्टिक की मौजूदगी की बात कही है। रिपोर्ट में माइक्रोप्लास्टिक की वैश्विक उपस्थिति को भी दर्शाया गया है। भारतीय संदर्भ में मानव स्वास्थ्य और सुरक्षा के लिए इस मसले को पूरी तरह से समझने के लिए अधिक मजबूत डेटा की जरूरत पर भी जोर दिया गया है।

Source: **Headtopics**

Cusat to host national conference on marine pollution

The Department of Marine Biology, Microbiology and Biochemistry at the Cochin University of Science and Technology (Cusat) will organise a national conference on 'Marine Pollution and Ecotoxicology' here from September 25 to 27. The meet, which is being held in collaboration with the National Centre for Coastal Research, Ministry of Earth Sciences, and **CSIR-Indian Institute of Toxicology Research (IITR),** will be inaugurated by George Kurian, Minister of State for Fisheries, Animal Husbandry and Dairying, at the seminar complex on the main campus on September 25, according to a release. Around 400 participants from over 30 institutions in the country and abroad will attend the conference that aims to address critical challenges facing marine and coastal ecosystems and translate them into actionable policy frameworks. The conference will focus on five key themes including legacy and emerging contaminants in the marine environment, environmental toxicology, climate change impacts, health risk assessment, seafood safety, and sustainable aquaculture technologies. A marine science exhibition will be held at the venue. Central Institute of Fisheries Technology, Naval Physical and Oceanographic Laboratory, and Central Institute of Fisheries Nautical and Engineering Training will showcase their activities, technological advancements, and products as part of the event.

Source: **The Hindu**

CSIR-North East: विज्ञान-प्रौद्योगिकी संस्थान ने मनाया 83वां स्थापना दिवस

सीएसआईआर-नॉर्थ ईस्ट इंस्टीट्यूट ऑफ साइंस एंड टेक्नोलॉजी, जोरहाट ने सोमवार को अपने शीर्ष निकाय, **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर)** का 83वां स्थापना दिवस बहुत उत्साह और उमंग के साथ मनाया। 'अकादमिक जगत में नेतृत्व' विषय पर अपने व्याख्यान में, आईआईटी कानपुर में चेयर प्रोफेसर और आरएबी **(सीएसआईआर**) के अध्यक्ष, पद्म श्री पुरस्कार विजेता प्रोफेसर विनोद के सिंह ने अनुसंधान और शिक्षाविदों में नेतृत्व गुणों को विकसित करने के महत्व पर जोर दिया।

उन्होंने कहा कि विज्ञान और शिक्षा जगत में नए नेताओं का निर्माण करना भारत जैसे देशों के लिए महत्वपूर्ण और जरूरी है। इस अवसर पर मुख्य अतिथि प्रोफेसर विनोद के सिंह ने भी काम, जिम्मेदारी और समय प्रबंधन के महत्व पर जोर दिया। उन्होंने उल्लेख किया कि एक महान नेता के गुण, जैसे विचार और प्रस्तुति में स्पष्टता, सही निर्णय लेने की क्षमता और शासन और प्रबंधन की समझ, साथियों के प्रति सम्मान, नैतिकता, नैतिकता, ईमानदारी और अखंडता के साथ होने चाहिए। प्रोफेसर सिंह ने सुबह डॉ. जेएन बरुआ ऑडिटोरियम में आयोजित एक विशेष कार्यक्रम में अपना संबोधन दिया, जिसमें जोरहाट जिले के गणमान्य व्यक्तियों, आमंत्रितों और प्रतिष्ठित व्यक्तियों के साथ-साथ **सीएसआईआर-एनईआईएसटी** बिरादरी की एक बड़ी सभा ने भाग लिया। **सीएसआईआर-एनईआईएसटी** के निदेशक डॉ. वीएम तिवारी ने समारोह की अध्यक्षता की। अपने स्वागत भाषण में, डॉ. तिवारी ने इस अवसर पर अपनी शुभकामनाएं दीं।

Source: Jantaserishta

CSIR develops device to run health diagnostics, test adulteration

Institutions of the **Council of Scientific and Industrial Research (CSIR)** have designed 'FluoriPCR', a device which is expected to revolutionise health diagnostics and testing of food commodities. Developed by the **CSIR– Indian Institute of Toxicology Research (CSIR - IITR)** and **CSIR – Central Electronics Engineering Research Institute, Pilani (CEERI),** the FluoriPCR integrates four machines used for biochemical and molecular testing in health, diagnostics and food safety. **CSIR-IITR** director, Dr Bhaskar Narayan, said that the device has been developed as part of **CSIR-IITR's** Advancing Technological Leads for Assuring Safety of Food (ATLAS) under **CSIR's** Mission Mode Project. **CSIR-IITR** has tested FluoriPCR for identifying mixing in meat products and the authenticity of meat species. Buying equipment for carrying out these tests is generally expensive and costs about ₹35 lakh collectively. On the other hand, this device can be made available at ₹1-1.5 lakh, a scientist involved in the innovation process said. "Analysing samples with the machine developed, **CSIR-IITR** has detected contamination or mixing in meat products and the authenticity of four meat species. This helps us to find if the sample is mixed with undesired meat components," said a scientist from **CSIR-IITR.**

Source: Hindustantimes

2.1 million premature deaths attributable to air pollution in India: Experts

In a recent assessment of the global burden of disease (GBD 2021), approximately 2.1 million premature deaths and 60 million disability-adjusted life years (DALYs) were found to be attributable to air pollution in India. Besides ,air pollution ranks among the leading risk factors contributing to the disease burden in most South East Asian countries and India is no exception. These were some of the thoughts shared by Prof Kalpana Balakrishnan, Dean (Research) and Director, World Health Organization Collaborating Center for Occupational and Environmental Health, ICMR Centre for Advanced Research

on Air Quality, Climate and Health. Delivering the Key Note Address at the inaugural function of the four-day International Toxicology Convention on "Emerging Approaches in Risk Analysis and Translational Aspects of Health and Environment (EARTH 2024)" at **CSIR–Indian Institute of Toxicology Research (CSIR – IITR)** here on Wednesday, she said that there is now an increasing body of evidence to indict air pollution as a leading risk factor for ill health including high blood pressure, child and maternal malnutrition. Earlier in the programme, Guest of Honour, Dr Debabrata Kanungo, Former Additional Director General, Ministry of Health & Family Welfare, Govt..of India released the ASTRA Welcome Kit to mark the creation of the Association of Toxicologists and Risk Assessors. This was followed by the presentation of the Honorary Fellowship of ASTRA to Dr Debabrata Kanungo and Professor Samuel Godefroy from the Department of Food Science, Laval University, Québec, Canada. by Dr Bhaskar Narayan, Director **CSIR – IITR** and President ASTRA.
Source: Thestatesman

Functional foods are needed for frontline workers: Experts

Experts emphasised the need for functional foods, particularly for frontline workers, during a roundtable conference organised at the **Council of Scientific and Industrial Research–Indian Institute of Toxicology Research (CSIR-IITR)** on Friday. The conference, titled 'Safety and Toxicological Evaluation of Functional Foods and Nutraceuticals: The Requirements and Current Regulatory Status,' was held on the third day of the four-day 'Emerging Approaches in Risk Analysis and Translational Aspects of Health and Environment (EARTH 2024)' conference. **CSIR-IITR** director Bhaskar Narayan explained that functional foods are highly nutritious, combining natural foods that leave no residual effect on the body. "All nutraceuticals are functional foods, but not all functional foods are nutraceuticals," Narayan said. Kattesh Katti, a scientist from the University of Missouri, Columbia, shared insights into the role of ketone molecules. He explained that when synthesised in the body, and provided externally, these molecules help produce more energy and enhance the body's energy and cytokinin levels. "It helps in increasing cognitive power," Katti said.
Source: Hindustantimes

Therapeutic drug monitoring: 'Drug testing must as different races metabolise medicines differently'

Drugs are metabolised differently by people of different age groups, ethnicities among other factors. There is a need for therapeutic drug monitoring (testing that measures the amount of a medicine in your blood), especially for drugs which work on the nervous system. Those were the words of NIMHANS (National Institute of Mental Health and Neurosciences) director and senior professor, psychiatry, Bengaluru, Pratima Murthy, delivering a lecture 'Expanding the role of assessments in the field of neurobehavioral toxicity - detecting drugs of abuse and therapeutic drug monitoring'. She also shared the harmful effects of tobacco on a pregnant woman. The lecture was delivered as part of the Diamond Jubilee celebrations of the **Council of Scientific and Industrial Research –**

Indian Institute of Toxicology Research (CSIR-IITR) on Wednesday. She gave the example that to cure schizophrenia, people living in India need only 60% of clozapine dose of what Caucasians are prescribed. This is due to changes in ethnicity. The lecture by Murthy was the first under the IDEA (**IITR** Diamond Jubilee Elocution Address) series. On this occasion, a memorandum of understanding was also signed between NIMHANS and **CSIR-IITR** . As part of the MoU, both institutions will utilise each other's expertise for advancing academics and research in the areas of mutual interest, said director **CSIR-IITR** Bhaskar Narayan.
Source: Hindustantimes

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CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT)

Folk Dance Competition Begins at RIE, Bhubaneswar

The All-India National Role Playing and Folk Dance Competition commenced today at the Regional Institute of Education, Bhubaneswar, marking the beginning of a vibrant four-day event. Students hailing from 29 states/UT and four Demonstration Multipurpose schools have enthusiastically gathered to showcase their talents and cultural diversity. In the inaugural session, Professor Ramanuj Narayan, the Director of **CSIR- IMMT** and a distinguished scientist, graced the occasion as the chief guest. He aptly characterized the festival as a celebration of this nation and expressed optimism that it would contribute to the realization of a self-reliant India, aligning with the vision of the Prime Minister. Professor Narayan emphasized the significance of the National Council of Educational Research and Training (NCERT) as a knowledge hub, recommending students to forge connections with NCERT books for success, rather than relying solely on the internet or mobile devices.

Source: The samikhsya

Meghalaya press team explores Odisha as part of Viksit Bharat Sankalp Yatra

A ten-member press team from Meghalaya reached Bhubaneswar on Wednesday evening as part of a Press Tour to Odisha under the Viksit Bharat Sankalp Yatra (VBSY) programme. PIB Bhubaneswar officials accorded a warm welcome to Meghalaya journalists upon their arrival. The team will also visit the **CSIR – Institute of Minerals and Materials Technology, Council of Scientific and Industrial Research (CSIR),** Bhubaneswar, which specialises in conducting basic research and technology-oriented programmes in a wide range of subjects to address the R&D problems of mining, mineral, and metals industries and ensure their sustainable development.

Source: Eastmojo

Workshop On “Powder Metallurgy-Based Research For Advancements In Science And Engineering (PRAISE)”-2024 Kick Starts At CSIR-IMMT

A SERB Accelerate Vigyan sponsored High-end Workshop on “Powder metallurgy based Research for Advancements In Science and Engineering (PRAISE)”-2024, Kickstarts today at SS Bhatnagar Hall, CSIR-IMMT Bhubaneswar. This workshop will continue till 27th January 2024. The workshop was inaugurated by Hon’ble Chief Guest Prof. PV

Satyam, School of Basic Sciences, IIT Bhubaneswar, in the presence of Shri H.K. Tripathy Chief Scientist, MPD, CSIR-IMMT, Dr. R. Sakthivel Chief Scientist & Head, AMT, **CSIR-IMMT,** Dr. Ajit Panigrahi Convenor, PRAISE-2024
Source: Orissadiary

Skill Development Program On "Training CumDemonstration On Pond Ash Bricks Technology

CSIR-IMMT has organized a Skill Development Program on "Training Cum Demonstration on Pond Ash Bricks Technology" under the **CSIR** Integrated Skill initiative and as a part of **CSIR-IMMT** diamond Jubilee Year Celebration. The Demonstration on Pond Ash Bricks Technology was conducted at Centre for Waste Utilization of Environment & Sustainability Department. More than 25 participants from different industries, MSMEs, Startups companies, Academia and young entrepreneurs have participated. The organizing committee consisting of Dr Ramanuj Narayan, Director, **CSIR-IMMT,** Bhubaneswar, Dr. D.S Rao (Chief Scientist & Head, HRD), Dr. Nabin Kumar Dhal (Chief Scientist & Head), E & S Dept., Dr S K Pradhan Coordinator, **CSIR** Skill Development Program, Dr. Syed M. Mustakim, Convener, and Er. R. Sathish, Co-convener.
Source: Orissadiary

International Women's Day Celebrated at CSIR-IMMT

International Women's Day with a campaign theme, invest in Women: Accelerate Progress, highlighting the need for a world where everyone is respected and valued was celebrated at **CSIR –IMMT** Bhubaneswar. Chief Guest, Utkal Ratna Samman Mrs. Jagi Mangat Panda, MD, OTVand Guest of Honour Dr. Smita Mohanty, Director & Head, CIEPET: SARPinaugurated the celebration Shanti Swaroop Bhatnagar Hall, of **CSIR-IMMT** in the presence of distinguished women professionals from the state faculty members and students. On this occasion, Dr. Ramanuj Narayan, Director of **CSIR-IMMT** conveyed his greetings to all the employs. Speaking on this occasion Mrs. Jagi Mangat Panda, highlighted significant achievements such as the launch of Chandrayaan 3 and the role of women power and mind in this project. Emphasising on breaking stereotypes surrounding women in India, particularly citing the achievements of the "Rocket Women" and advocating for their recognition.
Source: India Education Diary

CSIR-IMMT, Bhubaneswar, Hosts 51st Shanti Swarup Bhatnagar Indoor Final Tournament-2024

CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar, hosts the prestigious 51st Shanti Swarup Bhatnagar Indoor Final Tournament-2024, from March 15th to 19th, 2024. Shri Chetan Prakash Jain, Financial Adviser, **CSIR**, inaugurated the Tournament in the presence of Shri. Debasish Mohanty (former Indian Cricketer), Dr. Sanjeev Khosla, President, **CSIR**-SPB, Dr. Anuradha Madhukar, Chief Scientist, **CSIR**-HQ, Secretary, **CSIR**-SPB, Dr. Ramanuj Narayan, Director of **CSIR-IMMT** and Chairman of the event organising committee, Organizing Secretary Dr. Bankim Ch. Tripathy, Chief Scientist and Secretary, IMMT-Staff Club Dr. Bama Prasad Bag, Senior Principal Scientist.

Source: Indiaeducationdiary

National Conference On 'Recent Advances In Material Science (RAMS)' Hosted At Dharanidhar University's South Campus In Keonjhar

A two-days' national conference on the theme "Recent Advances in Material Science (RAMS)" was recently held at the South Campus of Dharanidhar University, Keonjhar. Organised by the Department of Chemistry of the University, the conference was aimed at bringing together academia and industry on one platform in order to envision models of sustainable development by harnessing the powers of materials. The event was held on 15 and 16 March 2024 and witnessed the participation of eminent scholars of the field.The inaugural session of the conference had as its chief guest, former Chief Scientist of **CSIR-IMMT** Bhubaneswar, Dr S.K. Biswal. Renowned scientist, Dr SC khattoi was the guest of honour of the occasion. Underscoring the significance of the academic gathering, the guests lauded the University for conceptualizing and organising a conference of this kind. The Vice Chancellor of the University, Professor Pratap Kumar Mohanty and Chairman PG Council, Professor Satyabrata Mishra were among the other dignitaries on the dais.

Source: Indiaeducationdiary

KABIL and CSIR-IMMT sign MoU for Technical and Knowledge cooperation for Critical Minerals

Under the MoU, KABIL will leverage the technical expertise and services of **CSIR-IMMT** to undertake various projects, including the design and analysis of metallurgical test work-plans, development and review of process flowsheets, and the selection of process technologies for mineral processing, beneficiation, and metal extraction.

Source: pv-magazine-india

CSIR-IMMT, Bhubaneswar Commemorates The 133rdDr. B.R. Ambedkar Jayanti with Enthusiasm

CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar, marked the 133rd Dr. B.R. Ambedkar Jayanti with fervor and participation. Held at SS Bhatnagar Hall of CSIR-IMMT, the event, attended by 300 individuals, including 100 students from various schools in Bhubaneswar, showcased a celebration of Dr. B.R. Ambedkar's legacy and his contributions to society. Dr. N K Dhal, Vice-Chairman of the Dr. B.R. Ambedkar Jayanti Celebration Committee, extended a warm welcome to all attendees. The inaugural address was delivered by Dr. Ramanuj Narayan, Director of **CSIR-IMMT**, Bhubaneswar, with Shri Upendra Nath Behera IAS (Retd.), Former Chairperson of OERC, gracing the occasion as the Chief Guest. Mr. Behera addressed the gathering, shedding light on the life and achievements of Dr. B.R. Ambedkar and inspired the school children present.

Source: Orissadiary

World Environment Day Celebrated By CSIR-Institute Of Minerals And Materials Technology, Bhubaneswar

Today, on June 5th, 2024, the **CSIR-Institute of Minerals and Materials Technology**, Bhubaneswar celebrated World Environment Day as part of the JIGYASA program. The focus of the day centered around the theme of land restoration, desertification, and drought resilience. During the event, Shri. Sudhansu S Khora, IFS, RCCF, Angul, and Executive Director of the Forest & Environment section at Odisha Mining Corporation, honored the occasion as the chief guest. Accompanying him was Shri. Sanjay K. Bhar, Regional Director of CMPDI, Bhubaneswar, who attended as the guest of honor. The event commenced with the planting of mango fruit-bearing trees at the Bose Einstein International Residence, **CSIR-IMMT**, led by Dr. Ramanuj Narayan, Director of **CSIR-IMMT**, Bhubaneswar. Also present were Dr. N K Dhal, Head of the Environment & Sustainability Department, along with scientists, research scholars, and children from **CSIR-IMMT.**

Source: Indiaeducationdiary

CSIR-IMMT Celebrated 10th International Yoga Day With Enthusiasm

CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT) today marked the 10th International Yoga Day with a vibrant celebration held in SS Bhatnagar Hall of **CSIR-IMMT**. The event was conducted under the chairmanship of Dr. Ramanuj Narayan, Director, **CSIR IMMT,** Bhubaneswar. The theme of today's event was "yoga for self and society" The programme started with a traditional lamp-lighting ceremony and the National anthem. Through his inaugural speech Hon'ble Chief Guest Suresh Kumar Mohapatra, Pranta Pradhan (Odisha) of Bharatiya Yoga Sansthan, motivated the audience and emphasized on the impact of Yoga in everyday life and how it should be incorporated to the quality of one's day-to-day life."Dr. Ramanuj Narayan, felicitated Yoga instructors from Bharatiya yoga Sansthan Ms. Manjula Mishra, Mr. K.V Apprao, Ms. Anusuya Behera, Mr.Pragyan Pattanik.

Source: Odissadiary

One-Week National E-Workshop on Innovation and Intellectual Property Rights by CSIR-IMMT: Intec

As part of sensitization activities of **CSIR-IMMT:** InTEC is organizing a one-week National e-Workshop on Innovation and Intellectual Property Rights (NeW IPR-2024) with the theme IP for ALL from June 24-29, 2024 with a total of 24 lectures (4 sessions a day) delivered by experts from various fields covering the major aspects of Intellectual Property Rights with theory and practical exercises. This workshop received about 1800 registrations and participants include students, faculty, researchers, scientists, industry professionals and others from various parts of the country reflecting to the theme of the workshop IP for ALL. **CSIR-IMMT** organized the Diamond Jubilee One-day Workshop on "Opportunities and Challenges in Minerals & Metallurgical Research for Viksit Bharat " & One Week One Theme (OWOT) – Energy (EED) - Exhibition on June 26, 2024 along with poster display and exhibition. The event was graced by the Chief Guest, M.Akshaya, (IPS Retd., former DG of Police, Government of Odisha) along with Dr.Ramanuj Narayan (Director, **CSIR-IMMT**), Prof.T.Srinivas (former outstanding Scientist, BARC and

Professor, HBNI), Prof.Madhusmita Das (Former Vice-Chancellor, FM University), Dr.Raghu Kumar (head, beneficiation, COE, AMNS).
Source: Odisharay

IMMT-led consortium in fray to pilot India's first green steel initiative

A consortium headed by the **Institute of Minerals and Materials Technology (IMMT)** has expressed interest to pilot India's first green steel-making initiative using 100 per cent hydrogen-based DRI production method. The project will be partly supported by the steel ministry. In industrial-scale hydrogen-iron making, also known as direct reduction of iron (DRI) using hydrogen, the oxygen is removed from the iron-ore. But instead of using high carbon emitting fossil fuels, it is done using hydrogen with the waste gas being water. The DRI so produced, also called sponge iron, is then fed into an electric arc furnace where electrodes generate a current to use it to produce steel. Earlier in June, steel Ministry had floated tenders – under the National Green Hydrogen Mission with an outlay Rs ₹455 crore - seeking participation for industry to pilot green steel-making, that is steel made where carbon emission or carbon content is substantially lower. The pilots will use hydrogen as an alternative to conventional coking coal.
Source: Thehindubusinessline

CSIR-IMMT Hosts Serb-Sponsored Bet 2024 Karyashala

CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT) has been instrumental in pioneering research in energy materials and devices, focusing on the development of novel materials for energy generation and storage through various technologies including hydrogen, photovoltaic cells, batteries, fuel cells, and more. Their contributions play a crucial role in advancing sustainable energy solutions and sensor technologies. To commemorate this achievement, **CSIR-IMMT** is organizing a SERB-sponsored skill development workshop titled "Building capabilities in context to energy materials and devices" (BET 2024) from 22nd to 27th July 2024 at SS Bhatnagar Hall, **CSIR-IMMT,** Bhubaneswar. This event marks a significant gathering of students from across the country, convened to explore and advance the boundaries of energy materials and technologies. Speaking on this occasion, Dr. Ramanuj Narayan, Director of **CSIR IMMT,** extended a heartfelt welcome to everyone. He remarked that from the dawn of civilization to our ongoing quest for energy, we draw inspiration from nature and learn how to utilize its resources effectively.
Source: Orissadiary

Centre of excellence set up at IIT-P for coating technology

A centre of excellence for wear- and corrosion-resistance coating technology that finds usage in a number of industries like manufacturing, aerospace, agriculture and automotive, was set up at Indian Institute of Technology (IIT)-Patna on Thursday with support from the department of science and technology, Govt of India. The centre, first of its kind in eastern India, was inaugurated by IIT-P director T N Singh at the inaugural function of a four-day international conference on "Advances in Thermal Spray". Singh said the initiative will develop "pioneering solutions that will revolutionize industries such

as manufacturing, aerospace and automotive". Ramanuj Narayan, director of **CSIR-IMMT,** Bhubaneswar; Goutam Sutradhar, director of NIT-Jamshedpur; Naresh Chanda Murmu, director of **CSIR-CMERI,** Durgapur; and Anup Kumar Keshri, principal coordinator of the centre of excellence among others were present on the occasion.
Source: Times of India

One-Month Professional Training Program For Hindalco Industries Limited Concluded Successfully At CSIR IMMT Bhubaneswar

The **Council of Scientific and Industrial Research-Institute of Minerals and Materials Technology (CSIR-IMMT)** has successfully concluded a one-month professional training program on “Recent Trends in Mineral Characterization, Beneficiation, Metallurgy, and Materials Development” for Graduate Engineer Trainees (GETs) from Hindalco Industries Limited. The program, held from July 1-31, 2024, featured a series of theory, practical, and hands-on sessions focusing on the theme and objectives of the training. The program was attended by 50 GETs from various Hindalco working stations. Dr. T S Rana, Head of **CSIR-HRDC,** Ghaziabad, was the chief guest and delivered the valedictory lecture on Human Resources Development activities at **CSIR**, which included a highly productive interaction with the participants. Dr. Ramanuj Narayan, Director of **CSIR-IMMT,** addressed the gathering, detailing the various activities of **CSIR-IMMT** and the broader **CSIR** organization, while emphasizing the importance and impact of regular training.
Source: Indiaeducationdiary

IIT Kanpur Hosts BIS – Academia Workshop on Technical Advancements in Powder Metallurgical Processes & Products

The Advanced Centre for Materials Science (ACMS) at the Indian Institute of Technology Kanpur (IITK) and the Bureau of Indian Standards (BIS), New Delhi, organized a BIS-Academia Workshop on ‘Technical Advancements and the Role of Standardization in Powder Metallurgical Processes and Products,’ in collaboration with the Department of Materials Science and Engineering at IIT Kanpur and the Indian Institute of Metals, Kanpur Chapter. Dr. Mayadhar Debata, Senior Principal Scientist at **CSIR-IMMT,** Bhubaneshwar, discussed the “Development of Non-Ferrous Alloys through Powder Metallurgy” with a special focus on strategic applications. The third lecture, by Dr. Pradyut Sengupta, Senior Scientist at **CSIR-IMMT,** focused on the “Design and Development of Intermetallics and Composites by Powder Metallurgy Route for High-Temperature Strategic Applications,” highlighting advanced materials for critical engineering challenges. In the subsequent lecture, Dr. Gururaj Telasang, Scientist E, ARCI Hyderabad, delivered a talk on “Metal Additive Manufacturing: Materials, Processes, and Case Studies,” exploring innovative processes for engineering applications. Dr. Deepak Pattanayak, Principal Scientist at **CSIR-CECRI,** discussed the “Application of Metal Additive Manufacturing Technology in the Biomedical Field.”
Source: Indiaeducationdiary

IIT Kanpur hosts BIS academia workshop on advancements and standardisation in powder metallurgy

The Advanced Centre for Materials Science (ACMS) at IIT Kanpur, in collaboration with the Bureau of Indian Standards (BIS) and the Indian Institute of Metals, organised a workshop titled 'Technical Advancements and the Role of Standardisation in Powder Metallurgical Processes and Products'. The event, hosted by IIT Kanpur's Department of Materials Science and Engineering, brought together industry experts, academics, and researchers to discuss innovations and the critical role of standardisation in powder metallurgy. Professor Anish Upadhyaya, Head of ACMS, delivered the welcome address and coordinated the event. Other speakers included Dr Mayadhar Debata, Senior Principal Scientist at **CSIR-IMMT,** Bhubaneshwar, who discussed the "Development of Non-Ferrous Alloys through Powder Metallurgy," with a focus on strategic applications. The evening session also featured talks from Dr Pradyut Sengupta (Senior Scientist at **CSIR-IMMT),** Dr Gururaj Telasang (Scientist E, ARCI Hyderabad), Dr. Deepak Pattanayak (Principal Scientist at **CSIR-CECRI),** Professor Anish Upadhyaya (IIT Kanpur), and Anshu Bhatia (Managing Director at Camstar Defense India Pvt Ltd).
Source: Bestcolleges

International Training program on Deep Sea Minerals at CSIR-IMMT, Bhubaneswar

The International Training Program on Deep Sea Minerals was officially launched today at SS Bhatnagar Hall, **CSIR-IMMT,** Bhubaneswar. Dr. Ramanuj Narayan, Director of **CSIR-IMMT,** inaugurated the program, joined by Dr. Kali Sanjay, Head of the Hydro & Electrometallurgy Department, **CSIR-IMMT**, Mr. P.K. Dash, Administrative Officer, **CSIR-IMMT** along with esteemed participants and guests. Speaking on this occasion, Dr. Ramanuj Narayan, Director of **CSIR-IMMT,** said, **CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT)** plays a crucial role in advancing metallurgical technologies for seabed minerals, in collaboration with the Ministry of Earth Sciences (MoES), Government of India. Fifteen international participants from countries including Kenya, Tanzania, Ghana, Nigeria, Sri Lanka, Madagascar, and Jamaica are attending this training, which will be conducted by scientists from **CSIR-IMMT.** Representatives from the Geological Survey of India (GSI), Indian Bureau of Mines (IBM), National Institute of Ocean Technology (NIOT), and National Centre for Polar and Ocean Research (NCPOR) are also part of the program, which runs until 26th October 2024.
Source: Indiaeducationdiary

ODICHEM-2024 Seminar in Bhubaneswar Focuses on Technological Challenges in the Mineral Sector

Bhubaneswar Regional Centre of the Indian Institute of Chemical Engineers (IIChE-BRC) and **CSIR-Institute of Minerals and Materials Technology**, Bhubaneswar, organized ODICHEM-2024 on the theme "Technological Challenges in the Mineral Sector" on 18-19th October 2024 at Welcomhotel By ITC, Bhubaneswar. Around 200 delegates from industries, academia, and R&D organizations attended the seminar. The Chief Guest, Dr Raghavendra Tewari, Outstanding Scientist & Director of Materials Group, Bhabha

Atomic Research Centre, inaugurated the seminar. Dr Tewari discussed the Energy Scenario in the Country and the Changing Role of Critical Minerals in India. The Guest of Honor, Shri Pankaj Kumar, Deputy Director General of the Geological Survey of India, presented a clear Geological picture of Odisha to the audience, highlighting the possibility of industrial development, especially related to the critical minerals. The Chairman of the Organizing Committee, Mr D. P. Misra, a veteran Chemical Engineer of Odisha and a consultant to many chemical industries, welcomed all the Industry Leaders, Associations, and their members, especially the investors from the mineral sectors, to come and explore Odisha as their next investment destination. Dr Ramanuj Narayan, Director, **CSIR-IMMT,** Bhubaneswar, narrated the industry-oriented research activities taken up by the **Council of Scientific and Industrial Research (CSIR)** and **CSIR-Institute of Minerals and Materials Technology,** in particular, for the mineral sector.
Source: Orissadiary

CSIR, IMD stalls win awards at science and technology expo

The three-day National Science and Technology Expo concluded at the G. Pulla Reddy Memorial School in Dilsukhnagar, Hyderabad, on Sunday (October 20, 2024). The event attracted over 50,000 visitors, including students and members of the public, who had the opportunity to interact with scientists and explore a wide range of exhibits. Among the many highlights of the event, the stalls by **CSIR** and IMD were particularly well-received. Both were awarded 'Best Stall' prizes. The expo featured 100 stalls from prominent scientific organisations such as ISRO, NRSC, **CSIR, NGRI, NAL, SERC, IMMT,** IMD, UIDAI's Aadhaar Card Division, the Visvesvaraya Industrial and Technological Museum, the National Council for Science Museums, **NIIST**, IITM Pune, NIOT, and MOES, among others. These stalls displayed science models and projects, offering a deep dive into various fields of scientific research and innovation.
Source: The Hindu

DSIR-CRTDH Conclave-2024 held at CSIR-Institute of Minerals & Materials Technology (CSIR-IMMT), Bhubaneswar Concluded: Empowering MSMEs through Innovation and Collaboration to Foster a Self-Reliant India

The Department of Scientific & Industrial Research (DSIR) under Ministry of Science & Technology, through its Programme 'Common Research and Technology Development Hub (CRTDH)', initiated in 2014-15, attempts to provide MSME clusters the much-needed supportive ecosystem, which encourages and facilitates innovation essential for MSMEs. This program recognizes the importance of MSMEs in the overall economy of India and therefore focuses on the creation of R&D infrastructure in driving scientific advancements, technological innovations and socio-economic development. The CRTDHs established in publicly funded research institutions have not only achieved remarkable success but have also generated inspiring success stories from their stakeholders. These outstanding and continuous accomplishments should be shared with a broad audience, including those who are currently not connected to the CRTDH network. In view of this, DSIR has organized two days DSIR-CRTDH Conclave 2024 on 13th & 14th November 2024 at

CSIR-Institute of Minerals & Materials Technology (CSIR-IMMT), Bhubaneswar wherein the supported CRTDHs had participated and showcased their achievements.
Source: Pib

CSIR Skill Coordinators' Conclave and Brainstorming on Future Skills at CSIR IMMT Bhubaneswar

CSIR-Human Resource Development Centre (HRDC), Ghaziabad (UP), the Training Unit of **CSIR** has been playing a significant role by periodically reviewing, monitoring, and evaluating the performance of the Initiative. To deliberate upon the various issues related to the effective implementation of this Initiative, **CSIR-HRDC** is organizing the "**CSIR** Skill Coordinators' Conclave and Brainstorming on Future Skills" from 21-22 November 2024 at **CSIR-IMMT**, Bhubaneswar with active support from **CSIR-Institute of Minerals and Materials Technology (IMMT).** Over 100 professionals are participating in the Conclave, including **CSIR** scientists, senior representatives from the Industry Associations, academicians, and students. The Conclave is expected to discuss the plan of action by participating labs for the future in order to make this Initiative, a grand success. **CSIR** also records its sincere thanks to all stakeholders for their continuous support for this national important initiative. Speaking on this occasion Dr. Vinay Kumar, Sr. Principal Scientist at **CSIR-HRDC**, Ghaziabad, and Skill Nodal PI, stated, "This program aligns with initiatives like Skill India, bridging the gap between academic knowledge and industry needs. Since its launch in 2016, **CSIR** has provided hands-on training in fields like oceanography, geophysics, drug discovery, and biotechnology.
Source: Orissadiary

IIT Bhilai's Common Research and Technology Development Hub receives Plaque of Honor at DSIR Conclave 2024

The Common Research and Technology Development Hub (CRTDH) at IIT Bhilai was honoured with a Plaque of Honour at the Department of Scientific and Industrial Research (DSIR)-CRTDH Conclave-2024, which took place at **CSIR-IMMT.** The CRTDH at IIT Bhilai exemplifies a crucial partnership between DSIR and IIT Bhilai. This advanced facility aims to support chemical industry progress, particularly benefiting Micro, Small, and Medium Enterprises (MSMEs). Led by IIT Bhilai Director Professor Rajiv Prakash, the centre provides technological solutions and innovative processes for various sectors, including chemical, pharmaceuticals, pigments, textile, dye and dye intermediates, metal, and mineral industries. Dr Sanjib Banerjee, Associate Professor, Department of Chemistry, serves as the PI and Coordinator of the CRTDH at IIT Bhilai. The recognition was received during the DSIR-CRTDH Conclave-2024 at **CSIR-IMMT** (Institute of Minerals and Materials Technology) during November 13-14. The facility focuses on supporting industries through specialised technological solutions addressing specific needs. Its services encompass effluent and waste treatment, process optimisation, and new chemical product development.
Source: Times of India

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: **Pib**

Lithium deposits in Reasi: Mineral samples submitted to IBM and IMMT, says Union Minister

Geological Survey of India (GSI) has submitted mineral samples of Lithium and Titanium resources, found during preliminary exploration in Salal-Haimna block of Reasi district in J&K, to Indian Bureau of Mines (IBM), Nagpur and **Institute of Minerals and Materials Technology (IMMT),** Bhubaneswar for carrying out beneficiation study. This has been revealed by the Union Minister of Coal and Mines, G Kishan Reddy, in reply to a question of MP Vishnu Datt Sharma in Lok Sabha on Wednesday. Reddy stated, "Geological Survey of India (GSI), an attached office of Ministry of Mines, has carried out preliminary exploration (G3 stage) in Salal-Haimna block of Jammu and Kashmir's Reasi district, primarily for bauxite, where additional resources of lithium and titanium were also established." Earlier the Minister had stated that the second attempt of the auction of the block was annulled due to non-receipt of bids. "GSI has submitted mineral samples to Indian Bureau of Mines, Nagpur and Institute of Minerals and Materials Technology, Bhubaneswar for carrying out beneficiation study. Additionally, two preliminary exploration (G3 stage) projects on Lithium in Salal East and Panasa areas of Reasi district have been taken up by GSI in the current field season 2024-25," the Union Minister stated.

Source: **Greaterkashmir**

IIIM wins CSIR Jigyasa Epic Hackathon

CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu won the final round for Solar Mech works on Solar Thermal Technology as a standalone system that works on CHP (Concentrated Heat & Power), an innovation model mentored by the scientists of **CSIR-IIIM**, Jammu under **CSIR** Jigyasa Epic Hackathon-2024. Giving the detail of the contest, a spokesperson of the Institute said that a total of 960 submissions were received by **CSIR** from all the **CSIR** institutions throughout the country, and later on, 64 ideas/models were shortlisted which were mentored by **CSIR** institutions. The Award was presented in an event under **CSIR**-Jigyasa Hackathon- 2024, held today at **CSIR-IGIB,** New Delhi. Pertinently, **CSIR-IIIM** developed technology called as Solar Mech works on Solar Thermal Technology as a standalone system works on CHP (Concentrated Heat & Power) and proves to be an efficient Solar Energy Technology which works on principle of cyclic air expansion and contraction by Temperature difference converting Heat Energy into Mechanical Energy.

Source: Dailyexcelsior

Discusses Challenges and Opportunities in the Mineral Sector

Inaugurating ODICHEM-2024, the Chief Guest, Dr. Raghavendra Tewari, Outstanding Scientist & Director of Materials Group, Bhabha Atomic Research Centre outlined the energy scenario in India and the changing role of critical minerals. The Guest of Honor, Shri Pankaj Kumar, Deputy Director General of the Geological Survey of India, presented a clear geological picture of Odisha to the audience, highlighting the possibility of industrial development, especially related to the critical minerals. Bhubaneswar Regional Centre of the Indian Institute of Chemical Engineers (IIChE-BRC) and **CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT),** Bhubaneswar, organized ODICHEM-2024 on the theme “Technological Challenges in the Mineral Sector” on 18-19th October 2024 at ITC Welcomhotel, Bhubaneswar. Around 200 delegates from industries, academia, and R&D organizations attended the seminar. There were many presentations primarily focused on the challenges and opportunities in the mineral sector, with an emphasis on critical minerals, as well as ferrous and non-ferrous minerals. Prof. Dr.-Ing. Omkar Nath Mohanty, Director, Technology & Academic Initiative, RSB Metaltech., RSB Group, Pune, delivered his keynote address on “Sustainable Steel Production in India an Appraisal: Focus on utilization of solid by-products.” He outlined the challenges of meeting the growing demand for steel production, including securing critical raw materials, sourcing energy and water, optimizing mine operations, and minimizing environmental impact.

Source: Chemindigest

Go Back

CSIR-IMTECH

CSIR-Institute of Microbial Technology (CSIR-IMTECH)

CSIR to develop indigenous standards for medical diagnosis as West-based models may not be suitable for Indian population

In a novel project, the **Council for Scientific and Industrial Research (CSIR)** is developing indigenous standards for medical diagnosis and treatment which would be more attuned to the Indian population than the Western standards that are being presently followed. “Our allopathic system of medicine is based on the parameters devised by the West. The view of the scientific and medical fraternity is that the genetic profile, genealogy environment, living conditions, diet and level of physical activity of the population in the sub-continent are quite different from that in the West and hence, the medical parameters devised for the Western populace may not be ideal for Indian conditions,” Dr Sanjiv Khosla, Director Institute of Microbial Studies **(IMTECH),** one of the participating laboratories in the project, said. Titled Phenome India-**CSIR** Health Knowledgebase (PI-CHeCK), the project is being undertaken by all 37 constituent laboratories of CSIR, and in the first phase will involve a sample base of 10,000 employees, pensioners and their family members. CSIR’s Institute of Genomics and Integrative Biology, New Delhi, is the nodal laboratory for the project.

Source: **Tribune India**

‘Biomarkers can help detect oral cancer at an early stage’

Microbial markers can help identify oral cancer at an early stage, found a study jointly done by King George’s Medical University and **CSIR-IMTECH** Chandigarh. “The study found that Streptococcus and Rothia bacteria can be established as biomarkers for early stage oral cancer. Study of these bacteria can help in early case detection,” said Dr Sudhir Singh of KGMU, who is a part of the joint study. He said that mouth is considered to be a hub of micro-organisms and in a person with disease these micro-organisms will change. Keeping in view the change the study was conducted and this has given positive results.

Source: **Hindustantimes**

Workshop on ‘Molecular Techniques in Biochemistry’

Chandigarh, February 15, 2024: Department of Biochemistry organized a Two Day workshop on ‘Molecular Techniques in Biochemistry’ on Feb 14-15, 2024 Department of Biochemistry, PU organized a two day workshop on ‘Molecular Techniques in Biochemistry’ on February 14-15, 2024 in collaboration with Merck High End Skill Development Centre, **CSIR, IMTECH** Chandigarh. The workshop was designed with an aim to provide a hand on training to the MSc students for analysis of important

biomolecules by giving them exposure to sophisticated molecular techniques such as Western blotting and Polymerase Chain reaction (PCR).
Source: Cityairnews

What's the sign for 'centrifuge'? How we added scientific terms to Indian Sign Language

The lack of scientific terms and vocabulary in many of the world's sign languages can make science education and research careers inaccessible for deaf people and those with hearing loss. Meet the scientists, sign-language specialists and students working to add scientific terms and concepts to sign languages. In the first of four articles showcasing their efforts, Alka Rao, a molecular biologist at the **Council of Scientific and Industrial Research's Institute of Microbial Technology (CSIR-IMTECH)** in Chandigarh, India, tells Nature what inspired her to push for increased inclusivity for deaf students in India.
Source: Nature

Visible signs of change: Scientific terms and concepts in Indian Sign Language are coming to the aid of hearing-impaired

How do you explain centrifuge in Indian Sign Language (ISL)? This was the simple question that a hearing-impaired student asked microbiologist Dr Alka Rao, who was visiting the School for Deaf Children in Gurugram in 2017. "We had no answer," says Rao, Principal Scientist, Council of Scientific and **Industrial Research's Institute of Microbial Technology (CSIR-IMTECH),** Chandigarh. The question, however, prompted Rao and her six-member team — Digvijay Singh, Hoshiyar Singh, Sakshi Sharma, E Theresa Arulvathy, Vivekanand Jaiswal and Navjot Singh — to start working on the Indian Sign Language Enabled Virtual Laboratory (ISLEVL), a project that won the prestigious International Zero Project Award 2024.
Source: Tribune India

CSIR campus to have tougher, thinner steel slag roads

Two laboratories of the **Council for Scientific and Industrial Research (CSIR)** will be the first locations in the city to have roads constructed with steel slag, a by-product waste in the production of steel. Due to its superior structural stiffness, steel slag roads are expected to be 30% thinner than conventional roads, thereby enhancing durability and sustainability. It is produced during the separation of molten steel from impurities in steel-making furnaces and largely composed metallic and silica oxides. A team from the **CSIR's Central Road Research Institute (CRRI),** headed by its director Prof Manoranjan Parida, visited the **CSIO** and the **Institute of Microbial Technology (IMTECH)** here. Discussions were held on the modalities of constructing such roads with Dr Sanjeev Khosla, Director **IMTECH**, and Dr Satish Kumar, acting Director and Chief Scientist at **CSIO**.
Source: Tribune India

AIMS Mohali and CSIR-IMTECH Chandigarh sign MoU

Dr. B R Ambedkar state institute of medical sciences, Mohali and **CSIR-IMTECH**, Chandigarh signed a Memorandum of Understanding (MoU), to "Collaborate and carry out state of the art research through development and exchange of research, training and

projects in areas that complement each other in healthcare theme." "It has been seen that adherence to academic textbooks and the atmosphere of hospitals limits the medical students from engaging in activities beyond the medical curriculum. This collaboration is likely to be useful in assigning elective postings to medical students during their 3rd year at AIMS Mohali which has now been made mandatory as per the latest NMC guidelines for a multidimensional exposure of medical graduates in the fields of research and clinical practice along with broadening the scope of multidisciplinary research among the two institutions, "said Dr Bhavneet Bharti,
Source: Yespunjab

IMTECH-led team on path of developing Parkinson's cure

Indian researchers, led by scientists from **Institute of Microbial Technology (IMTECH)** in Chandigarh, have in a collaboration with Denmark discovered a molecule which could lead to developing a cure for Parkinson's, a neurodegenerative disease. The study, till now only carried out on mice, has shown promising results for one molecule. The researchers have filed an international patent for four molecules that have potential to provide cure for the disease. The researchers are planning to carry out studies for tolerability of the molecule in animals. If the team, which includes researchers from IIT Bombay, IIT Delhi, **Central Drug Research Institute**, Lucknow and a group in Denmark, manages to provide a cure for Parkinson's, a similar strategy could be explored for Alzheimer's.
Source: Times of India

CGC's Biotechnology department organizes event on bioentrepreneurship

Department of Biotechnology, CCT, CGC Landran, organized BioStart2K24, a capacity-building program on bioentrepreneurship and building bioentrepreneurial resilience. The event was graced by the presence of the chief guest, Dr. Ajit Dua, CEO, Punjab Biotechnology Incubator (PBTI) Mohali; guest of honor, Mr. Munish Kumar, Head-HR, Nectar Life Sciences Ltd.; Dr. Amit Kumar Rai, Scientist D, National Agri-Food Biotechnology Institute (NABI), Mohali; Dr. Taraka Ramji, Plant Scientist, Co-founder and CEO, PeelOn, USA; Dr. Ankur Gautam, Lab Services Manager, Merk Innovation Lab, **CSIR-IMTECH** Mohali, among others. They were joined by Dr. P.N. Hrisheekesha, Campus Director, CGC Landran, and Deans and Directors of the institution.
Source: Babushahi

IPC and CSIR-IMTECH forge strategic partnership to advance research in microbiology

Aimed at driving innovation and progress in the field of microbiology, the Indian Pharmacopoeia Commission (IPC) and the **CSIR-Institute of Microbial Technology (IMTech),** Chandigarh, have joined forces towards advancing microbiological research and development for the betterment of public health. This partnership marks a significant milestone in the journey towards harnessing the potential of microbiology to address pressing healthcare challenges. By pooling their expertise and resources, IPC and **IMTECH** are poised to unlock new avenues of discovery and innovation in this critical

field. Through close collaboration, IPC and **IMTECH** aim to explore cutting-edge technologies and methodologies that hold the promise of transforming healthcare and pharmaceutical industries. By fostering an environment of cooperation and knowledge exchange, this partnership seeks to accelerate the pace of microbiological research and propel India to the forefront of global innovation.
Source: Pharmabiz

First fully indigenous vaccine shows 'near-complete protection' from Covid

In what could be a major boost to fight future SARS-COV-2 infections, researchers from **CSIR-Institute of Microbial Technology (IMTECH)**, Chandigarh, have developed a "safe and highly effective" protein subunit-based vaccine candidate offering "near-complete protection" in preclinical studies. Newer variants of SARS-CoV-2 capable of evading the human immune response continue to emerge, although not of pandemic-proportions such as those detected in 2020 and 2021. Most existing Covid vaccines currently in human use are based on messenger ribonucleic acid (mRNA), inactivated Covid virus or non-replicating virus vectors. Recently published in the international journal Vaccine (Elsevier), **CSIR-IMTECH's** paper reported the development and pre-clinical assessment of an engineered antigen IMT-CVAX, which is a recombinant prefusion-stabilised trimeric spike protein, to tackle Severe Acute Respiratory Syndrome-related Coronavirus 2 (SARS-CoV-2) infections. The project was funded by the **Council of Scientific and Industrial Research (CSIR),** New Delhi, and the team was headed by principal scientist Dr Ravi P N Mishra.
Source: Deccanherald

National Conference on Technological Breakthrough and Libraries at Chd from today

CSIR-IMTECH, in collaboration with the Association of Senior Library and Information Professionals (ASLIP), is organizing a two-day National Conference on 'Technological Breakthrough and Libraries: Present and Beyond' on November 7-8, 2024. The conference will explore the role of technology in shaping the future of libraries and information management. The inaugural ceremony, scheduled for 10 am on Thursday, will be graced by Amity University, Mohali, Vice-Chancellor Prof RK Kohli.
Source: Dailypioneer

डॉ दीपक राष्ट्रीय एसलिप बेस्ट प्रोग्रेससिव लाईब्रेरीयन अवार्ड, 2024 से एसलीप कांक्लेव मे हुये सम्मानित

सी एस आई आर – सूक्ष्मजीव प्रोधोगिकी संस्थान (**CSIR- IMTECH)** चंडीगढ एवं एसोशिएशन ऑफ सीनीयर लाईब्रेरी प्रोफेशन्ल्स (एसलिप) के संयुक्त तत्वाधान मे "टेक्नोलोजीकल ब्रेकथ्रू एण्ड लाईब्रेरीज़ : प्रजेन्ट एण्ड बियोण्ड" विषय पर आयोजित 2 दिवसीय राष्ट्रीय एसलीप कांक्लेव मे देश के नेक्स्ट जनरेशन लाईब्रेरीयंस एवं विश्व के सबसे बड़े पुस्तकालय संगठन इफ्ला "वाल ऑफ फेम " मे नाम शुमार राजकीय सार्वजनिक मण्डल पुस्तकालय कोटा के संभागीय पुस्तकालय अध्यक्ष एवं कोटा संभाग के सार्वजनिक

पुस्त्स्कालय के नोडल ओफ़ीसर डा दीपक कुमार श्रीवास्तव को राष्ट्रीय एसलिप बेस्ट प्रोग्रेससिव लाईब्रेरीयन अवार्ड , 2024 से प्रोफेसर डा.आर के कोहली कुलपति एमीटी विश्वविधालय मोहाली, डा एस कार्तिकेन निदेशक सूक्ष्मजीव प्रोधोगिकी संस्थान (**CSIR- IMTECH)** चंडीगढ , डा आर पी कुमार अध्यक्ष एसलीप , डा राजकुमार भाकर सचिव एसलीप एवं डा वी सी यादव सेवानिवृत प्राचार्य राजकीय महाविधालय चंडीगढ़ द्वारा शाल, साएटेशन एवं मोमेंटों देकर सम्मानित किया गया | इस अवसर पर डा दीपक कुमार श्रीवास्तव ने " फोर्टीफ़ाएंग लाईब्रेरी सिस्टम – स्ट्रेटेजी फॉर ओवरकमिंग सीक्यूरिटी चेलेंजेज़" विषय पर अपना शोध पत्र प्रजेन्ट किया |

Source: **Pressnote**

Go Back

CSIR-National Aerospace Laboratories (CSIR-NAL)

Year End Review 2023 of the Council of Scientific and Industrial Research (CSIR)

India requires large number of pilot trainer aircraft to cater to the needs of the aviation sector. **CSIR-NAL** has indigenously designed and developed light aircraft Hansa-New Generation (NG) with advance features. Aircraft is Type Certified by the DGCA on 20th February 2023 for DAY-VFR & NIGHT-VFR operations under JAR-VLA. **CSIR-NAL** has received Letter of Intents (LoI) for procurement of nearly 110 aircrafts from Flying clubs across the country.

Source: bestcurrentaffairs

Ministry of Textiles Allocates Rs 103 Cr for R&D Projects In Technical Textiles

The Ministry of Textiles has earmarked approximately Rs 103 crores for a series of Research and Development (R&D) projects in the realm of technical textiles, on Thursday. Union Minister for Textiles, Commerce and Industry, Piyush Goyal, highlighted the importance of fostering collaborative efforts between the government and industry to boost the indigenous development of technical textile products. Leading the charge on these approved projects are research institutions and bodies such as **CSIR-NAL,** ATIRA, NITRA, IIT Delhi, ICT-Mumbai, NIT-Jalandhar, and Colorjet India Ltd., among others.

Source: Knn India

CSIR launches tech-driven initiative to improve productivity, farmers' income

The **Council of Scientific and Industrial Research (CSIR)** has launched a unique mission to develop region-specific smart agro-technologies for paddy in south India, besides for other crops, aiming to improve soil health and productivity and thereby enhance the farmers' income, a senior scientist said. This endeavour will help the Central government to introduce the use of automation, sensors, drones, and Artificial Intelligence gadgets for agriculture in the future. "This is one of the first of the mission mode projects that have been conceived and implemented on the ground," he said. A team of scientists and technologists from **CSIR Fourth Paradigm Institute,** Bengaluru, **CSIR-National Aerospace Laboratories**, **CSIR-Indian Institute of Integrative Medicine** Jammu, and **CSIR-Central Mechanical Engineering Research Institute**, Ludhiana, identified the paddy fields of farmers at Chengalam, Thiruvarppu panchayat and Muleppadam Panchayat in Kottayam, Kerala, Senbagaraman Pudur and Navalkadu in Nagercoil, Tamil Nadu, and Hosapete in Karnataka for the mission.

Source: Deccanherald

India's National Aerospace Laboratories conducts HAPS flight tests

India's **Council of Scientific and Industrial Research – National Aerospace Laboratories (CSIR-NAL)** has carried out a series of flight tests on a subscale model of its high-altitude pseudo satellite (HAPS) platform. The tests were conducted at the Defence Research and Development Organisation's (DRDO's) Aeronautical Test Range (ATR) at Challakere, Karnataka, from 23 January to 2 February. During the tests, the subscale model, which has a wingspan of 12 m and a maximum take-off weight of 22 kg, conducted about 22 sorties and accumulated close to 37 flight hours. Speaking to Janes, L Venkatakrishnan, **NAL's** chief scientist and high-altitude platform programme director, said, “The aircraft met or exceeded all the performance metrics set out for it including a flight endurance of more than 8 hours 30 minutes, reaching an altitude of almost 3 km above mean sea level.” Venkatakrishnan added that metrics including climb rate, maximum bank angle, turn radius, and one engine inoperative were also assessed in the flight tests.
Source: Janes

CSIR NAL flies test-drone that can double up as ‘pseudo satellite’

Scientists at the **CSIR-National Aerospace Laboratories (NAL)** have successfully tested an unmanned aerial vehicle, called High Altitude Pseudo Satellite (HAPS) at Challakere, Karnataka, earlier this month. HAPs are like drones, except that they are expected to be in the stratosphere – well above where commercial planes fly – and can be powered enough by solar cells and a battery-system to be able to hover for days on end. A fully working HAPS can be used for a variety of applications, from surveillance to beaming 5G waves. They can double up as “towers in the sky” and have more flexibility than satellites, in being able to map a piece of land from above.
Source: The Hindi

Why India wants to develop high-altitude pseudo-satellite vehicles, powered by the Sun

The Bengaluru-based **National Aerospace Laboratories (NAL)** successfully flew a prototype of a new-generation unmanned aerial vehicle (UAV) that is being seen as a huge technology breakthrough. It was no ordinary UAV. This one can fly at great heights, about 20 km from ground, runs entirely on solar power, and can remain in the air for months on end. Such UAVs belong to a class of flying objects called HAPS, or high-altitude pseudo-satellite vehicles, or HALE, that is high-altitude long-endurance vehicles. The primary utility of HAPS vehicles is in the field of surveillance and monitoring, but there are other situations, like disaster management, wherein it can be very useful.
Source: Indian Express

HAL conducts successful first flight of LCA Tejas Mk1A in Bengaluru

The first aircraft LA5033 of the Tejas Mk1A series successfully soared in the sky after taking off from the Hindustan Aeronautics Limited (HAL) facility in Bengaluru on Thursday, the public sector aerospace and defence company said. According to HAL, the Tejas Mk1A aircraft did a successful sortie with a flying time of 18 minutes. The plane was

piloted by Chief Test Pilot Group Captain K K Venugopal (Retired). HAL had signed a Transfer of Technology (ToT) agreement with **CSIR-National Aerospace Laboratories (CSIR-NAL)** on November 8, 2023. The agreement was aimed at manufacturing BMI Engine Bay Door for the series production of Light Combat Aircraft (LCA) Tejas Mk1A an indigenous 4.5 generation, all-weather and multi-role fighter aircraft for the Indian Air Force.
Source: Business Standard

CSIR-NAL hands over final set of engine bay door parts for Tejas Mk1A to HAL

CSIR-National Aerospace Laboratories (NAL) on Monday handed over the third and final set of engine bay door (EBD) parts for the Tejas Mk1A, to Hindustan Aeronautics Limited (HAL). HAL had entered a Transfer of Technology (ToT) agreement with **CSIR-NAL** in November 2023, to manufacture Bismaleimide (BMI) EBD for the series production of Light Combat Aircraft Tejas Mk1A. As part of the agreement, HAL can directly produce these high temperature-resistant composite parts for the multi-role fighter aircraft. The manufacturing technology involves the use of carbon-BMI prepreg (composite materials impregnated with resins) for the EBD to withstand a temperature of about 200 degrees Celsius. The required moulds and tools were refurbished and qualified by **CSIR-NAL,** along with HAL.
Source: Deccanherald

Bengaluru start-up successfully tests Synthetic Aperture Radar technology on NAL's Pseudo-Satellite

City-based space technology start-up GalaxEye has successfully tested its Synthetic Aperture Radar (SAR) technology on a subscale High Altitude Pseudo-Satellite (HAPS) developed by the **National Aerospace Laboratories (NAL).** GalaxEye said that it is the world's first private entity to conduct SAR trials on the HAPS platform. According to the start-up, HAPS are like high-flying drones that operate in the stratosphere, offering unprecedented capabilities for prolonged aerial surveillance. These platforms leverage solar energy and advanced battery systems to stay aloft for extended periods. At the stratosphere, SAR emerges as a pivotal technology for all-weather, all-time imaging, hence overcoming the challenge of cloud cover, which impedes traditional electro-optical cameras
Source: The Hindu

Vice-President to visit Belagavi & Bengaluru in Karnataka on 27th May

The Vice-President, Shri Jagdeep Dhankhar and Dr. Sudesh Dhankhar will visit Belagavi and Bengaluru in Karnataka on 27th May, 2024. During his one-day tour, the Vice-President will arrive in Belagavi and be the Chief Guest at the Foundation Day of ICMR-National Institute of Traditional Medicine (NITM) and at the 14th Convocation of KLE University there. Thereafter, Shri Dhankhar will visit **CSIR-NAL** Belur Campus and witness the Exhibition of LCA components & SARAS. He'll also lay the foundation stone for certain projects at the NAL. During his tour, VP is also scheduled to visit Raj Bhawan, Bengaluru.

Source: Pib

Skyward leap. India on course to joining the elite HAP club

India has carved a place for itself in many exclusive niches — it is among the very few countries to have achieved moon landing, to possess anti-satellite missile systems, intercontinental ballistic missile (ICBM) and ICMBs with multiple independently targetable re-entry capabilities. And now, the country is on course to join a very select club of countries that have their own long-flight, High-Altitude Platforms (HAP). On May 7, the public funded research body, **CSIR-NAL** (National Aerospace Laboratories), test-flew a vehicle first to a height of about 3,000 feet (with a 'synthetic aperture radar' payload, made by the start-up, Galaxeye Space). It came back and took off again and flew to 25,000 feet (about 8 km), without the payload. The "subscale flight" was a milestone event in the journey towards the development of a full-scale HAP. The learnings from the flight would be used to build a bigger vehicle, which is the target of the 'High Altitude Platform Program', by December 2025. When NAL achieves the feat, India might be only the second or the third country to have HAP (depending upon other countries' progress.)
Source: Thehindubusinessline

Text of the Vice President's speech after visiting National Aerospace Limited (NAL) facilities and laying the foundation stone of Centre for Carbon Fiber and Prepregs in Bengaluru (Excerpts)

Hon'ble Vice-President Shri Jagdeep Dhankhar witnessed the flying display of the Hansa NG, the indigenous flying trainer designed and developed by the **CSIR- National Aerospace Laboratories (CSIR-NAL),** in Bengaluru, Karnataka today. I greet you, I congratulate you. In past one hour or so, I have been surcharged, energised and motivated. I have been telling, driven by the ground reality, that India is a land of hope and possibility. But, here I find that our futuristic outlook is taking shape. This is the laboratory, this is the crucible where these things are happening. As a student of physics honours, I'm absolutely delighted. In Amrit Kaal, we are seeing India's rise. The rise is unstoppable, the rise is incremental but the kind of rise which you are defining here is a rise that the world is noticing. We are going to be one of the top nations in the world. India is one of the countries that are focusing on disruptive technologies as no other country is doing. There are 5, 6 countries in the world focusing on that. Our quantum computing system that will be of extreme awareness to you all is already in place.
Source: Pib

Innovation, tech push defining India's growth, says Dhankhar

Vice President Jagdeep Dhankhar and wife Sudesh Dhankhar during their visit to **CSIR-NAL** on Monday. Karnataka Governor Thaawarchand Gehlot (L) looks on. Bengaluru: India's scientific community is converging to fuel transformative change and widening the range of opportunities for the country's youth, Vice President Jagdeep Dhankhar said here on Monday. He was speaking at **CSIR-National Aerospace Laboratories** after a visit to the facility. Calling the laboratory a crucible where India's outlook for the future

was taking shape, the Vice President said the country was on a course of incremental growth, which the world was noticing. "India is one of the countries that are focusing on disruptive technologies. Our quantum computing system is already in place. We are also focusing on Machine Learning, blockchain, Artificial Intelligence, and Internet of Things," he said.
Source: **Deccanherald**

Floating earthmover may help BBMP rid lakes of weed

What started as a 12-foot-long small boat in 2017 has now become a 40-foot-long floating earthmover developed by **CSIR-National Aerospace Laboratories (CSIR-NAL).** Jaldost, designed to clear hyacinth and garbage in waterbodies up to two feet in depth, is being pitched for cleaning the city lakes. Now in the commercial stage of production after the prototype was tested, the commercial arm that is scaling the product is confident of manufacturing another unit within three months. Karthikeyan from CSIR-NAL, who is the project leader for Jaldost, said the prototype is tested and in the commercial stage. "We are in talks with BBMP," he said. Ganesan G, VP of business development at Shri Vari Engg Systems Pvt Ltd, which is the commercial arm of Jaldost, said BBMP has principally agreed to procure the machine, but the deal is yet to be formalised. Since 2017, Karthikeyan has been working with the Indian Army, which gave him the space to test his mechanism at Ulsoor Lake.
Source: **Times of India**

Isro successfully conducts second test of Air Breathing Propulsion Technology

The Indian Space Research Organisation (Isro) on Tuesday successfully completed the second experimental flight demonstrating Air Breathing Propulsion Technology. The test, conducted at 07:00 am from the Satish Dhawan Space Centre in Sriharikota, marks a crucial step forward in India's space propulsion capabilities. The experiment utilised Isro's RH-560 sounding rocket, the heaviest in its sounding rocket family, as a cost-effective flying test bed. The Air Breathing Propulsion systems were symmetrically mounted on either side of the rocket, showcasing Isro's innovative approach to testing advanced technologies. This experimental flight builds upon extensive ground tests conducted at various Isro centers, including the Vikram Sarabhai Space Centre (VSSC), Liquid Propulsion Systems Centre (LPSC), and Isro Propulsion Complex (IPRC). Collaboration with the **CSIR-National Aerospace Laboratories (CSIR-NAL)** in Bengaluru further underscores the comprehensive approach taken in developing this technology.
Source: **India Today**

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

Council Scientific and Industrial Research (CSIR)-National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the **NPL** campus, as part of its 'One Week One Theme' initiative with participating labs **CSIR-CSIO,**

CSIR-CEERI, and **CSIR-IIP**. Prof. Venugopal Achanta, Director of **CSIR-NPL**, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of **CSIR-NAL** and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme. Dr. P. C. Panchariya, Director of **CSIR-CEERI,** highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.
Source: **Pib**

India Unveils Lethal 'Swadeshi' Kamikaze Drones With 1,000 Km Range

As India prepares to celebrate the 78th Independence Day, the **National Aerospace Laboratories (NAL)** unveiled that it is making potent swadeshi (indigenous) Kamikaze Drones, do-and-die unmanned aerial vehicles with home-built engines that can power them to fly up to 1,000 kilometres. Loitering munitions are do-and-die machines. They have been widely used in the ongoing Russia-Ukraine war and the Israel-Hamas conflict in Gaza. These unmanned aerial vehicles have been used extensively by the Ukrainians to target Russian infantry and armoured vehicles. They loiter in the general area of interest for an extended period, carry explosives and ram the target when commanded by a human controller sitting far away. They can be sent in swarms, i.e. multiple drones and attack enemy installations by overwhelming the radars and enemy defences. The Kamikaze suicide missions were first seen towards the end of World War II when the pilots of a depleted Japanese air force would ram their fighter planes on Allied aircraft and ships.
Source: **Ndtv**

भारत में तैयार हो रहा स्वदेशी कामिकाजे ड्रोन:1000 किलोमीटर की रेंज; रूस-यूक्रेन और इजराइल-हमास युद्ध में हो रहा इस्तेमाल

भारत स्वदेशी कामिकाजे ड्रोन बना रहा है। यह ड्रोन 1,000 किलोमीटर तक उड़ान भर सकेगा। इसमें घरेलू इंजन लगाया जा रहा है। ये मानव रहित ड्रोन टारगेट पर जाकर नष्ट हो जाते हैं। **नेशनल एयरोस्पेस लेबोरेटरीज (NAL)** ये ड्रोन बना रही है। इस तरह के ड्रोन रूस-यूक्रेन और गाजा में इजराइल-हमास संघर्ष में इस्तेमाल हो रहे हैं। यूक्रेन ने इनका उपयोग रूस की पैदल सेना और बख्तरबंद वाहनों को टारगेट करने के लिए बड़े पैमाने पर किया है। ड्रोन लंबे समय तक टारगेट के इलाके में उड़ सकते हैं। इनमें विस्फोटक लगा होता है। दूर बैठा कोई भी व्यक्ति इन्हें कंट्रोल कर सकता है। इन्हें झुंड में यानी कई ड्रोन एक साथ भेजे जा सकते हैं। इससे यह दुश्मन के रडार और डिफेंस से बचकर टारगेट पर हमला कर सकता है। कामिकाजे जापानी शब्द है। यह द्वितीय विश्व युद्ध के दौरान हमला करने वाली एक स्पेशल यूनिट से

जुड़ा है। इसमें पायलट अपने लड़ाकू विमान क्रैश करके अपने साथ दुश्मनों का खात्मा कर दिया करते थे। तब से किसी भी आत्मघाती अभियान के लिए कामिकाजे नाम जुड़ गया।

Source: Bhaskar

National Aerospace Labs Issues RFP for Loitering UAV Development

National Aerospace Laboratories (NAL) has launched a Request for Proposal (RFP) seeking partners to develop cutting-edge loitering unmanned aerial vehicles (UAVs). This initiative is aimed at advancing India?s defence technology and bolstering its capabilities in aerial surveillance and precision strikes. The RFP outlines requirements for the design, development, and delivery of loitering UAVs that can perform extended surveillance and attack missions. These UAVs are expected to be equipped with advanced avionics, high-resolution imaging systems, and precision-guided munitions. The project is a key part of NAL's strategy to enhance indigenous defence technology and reduce reliance on foreign systems. The development of loitering UAVs will enable more effective monitoring and targeted operations in both military and strategic scenarios. The technology promises to offer significant improvements in mission flexibility and operational efficiency, with applications ranging from border security to counter-terrorism operations.

Source: Constructionworld

KRR Heavy Engineering Expands into Aerospace Industry by Acquiring Advanced Drone and UAV Technology from National Aerospace Labs

KRR Aerospace, the specialized aerospace, defence, and space division of KRR Heavy Engineering, proudly announces the acquisition of cutting-edge drone and UAV technology from the prestigious **Council of Scientific and Industrial Research – National Aerospace Laboratories (CSIR-NAL),** Bengaluru. This strategic acquisition aligns with KRR Aerospace’s commitment to advancing aerospace innovation and enhancing capabilities in unmanned aerial systems beyond the autoclave technologies in which KRR is already a market leader. The technology transfer agreement, was formalized on September 4, 2024, signed by Dr. Sakthivel Ramaswamy, MD & CEO of KRR Aerospace, and handed over to KRR Aerospace by Dr. Abhay A Pashilkar, Director of **CSIR-NAL**. It marks a significant enhancement of KRR Aerospace’s technological portfolio. This partnership brings together two leaders in aerospace to drive forward advancements in unmanned aerial systems. Revolutionary UAVs for Diverse Applications The acquired UAV technologies from **CSIR-NAL** include drones designed for a variety of applications:

Source: Theprint

India's Pseudo-Satellite: Solar Plane That Can Fly For 90 Days At A Time

In what will be a significant addition to India's arsenal, scientists have been developing a solar-powered plane that can fly up to 90 days at a stretch, and a smaller version has been flown successfully for ten hours. Called a High-Altitude Platform (HAP), it has been developed by the **National Aerospace Laboratories (NAL),** Bengaluru. HAP is a solar-

powered autonomous unmanned aircraft flying at stratospheric levels and is capable of day-and-night operations at altitudes of 17-20 km with an endurance of months. A HAP with a payload is often referred to as a High-Altitude Pseudo Satellite (HAPS). A startup in Bengaluru called New Space Research and Technologies has also developed a similar prototype with 24-hour endurance. According to **NAL,** during times of conflict, HAPS can address the perpetual theatre and strategic air asset shortfall, particularly during force mobilisation. It can fill both strategic and tactical roles of ISR (Intelligence, Surveillance, Reconnaissance) and can also provide battlefield communications. When used by air defence services, such aircraft can play an additional role in directing operations.
Source: **Ndtv**

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक, शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.
Source: **Indias.news**

India set to boost aircraft manufacturing, government to collaborate with HAL and NAL

Civil Aviation Minister K Rammohan Naidu on Monday (October 21) announced that the government aims to develop aircraft design and manufacturing capabilities in India, collaborating with industry leaders. The Bhartiya Vayuyan Vidheyak Bill 2024, passed by the Lok Sabha in August, includes provisions to regulate aircraft design and manufacturing, aligning with the Aatmanirbhar Bharat initiative. “We want to design and manufacture planes in India. We are taking help from HAL (Hindustan Aeronautics Ltd) and **NAL (National Aerospace Laboratories**) and other industry partners we have,” Naidu stated. “In the foreseeable future, we want to also have a situation where we

manufacture planes not for domestic demand only but also for the demand of the entire world… we are going to move towards it," the minister said. India becoming key market for aviation manufacturers Currently, HAL is producing small civilian planes on a limited scale. As India continues to be one of the fastest-growing aviation markets, with over 1,200 planes on order, the country is becoming a key market for manufacturers like Boeing and Airbus.
Source: Financialexpress

Civil Aviation Minister Naidu stresses upon the need of indigenous civil aircraft development

Civil Aviation Minister Kinjarapu Rammohan Naidu on Monday emphasised the importance of developing indigenous civil aircraft to showcase India's expertise and strengthen its position as a preferred destination for aerospace component manufacturing, from initial design to final production, according to an official press release. Addressing staff at the **Council of Scientific and Industrial Research-National Aerospace Laboratories (CSIR-NAL),** the Ministry of Civil Aviation, the Directorate General of Civil Aviation (DGCA), flight training organisations (FTOs), and aerospace industry representatives in Bengaluru, Minister Naidu underscored Prime Minister Narendra Modi's vision for India to become a leading aviation hub by the end of the decade and achieve Viksit Bharat by 2047. "India has a competitive advantage in the aerospace industry, supported by a qualified workforce of engineers, scientists, and IT graduates; an established base of parts and components; robust manufacturing expertise; and advanced academic institutions and R&D infrastructure. Many aerospace companies are considering India as a destination for manufacturing and MRO services.
Source: Aninews

CSIR, IMD stalls win awards at science and technology expo

The three-day National Science and Technology Expo concluded at the G. Pulla Reddy Memorial School in Dilsukhnagar, Hyderabad, on Sunday (October 20, 2024). The event attracted over 50,000 visitors, including students and members of the public, who had the opportunity to interact with scientists and explore a wide range of exhibits. Among the many highlights of the event, the stalls by **CSIR** and IMD were particularly well-received. Both were awarded 'Best Stall' prizes. The expo featured 100 stalls from prominent scientific organisations such as ISRO, NRSC, **CSIR, NGRI, NAL, SERC, IMMT,** IMD, UIDAI's Aadhaar Card Division, the Visvesvaraya Industrial and Technological Museum, the National Council for Science Museums, NIIST, IITM Pune, NIOT, and MOES, among others. These stalls displayed science models and projects, offering a deep dive into various fields of scientific research and innovation.
Source: The Hindu

Jal Dost: A Revolutionary Made-in-India Lake Rejuvenation Machine That Bengaluru Lakes May Get A Clean Sweep With

In a significant innovation which can turn out to be a game-changer for rejuvenation of lakes in Karnataka's Bengaluru, locally based **Council of Scientific and Industrial Research-National Aerospace Laboratories (CSIR-NAL)** has unveiled an airboat for removing weeds from water bodies. The machine is however awaiting a nod by the Bruhat Bengaluru Mahanagara Palike (BBMP) for on ground implementation. Features and Functionality The machine can remove plastic debris, invasive weeds, and other pollutants from water bodies, collecting up to 5 tons of waste in a single operation. Designed with eco-friendly propulsion, Jal Dost can operate in shallow and weed-dense areas, ensuring minimal disturbance to aquatic ecosystems. In an exclusive conversation with ETV Bharat, Karthikeyan, Principal Scientist, **CSIR-NAL** said that Jal Dost is a game-changer in lake rejuvenation. “It offers an affordable, indigenous solution to urban water pollution, costing only Rs 90 lakh compared to Rs 2.5 crore for foreign alternatives," he said. "We are actively engaging with BBMP to deploy Jal Dost in Bengaluru’s lakes. It’s a ready solution that combines cutting-edge technology with cost-effectiveness to address lake pollution,” he added.
Source: **Etvbharat**

CSIR-NAL celebrates 50th edition of science magazine 'Kanaada'

The Kannada Samskruthika Sangha at the **Council for Scientific and Industrial Research-National Aerospace Laboratories (CSIR-NAL)** marked a dual celebration on Wednesday: the 50th release of its annual science magazine 'Kanaada' and Kannada Rajyotsava. The magazine is named after sage Kanaada, who is credited with postulating the existence of atoms. Purushottama Bilimale, President of Kannada Abhivruddhi Praadhikara, and poet BR Lakshman Rao were the guests of honour at the event. Bilimale said protecting linguistic diversity in India is important, warning against the marginalisation of South Indian languages in light of changes like delimitation. "It is the responsibility of central and state governments to ensure that dominant languages do not overshadow regional ones,” he said. He praised the Kannada cultural celebration at **NAL** as a rare and commendable initiative in scientific institutions. He also pledged to discuss financial support for 'Kanaada' magazine's operations and publication with Chief Minister Siddaramaiah. The chief minister sent a congratulatory message, stating: “I am very happy to know that an autonomous organisation like **CSIR-NAL** has been publishing the 'Kanaada' science magazine for 49 years, disseminating current scientific research in Kannada to every corner of the state.”
Source: **Deccanherald**

Aerofest 2024 by NAL Bangalore

The talented team of Spring Dales English School, Changran, Kathua comprising of Rishabh, Kavya Krishna, and Mrigan, guided by their mentor Sakshi Sharma, achieved a remarkable milestone by securing a spot in the top 20 teams at Jigyasa's Aerofest 2024, organized by **CSIR-NAL**. The Jigyasa-Aero Fest, a three-day national event, was organized by Jigyasa, **CSIR-National Aerospace Laboratories,** Bangalore. Their groundbreaking research on sustainable air propulsion systems led them to Bengaluru,

where they explored the cutting-edge facilities of **CSIR-NAL** and DRDO campuses. They delved into advanced labs, interacted with top scientists, and participated in an array of exciting events, including the Aero Quiz, Aeromodelling, and Project Presentations.
Source: **Earlytimes**

Go Back

CSIR-National Botanical Research Institute (CSIR-NBRI)

100 varieties of gladiolus & roses to dazzle at NBRI show

If you desire to revel in the breathtaking sight of over 100 varieties of gladiolus blossoming in a field, accompanied by around 125 rose varieties wafting their fragrance through the air, then do not miss the **CSIR-National Botanical Research Institute's (NBRI**) annual 'Rose and Gladiolus' show scheduled for January 20-21. In a first, the scientific institute, in addition to showcasing beautiful rose and gladiolus varieties on its botanic garden grounds, will also throw open its gates to the public, allowing them to witness the institute's gladiolus field and rose garden.

Source: Times of India

College prof gets green Technology award

Kuldeep Yadav of Gandhi Memorial National College, Ambala Cantonment, has been conferred with "Green Technology Innovative Award 2023" by the National Academy of Environmental Sciences, New Delhi, at the **CSIR-National Botanical Research Institute**, Lucknow, Uttar Pradesh. As per a press note issued by the college, Yadav is working as the head, department of botany at Gandhi Memorial National College. He has contributed extensively in the fields of plant biotechnology, molecular biology, and mycology. He has published more than 65 research papers in journals of international repute and has also authored eight book chapters. Recently, he has published two Indian patents on extraction and separation of compounds from valuable medicinal plants in collaboration with other institutions."

Source: Tribune India

A fern protein kills whiteflies by degrading chitin

A team of researchers at the **CSIR-National Botanical Research Institute (CSIR-NBRI**), Lucknow, has investigated the functional activity of the plant protein Tma12, which is toxic to whiteflies. The study demonstrates that Tma12 kills whiteflies by degrading chitin. The findings of this research can be utilised by biorefineries in the production of biofuels and for expanding the horizons of biopesticides. Infecting a wide variety of economically important crops, Bemisia tabaci, commonly known as whitefly, is globally regarded as one of the most destructive insect pests. Whitefly infestation is primarily overcome by the administration of chemical pesticides. These pesticides are widely used because of their cost-effectiveness, accessibility, and immediate results. However, their overuse leads to health and environmental risks, creating an urgency for environment-friendly substitutes

for managing field pests. Pradhyumna Kumar Singh, Chief Scientist, **CSIR-National Botanical Research Institute (CSIR-NBRI),** Lucknow, works on the development of safer pest management strategies and crop improvement.
Source: India Bioscience

NBRI creates floral replica of Ram temple

A floral replica of Ram Temple made from 75 kgs of marigold and chrysanthemum will be the major attraction during the two-day **CSIR- National Botanical Research Institute's (NBRI**) annual 'Rose and Gladiolus' show to be held on Saturday and Sunday. "We have used three varieties of marigolds, a variety of chrysanthemums mostly of Basanti (yellow) colour to depict this major event ," said **NBRI** chief scientist Prof SK Tiwari.
Source: Times of India

U'khand's 'valley of flowers' comes alive at NBRI show

A chilly afternoon with blooming flowers all around gave visitors a feel of Uttarakhand's 'valley of flowers' during the **CSIR-National Botanical Research Institute's (NBRI)** Rose and Gladiolus Show on Saturday. Apart from this, sight of a gladiolus field filled with white, pink, red and orange flowers, a white rose plant loaded with hundreds of roses, a floral replica of the Ram Mandir, state flowers of India and floral I love **CSIR-NBRI** selfie-points were another show stealer on the first day of the two-day show.
Source: Times of India

Two-day Kisan Mela Begins at CSIR-CIMAP

A two-day Kisan Mela was inaugurated on Tuesday at **CSIR-Central Institute of Medicinal and Aromatic Plants,** Lucknow. The chief guest, Dr Ajit Kumar Shasany, Director, **CSIR-NBRI** inaugurated the program. Dr. Sanjay Kumar, the conveyor of the Kisan Mela briefed the activities for the two-day program of Kisan Mela to the dignitaries and the audience. During the Kisan Mela, Dr Prabodh Kumar Trivedi, Director, **CSIR-CIMAP** welcomed the chief guest and guest of honour, industry representatives, media personnel, farmers, etc. On this occasion, he said that **CSIR-CIMAP** under its flagship program, Aroma Mission enabled the self-sufficiency of India in lemongrass essential oil, formerly which was imported from other countries.
Source: The News Agency

CSIR-CIMAP Celebrates Foundation Day

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) celebrated its Foundation Day on Friday at Utsav Hall, **CSIR-CIMAP**, Lucknow. On this occasion, Dr. Ajit Kumar Shasany, Director, **CSIR-NBRI** was the chief guest, Dr. Radha Rangarajan, Director, **CSIR-CDRI** was the guest of honor and Dr. Gopaljee Jha, Scientist-V, NIPGR was the special guest. Dr. Prabodh Kumar Trivedi, Director, **CSIR-CIMAP**, welcomed the Chief Guest in his welcome address, he apprised the audience about the contribution of the Institute in last 6 decades. He also mentioned the important achievements of the Institute, in particular, the **CSIR** – Aroma Mission. In the last 65 years **CSIR-CIMAP** has

always been in the fore front and has played a vital role in services towards the nation building. **CSIR-CIMAP** contribution has made India a leading essential oil exporter in methanol mint and lemongrass. **CSIR-CIMAP** has played a prominent role in serving the society, industry.
Source: Thenewsagency

Special flowers to bloom at Puri temple for rituals

The flowers offered at much revered Puri's Jagannath temple will soon be grown with help from Lucknow-based **CSIR National Botanical Research Institute.** As per a memorandum of understanding (MoU) signed between the two parties, Lucknow-based research institute will help the Odisha temple in growing special flowers such as lotus, Gandhraj and other aromatic plants needed for rituals. The flowers will be grown in around 13 acres of temple land. It will not be the first such holy assignment for tyhe **NBRI,** which had recently developed 'Namoh', a lotus with 108 petals.
Source: Times of India

For Science Day, CSIR instts plan lectures, open lab

City-based laboratories of the **Council of Scientific and Industrial Research (CSIR)** are planning to organise National Science Day on Wednesday, Feb 28, by organising special lectures and open laboratories for students and general public. **The National Botanical Research Institute (NBRI**) will observe National Science Day as an 'Open day' during which laboratories, exposition, herbarium and botanic garden will remain open for general public from 11 am to 4 pm. For school/group visits, interested people may contact **NBRI** on phone numbers 0522-2297984 and 9737302883. Central Drug Research Institute is organising a translational research lecture series on the occasion. Professor in the department of gastroenterology of All India Institute of Medical Sciences, New Delhi, Dr Vineet Ahuja, will be delivering a lecture on 'Microbiome manipulation therapies in inflammatory bowel disease at the institute's main auditorium, 11:30 am onwards.
Source: Times of India

To boost farmers' income CSIR-NBRI to combine floriculture, apiculture

The **CSIR- National Botanical Research Institute (NBRI)** in Lucknow is working to combine floriculture with apiculture (large-scale beekeeping) to boost farmers' income. The institute focuses on developing lotus-based products, enhancing medicinal cannabis and opium traits, and more. NBRI director Ajit Kumar Shasany said that the institute already supports flower growers through its floriculture mission. Now, they aim to converge floriculture with apiculture for even greater societal benefits.He further elaborated on the institute's focus areas which include product development from lotus, creating novel fragrances from flowers and introducing new herbal products with zero side-effects, and trait improvement in both cannabis and opium.
Source: The Hans India

NBRI to spread fragrance with lotus perfumes

Soon perfumes will have the pure and soothing fragrance of Lotus. **CSIR-National Botanical Research Institute (NBRI)** has set up 'Parijaat' laboratory on its campus. The lab will work on fragrances and perfumes of flowers to develop floral-based products. The institute has begun work on 'lotus' flowers at the lab and is focussing on developing lotus perfumes and products. Gradually, other popular flowers of the perfume industry like jasmine, rose and others will also be worked upon. "At Parijaat lab **NBRI** scientists will conduct research and focus on the development of perfumes made from all-natural ingredients. Lotus flower is one of the most fascinating floral ingredients used in modern perfumery as it has a delicate, floral aroma that is described as a fresh and aquatic fragrance, delicate yet enduring," said NBRI director Ajit Kumar Shasany.
Source: Times of India

International Women's Day 2024: सीएसआईआर-एनबीआरआई लखनऊ में मनाया गया अंतर्राष्ट्रीय महिला दिवस

सीएसआईआर-एनबीआरआई में अंतर्राष्ट्रीय महिला दिवस के मौके पर समारोह आयोजित हुआ। जिसमें मुख्य अतिथि के रूप में महापौर सुषमा खर्कवाल मौजूद रहीं, वहीं समाज सेविका डॉ। सरिता विशिष्ट अतिथि के रूप में उपस्थित रहीं। संस्थान के निदेशक डॉ। एके शासनी ने कहा कि हमारे संस्थान के वनस्पति उद्यान में आज भी वही बरगद का पेड़ संरक्षित हैं जो **1857** के स्वतंत्रता संग्राम में उधा देवी के बलिदान की याद दिलाता है। डॉ। शासनी ने अनुसंधान एवं विकास कार्यक्रमों में संस्थान की महिला वैज्ञानिकों के प्रयासों की भी सराहना की। वरिष्ठ वैज्ञानिक डॉ। अदिति गुप्ता ने कहा कि आज के दिन को महिलाओं के संघर्षों का सम्मान करने के लिए मनाया जाता है।

Source: Inextlive

Book by women scientists kindles ideas in kids to tackle air pollution

To mark International Women's Day, the Environmental Information System (ENVIS) team at **CSIR-National Botanical Research Institute (NBRI)** released a children's book designed by women scientists. The book features short stories aimed at raising awareness about air pollution. The book was released during the institute's International Women's Day celebration where mayor Sushma Kharkwal was the chief guest. **NBRI** director AK Shasany commemorated the contribution of freedom fighter Uda Devi in the 1857 War of Independence. He highlighted the Banyan tree on the NBRI campus as a silent witness to her courage and bravery. "During the War," said the director, "Uda Devi climbed the Banyan tree present on our campus and killed 36 British soldiers. She was later martyred due to a bullet injury near the same tree. This ancient tree stands not only as a testament to the freedom struggle but also to Uda Devi's bravery and courage."
Source: Times of India

Herbal, skin-friendly colours for Ram Lalla this Holi

Ram Lalla will enjoy this year's Holi with skin-friendly gulal made from Kachnar flowers at his new temple in Ayodhya, officials here said. Devotees believe that Kachnar was Ayodhya's "state tree" in Treta Yuga. A team of the Council of Scientific and **Industrial Research-National Botanical Research Institute (CSIR-NBRI)** has prepared this

special gulal for the occasion, an official said. “The scientists have prepared another herbal gulal from the flowers offered at Gorakhnath Temple in Gorakhpur and are available in lavender and sandalwood fragrances,” an official said. Ajit Kumar Shasany, Director of **CSIR-NBRI** presented both the herbal Holi colours to Uttar Pradesh Chief Minister Yogi Adityanath on Wednesday.
Source: The Print

Happy Holi | Scientists at NBRI develop two varieties of skin-friendly, herbal Gulaal

With Holi just around the corner, a team of scientists at **NBRI (National Botanical Research Institute)** has developed two varieties of skin-friendly and herbal gulaal, made from flowers. But unlike the usual choices of roses, this gulaal has been made from Kachnar flowers offered by devotees at the Gorakhnath Temple. Currently, this new gulaal is available in lavender and sandalwood fragrances. Furthermore, **NBRI** will be transferring this technology to start-ups and other companies that make herbal gulaal.
Source: Knocksense

Ayodhya Ram Mandir: CSIR prepares special Gulal for Ram Lalla this Holi

Ram Lalla will enjoy this year's Holi with skin-friendly gulal. A team of the Council of Scientific and **Industrial Research-National Botanical Research Institute (CSIR-NBRI)** has prepared special gulal for the occasion. According to a report in news agency PTI, Gulal made from Kachnar flowers will be put on Ram Lalla at his new temple in Ayodhya. The report quotes officials. "The scientists have prepared another herbal gulal from the flowers offered at Gorakhnath Temple in Gorakhpur and are available in lavender and sandalwood fragrances," an official told PTI. Ajit Kumar Shasany, Director of **CSIR-NBRI** presented both the herbal Holi colours to Uttar Pradesh Chief Minister Yogi Adityanath on Wednesday., Professor Satyabrata Mishra were among the other dignitaries on the dais.
Source: Times of India

विदेशी फूलों की खेती से इस किसान को मिली आर्थिक सफलता, पढ़ें सफलता की कहानी

देश के पढ़ें-लिखे लोग खेतीबाड़ी में अपना हाथ आजमा रहे हैं और कामयाबी हासिल कर रहे हैं. इसी क्रम में उत्तर प्रदेश के लखीमपुर खीरी के मड़ई पुरवा ब्लॉक के प्रगतिशील किसान अचल कुमार मिश्रा का नाम भी जुड़ गया है. लखीमपुर खीरी के हृदयस्थलों में, जहां कभी गहरे भूरे गन्ने का व्यापक दृश्य कृषि परिदृश्य पर हावी था, वहां अब एक जीवंत परिवर्तन का अनुभव देखने को मिल रहा है. स्थानीय किसानों के साथ-साथ **वैज्ञानिक और औद्योगिक अनुसंधान परिषद-राष्ट्रीय वनस्पति अनुसंधान संस्थान (CSIR-NBRI)** के सहयोगात्मक प्रयासों से ग्लेडियोलस और गेंदा के चमकीले रंग दिखाई देते हैं, जो खेतों को सुशोभित करते हैं. किसानों द्वारा पारंपरिक रूप से इसे 'विदेशी फूल' के नाम से पहचाना जाता है, फूलों की खेती की शुरूआत से न केवल आर्थिक समृद्धि आई है, बल्कि क्षेत्र में कृषि पद्धतियों में विविधता लाने के लिए एक नया उत्साह भी पैदा हुआ है.
Source: Krishijagran

NBRI scholars' contest in summer plant fest

Competing with each other in different plant-related competitions to be organised at the **CSIR-National Botanical Research Institute**, 300 research scholars will be presenting their research work during the two two-day 'Summer Plant Science Fest' on Monday and Tuesday "The fest will be inaugurated at 10:30am at Lotus auditorium in KN Kaul block, on Monday and this is an opportunity for our research scholars to showcase their findings and discuss their experiments and results with experts," said **NBRI** spokesperson Rajat Rastogi. He added that deputy director general (agricultural education), Rakesh Chandra Agrawal, ICAR, New Delhi would be the chief guest of the inaugural function, whereas Prof Manoj Dhar, director, AcSIR, Ghaziabad, will preside over the function as guest of honour.

Source: Times of India

Tequila Bacteria Boosts Tomato Health and Soil Life Against Disease

Tomatoes are a staple in diets worldwide, but they face a formidable foe in Fusarium wilt disease, caused by the soilborne pathogen Fusarium oxysporum. This disease not only wreaks havoc on tomato plants but can also affect over 100 other plant species and even pose risks to human health in immune-compromised patients [2). Researchers at the **CSIR-National Botanical Research Institute** have made a significant breakthrough in the fight against this disease [1). Their recent study provides hope for a sustainable solution to protect tomatoes and potentially other crops from the destructive pathogen. The study focuses on a biological control agent, Bacillus tequilensis PBE-1, and its effects on tomato plants and soil microflora when under attack from Fusarium wilt. B. tequilensis PBE-1 is a type of beneficial bacteria that can help plants resist diseases. The researchers found that treating tomato plants with PBE-1 led to increased lignin deposition in the plants' cells, which serves as a barrier against the invading pathogen, thereby reducing cellular damage.

Source: Naturalsciencenews

Farmer from Lakhimpur Grows 'Videshi Phool' and Reaps Significant Monetary Benefits,

In the heartlands of Lakhimpur Kheri, where the pervasive sight of dark brown sugarcane once dominated the agricultural view, has now experienced a vibrant transformation. Thanks to the collaborative efforts of the **Council of Scientific and Industrial Research-National Botanical Research Institute (CSIR-NBRI)** along with the local farmers, the landscape now boasts the bright colors of gladiolus and marigolds adorning the fields. Traditionally known as 'Videshi Phool' (foreign flowers) by the farmers, the introduction of floriculture has not only brought economic prosperity but has also sparked a newfound enthusiasm for diversifying agricultural practices in the region.

Source: Krishijagran

CSIR-CIMAP Celebrates Foundation Day

CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP) celebrated its Foundation Day on Friday at Utsav Hall, **CSIR-CIMAP**, Lucknow. On this occasion, Dr.

Ajit Kumar Shasany, Director, **CSIR-NBRI** was the chief guest, Dr. Radha Rangarajan, Director, **CSIR-CDRI** was the guest of honor and Dr. Gopaljee Jha, Scientist-V, NIPGR was the special guest. Dr. Prabodh Kumar Trivedi, Director, **CSIR-CIMAP,** welcomed the Chief Guest in his welcome address, he apprised the audience about the contribution of the Institute in last 6 decades. He also mentioned the important achievements of the Institute, in particular, the **CSIR** – Aroma Mission. In the last 65 years **CSIR-CIMAP** has always been in the fore front and has played a vital role in services towards the nation building. **CSIR-CIMAP** contribution has made India a leading essential oil exporter in methanol mint and lemongrass. **CSIR-CIMAP** has played a prominent role in serving the society, industry.
Source: **Thenewsagency**

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Source: **Naturalsciencenews**

Botanical breakthrough: Lucknow NBRI grows 1,000-petal lotus!

The **CSIR-National Botanical Research Institute (NBRI**) which made headlines for cultivating a 108-petal lotus called ‘Namoh-108,’ has now successfully grown a lotus with around 1,000 petals at its Lucknow campus. According to the research institute, this is the first time a lotus with so many petals has been grown, not only at **NBRI** but also in the entire state of Uttar Pradesh. “There are about 1,000 petals in this lotus, which makes it unique,” said Ajit Kumar Shasany, Director of **CSIR-NBRI.** “Sometimes the number of petals can vary, ranging from 800 to 1,100,” he added. This lotus is known as “Sahasrara Padma,” the lotus of a thousand petals, which is a symbol of supreme consciousness and spiritual enlightenment.
Source: **Hindustantimes**

Hi-tech tower to study carbon sequestration in Similipal

An Eddy covariance flux tower has been installed in the core area of Similipal Biosphere Reserve to study forest carbon sequestration which would help understand the impact of climate change on forest carbon dynamics. The tower has been installed at Pithabata

south range by **CSIR-National Botanical Research Institute (NBRI**), Lucknow. It will measure exchange of CO2, H2O and energy between the vegetation surface and the atmosphere, allowing researchers to generate scientific understanding on forest carbon dynamics and net ecosystem exchange (NEE). A first-of-its-kind study in Similipal Biosphere Reserve to measure forest carbon sequestration and predict climate change impact on forest carbon dynamics, it is also the first initiative by **CSIR** to measure forest carbon flux in any semi-evergreen forest of India. It will lead to developing a model for predicting impact of climate change on Indian forest carbon dynamics.
Source: Newindianexpress

New plant species discovered from Edamalayar forest range

Scientists from SNM College Maliankara, Ernakulam, **National Botanical Research Institute**, Lucknow, and King Fahd University, UAE, have reported the discovery of a new plant species Emblica chakrabartyi from Adichilthotti within the Edamalayar forest range of Kerala. The species belonging to the gooseberry (Phyllanthaceae) family, has been named after Tapas Chakrabarty, former scientist at the Botanical Survey of India, for his contribution to the study on Phyllanthaceae. The finding has been published in John Wiley & Sons' International Journal, Nordic Journal of Botany, from Sweden. The research team headed by C.N. Sunil, Research Advisor to the Department of Botany, SNM College Maliankara, Ernakulam includes Prabhukumar, scientist, National Botanical Research Institute, Lucknow; Naveenkumar, scientist, King Fahd University, UAE; M.G. Sanilkumar, head of the Research Department of Botany, SNM College Maliankara; Simi M.S., Assistant Professor from the Research Department of Botany, SNM College; and Indira Balachandran from the Centre for Medicinmal Plants Research, Kottakkal Aryavaidyasala.
Source: The Hindu

Entries open for bougainvillea fest

A perfect picturesque bougainvillea bloom on your rooftop may win a prize and even praise from scientists, experts and people of Lucknow. All you need to do is register for participation in the **CSIR-National Botanical Research Institute (NBRI)** bougainvillea festival on Jun 9 at NBRI's K N Kaul block lawn. The flower show-cum-competition is open to all govt, semi-govt, private institutions, nurserymen and individuals. No entry fee will be charged. "Those interested in participating may contact us on Jun 8. A competitor may enter multiple exhibits in a section but will be given a maximum of one prize. All exhibits must be correctly and legibly labelled. Screening for participation will be done by our scientists who are experts in the field," said Rajat Rastogi, NBRI spokesperson.
Source: Times of India

Need healthy saplings? Head to NBRI's centre in Banthra

On World Environment Day, **CSIR-National Botanical Research Institute (NBRI)** opened a new nursery and floriculture centre on its second campus in Banthara on Wednesday where nature lovers and farmers can get healthy plants and saplings. Visitors

will also get guidance like dos and don'ts while taking home a new plant, how to get full bloom and good yield by scientists. This is **NBRIs'** second nursery and floriculture research centre after one at the institute's main campus near Sikanderbagh cross-section. "This facility is being started under **CSIR**-floriculture mission and will work as an exclusive centre for beneficiaries to know about various initiatives. Plants are also available for sale at the facility which will also serve as an information centre for products, technologies and plant varieties developed by the institute," said NBRI director AK Shasany.

Source: Times of India

'Warmer temperatures are likely to reduce yields of major crops'

Warmer temperatures are likely to reduce yields of major crops such as rice, maize, wheat, and soybean, and as climate patterns become more erratic, crops may face floods, droughts, and heat within a single year, said Prof Ramesh V Sonti, director of the international centre for genetic engineering and biotechnology, New Delhi. Sonti was speaking at the World Environment Day event celebrated by **CSIR-NBRI**, Lucknow in collaboration with the International Society of Environmental Botanists (ISEB) on Wednesday. "We need to develop crop varieties with broad adaptation to multiple climate change stresses. All modern plant breeding technologies, including genomic selection, genome editing, and genetic transformation, must be utilized to develop new crops for food security. We must reduce pesticide usage and adopt alternatives such as microbial fertilizers to improve crop yields," suggested Sonti, who was also the chief guest of the function.

Source: Hindustantimes

Evaluating Plant Diversity and Pollution Cleanup Potential Near a Power Plant

The research conducted by **CSIR-National Botanical Research Institute** [1) focuses on evaluating the phytodiversity and metal accumulation potential of native plants near a thermal power plant (TPP). This study is crucial because coal-fired power plants, which still generate more than 65% of India's electricity, significantly impact air, soil, and water quality. The study documented 26 tree species, six shrubs, and 35 herbs in the area surrounding the TPP. The Importance Value Index (IVI), which measures a species' dominance in an area, was highest for Senna siamea (95.7), followed by Tectona grandis (56.5) and Pithecellobium dulce (19.6). The soil was found to be acidic (pH 5.4), with higher concentrations of aluminum (Al) and iron (Fe). The groundwater was also acidic, whereas the nearby river water was slightly alkaline. Ambient air quality measurements showed that PM2.5 and PM10 levels slightly exceeded the National Ambient Air Quality Standards (NAAQS) for industrial areas.

Source: Naturalsciencenews

CSIR-NBRI में मनाया गया पर्यावरण दिवस, अथिति बोले- गर्म तापमान से प्रमुख फसलों की पैदावार हो सकती कम

सीएसआईआर-एनबीआरआई में विश्व पर्यावरण दिवस के अवसर पर एक समारोह का आयोजन किया गया। यहां इंटरनेशनल सेंटर फॉर जेनेटिक इंजीनियरिंग एंड बायोटेक्नोलॉजी नई दिल्ली के निदेशक प्रो. रमेश वी. सोन्ती मुख्य अतिथि रहे। गर्मी से कम हो सकती है कई फैसलों की पदावर मुख्य अतिथि प्रो. रमेश वी. सोन्ती ने कहा कि गर्म तापमान से चावल, मक्का, गेहूं और सोयाबीन जैसी प्रमुख फसलों की पैदावार कम होने की संभावना है। क्योंकि जलवायु के अनिश्चित होने से एक ही वर्ष में फसल को बाढ़, सूखे और गर्मी का सामना करना पड़ सकता है। इसलिए कीटनाशकों का इस्तेमाल कम करना होगा। पैदावार बढ़ाने के लिए सूक्ष्मजीवी उर्वरकों जैसे विकल्प अपनाने होंगे।

Source: Newstrack

Lucknow to get its first fragrance park in Hussainabad

The state capital will soon get its first fragrance park near the iconic Clock Tower in Hussainabad area. To come up on 2.20 acres, the park will house dozens of aromatic flowers from across species. To be built by Lucknow Development Authority (LDA), the selection of flowers will be done by **National Botanical Research Institute (NBRI)** experts. According to LDA officials, the park, whose construction will cost ₹4 crore, is being developed on the stretch between Chota Imambara and Bada Imambara. It is a part of the proposed upgradation and beautification of the heritage zone in Hussainabad. Its design is being done by popular architect Ashish Srivastava. “This is the first such fragrance park in U.P. and the second in India. A fragrance park is situated at Rashtrapati Bhawan in New Delhi,” said Srivastava.

Source: Hindustantimes

Bougainvillea blossom in botanical garden fest

With beautiful names like Begum Sikander and Mary Palmer, hundreds of bougainvillea varieties bloomed in the lawns of **CSIR-National Botanical Research Institute** during Bougainvillea festival held on Sunday. “The institute has been organising two flower exhibitions annually and in the third Bougainvillea festival, we opened the exhibition to general public/government/private organisations for participation in various competitions,” said S K Tiwari, chief scientist. He said 19 exhibitors participated in the show with 46 entries. The competition was in eight categories. NBRI also displayed more than two dozen bougainvillea varieties developed by the institute, namely Begum Sikander, Shubhra, Dr B P Pal, Arjuna, Archana, Mary Palmer Special, Los Banos Variegata, Aruna, Dr P V Sane and others.

Source: Times of India

What goes into Puri Jagannath’s floral dress?

Lucknow-based **National Botanical Research Institute (NBRI)-Council of Scientific and Industrial Research (CSIR)** institute has set out to revive endangered flower species used in the 12th century Shree Jagannath Temple, Puri, Odisha. A year after NBRI signed a Memorandum of Understanding with Shree Jagannath Temple

Administration (SJTA), to cater to the needs of flowers raised in the temple throughout the year, the country's premier **National Botanical Research Institute (NBRI)** has supplied Maurya and davana (Dayana) species flowers for the temple. "We are studying various scriptures that detail the practices of the Shree Jagannath Temple. This temple's rich traditions involve the extensive use of flowers and leaves, each selected for specific rituals performed in the temple. However, many of these plant species are rare and difficult to procure," said Ajit Kumar Shasany, Director, CSIR-NBRI, Lucknow.
Source: The Hindu

Bougainvillea Festival in Lucknow: 'Discovered in Brazil, bougainvillea requires minimal care'

Bougainvillea was first discovered by the French botanist Philibert Commerson in Rio de Janeiro, Brazil in the 1760s, said Radha Rangarajan, a scientist and director of **CSIR-CDRI**, Lucknow, on Sunday during the Bougainvillea Festival. "The name Bougainvillea was named after his friend sailor Louis de Bougainville," added Rangarajan while sharing interesting historical facts at the festival organised by **CSIR-NBRI** at its KN Kaul Block Lawn where she was the guest of honour. "The splashing colours of bougainvillea refresh our heart and mind. This plant requires very little care and maintenance. This virtue of the plant can provide us insights to explore climate-resilient features," said PK Trivedi, director, **CSIR-CIMAP**, who was also the guest of honour at the one-day flower festival.
Source: Hindustantimes

100% plant-based: 'NBRI's Pio soft drink has no alcohol, cocoa or other synthetic chemicals'

Amid growing health concerns around the consumption of soft drinks, **CSIR-National Botanical Research Institute (NBRI)** has come out with a healthy herbal product, 'Pio', which is 100% plant-based with no artificial sweetener or caffeine, but has the fizz and taste intact. Around a decade ago, **NBRI** tried to develop a herbal soft drink but it was no match to the multinational beverage giants which dominated the market. However, the scientists did not give up and kept improving the product till they could finally pitch it as a healthy alternative. No preservatives have been used in the product and its expiry is of four months. Pio, which got a thumbs up from Union science and technology minister, Jitendra Singh, comes with the tagline 'Pio Herbal, Jio Har Pal'. "Soft drinks are consumed by people of all ages, be it children or elderly. Hence, there was an urgent need for replacing these unhealthy drinks with healthy options. Ateam of scientists carried out an in-depth study to develop scientifically validated and standardized health beverages by fortifying them with certain health protective/ promotive functional attributes," said **NBRI** director Ajit Kumar Shasany.
Source: Times of India

सीएसआईआर-एनबीआरआई मार्केट में लाया नई सेफ कोल्ड ड्रिंक, कई जड़ी-बूटियों का है मिश्रण

सीएसआईआर-नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट (एनबीआरआई) ने एक हेल्थ हर्बल प्रोडक्ट 'पियो' पेश किया है, जो 100 प्रतिशत प्लांट बेस्ड है, जिसमें कोई आर्टिफिशियल स्वीटनर या कैफीन नहीं है, लेकिन इसमें फिज और स्वाद बरकरार है. लगभग एक दशक पहले, एनबीआरआई ने एक हर्बल सॉफ्ट ड्रिंक बनाने की कोशिश की थी, लेकिन यह बाजार पर हावी मल्टीनेशनल दिग्गज ब्राड के मुकाबले में नहीं था. हालांकि, वैज्ञानिकों ने हार नहीं मानी और प्रोडक्ट में सुधार करते रहे जब तक कि वे अंततः इसे एक हेल्दी ऑप्शन के रूप में पेश नहीं कर पाए. प्रोडक्ट में किसी भी प्रीजरवेटिव्स का उपयोग नहीं किया गया है और इसकी समाप्ति अवधि चार महीने है. "सॉफ्ट ड्रिंक्स का सेवन हर उम्र के लोग करते हैं, चाहे वे बच्चे हों या बुजुर्ग. इसलिए, इन अनहेल्दी ड्रिंक्स को हेल्दी विकल्पों से बदलने की तत्काल जरूरत थी. वैज्ञानिकों की एक टीम ने वैज्ञानिक रूप से मान्य ड्रिंक्स को विकसित करने के लिए गहन अध्ययन किया, जिसमें उन्हें कुछ हेल्थ प्रोटेक्टिव/प्रमोटिंग फंक्शनल कैरेक्टरिस्टिक खासियतों के साथ मजबूत किया गया," एनबीआरआई के निदेशक अजीत कुमार शासनी ने कहा.

Source: Ndtv

Odisha farmer group, CSIR institute in pact to promote floriculture

Sabuja Sanatanpali Farmer Producer Company Limited (SSFPCL), Odisha's first floriculture-based farmer producer organisation (FPO), has signed an MoU with the **Council for Scientific and Industrial Research (CSIR) - National Botanical Research Institute (NBRI),** Lucknow, to promote research in floriculture. Facilitated by consulting firm Palladium, the collaboration will focus on enhancing crop diversity, understanding plant-environment interactions, and applying biotechnological approaches for plant improvement to promote economic viability. The FPO is among the first in Odisha to incorporate institutional applied research in its operational model to adapt to climate change, and boost flower production and marketing efforts. Odisha, with 6,500 hectares dedicated to floriculture, produces approximately 24,800 tonnes of loose flowers and about 5,500 lakh cut flowers annually. However, this output meets only 10 per cent of the state's demand, and it sources the rest from major centres like Kolkata, Bengaluru, Delhi, and Hyderabad. This shortfall presents a lucrative opportunity for local entrepreneurs to venture into floriculture, a sector poised for growth.

Source: **Thehindubusinessline**

Dr Prasanta K Patro Awarded National Geoscience Award 2023

Dr B Prasanta K Patro, Chief Scientist at the **CSIR National Geophysical Research Institute (NGRI)** in Hyderabad, has been honored with the prestigious National Geoscience Award 2023 by the Ministry of Mines, Government of India. This recognition celebrates his outstanding contributions to Geophysics and Applied Geophysics, an **NGRI** statement said on Tuesday. Dr Patro's academic journey commenced with a B.Sc. from Berhampur University, Odisha, followed by an M.Sc. from Andhra University, Visakhapatnam. He pursued his PhD from Osmania University, Hyderabad, after joining

NGRI. His research primarily focuses on the resistivity structure of the Earth's crust and upper mantle using the magnetotelluric (MT) method, which utilizes electromagnetic induction. Resistivity, a crucial parameter in geophysics, is sensitive to fluids and minerals. Dr. Patro's studies have provided profound insights into seismotectonics and resource exploration (hydrocarbon, geothermal). He has applied advanced MT techniques to tackle various geophysical and exploration challenges.
Source: Uni India

1200 से ज्यादा किसानों को फूलों की खेती के गुर सिखाए जाएंगे, ओडिशा के किसानों की मदद करेगा CSIR

ओडिशा के किसानों को फूलों की खेती से अधिक लाभ कमाने और उत्पादन बढ़ाने के लिए **केंद्रीय औद्योगिक अनुसंधान परिषद (CSIR)** मदद करेगा. **राष्ट्रीय वनस्पति अनुसंधान संस्थान (**NBRI**)** भी किसानों को तकनीक के जरिए मौसम अनुकूल फूलों की खेती के तरीके सिखाएगा. दोनों संस्थानों ने ओडिशा में किसान उत्पादक संगठन **SSFPCL** से हाथ मिलाया है. इस एफपीओ से **1200** किसान जुड़े हुए हैं. सबुजा सनातनपाली किसान उत्पादक कंपनी लिमिटेड (**SSFPCL)** ओडिशा का पहला फूल उत्पादन आधारित किसान उत्पादक संगठन (**FPO)** है. इसे **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (CSIR), राष्ट्रीय वनस्पति अनुसंधान संस्थान (NBRI)** लखनऊ के साथ फूलों की खेती के लिए रिसर्च को बढ़ावा देने के लिए करार किया है. इसके तहत **FPO** से जुड़े **1200** किसानों को फसल विविधता बढ़ाने**,** पौधे और पर्यावरण के बीच संबंधों को समझने को बढ़ावा दिया जाएगा. पौधों में सुधार के लिए जैव प्रौद्योगिकी का इस्तेमाल किया जाएगा.
Source: Kisantak

Farmer producer organisation ties up with NBRI for floriculture research in Odisha

Sabuja Sanatanpali Farmer Producer Company Limited (SSFPCL), Odisha's first floriculture-based Farmer Producer Organisation (FPO), has entered into a collaboration with Lucknow-based **National Botanical Research Institute (NBRI),** a unit of **Council for Scientific and Industrial Research (CSIR)** for promoting scientific research in floriculture, enhancing crop diversity and applying biotechnological approaches for plant improvement, with a focus on economic viability. This is for the first time an FPO in Odisha has incorporated institutional applied research into its operational model to adapt to climate change and boost flower production and marketing, ultimately empowering farmers economically. Senior principal scientist at **NBRI** Chandra Sekhar Mohanty said technical and scientific support will be provided to farmers through this initiative with a focus on production of value-added products. It will promote crop diversity and enhance income, he said.
Source: Newindianexpress

100% plant-based: 'NBRI's Pio soft drink has no alcohol, cocoa or other synthetic chemicals'

Amid growing health concerns around the consumption of soft drinks, **CSIR-National Botanical Research Institute (NBRI)** has come out with a healthy herbal product, 'Pio', which is 100% plant-based with no artificial sweetener or caffeine, but has the fizz and taste intact. Around a decade ago, **NBRI** tried to develop a herbal soft drink but it was no match to the multinational beverage giants which dominated the market. However, the scientists did not give up and kept improving the product till they could finally pitch it as a healthy alternative. No preservatives have been used in the product and its expiry is of four months. Pio, which got a thumbs up from Union science and technology minister, Jitendra Singh, comes with the tagline 'Pio Herbal, Jio Har Pal'. "Soft drinks are consumed by people of all ages, be it children or elderly. Hence, there was an urgent need for replacing these unhealthy drinks with healthy options. Ateam of scientists carried out an in-depth study to develop scientifically validated and standardized health beverages by fortifying them with certain health protective/ promotive functional attributes," said **NBRI** director Ajit Kumar Shasany.

Source: Times of India

NBRI churns out 'Shiv bhabhut' from KV Temple's floral waste

CSIR's National Botanical Research Institute (NBRI) has stepped in to help Kashi Vishwanath temple manage tons of floral waste generated daily by converting it into Shiv bhabhut (holy ash). The increase in the footfall of devotees after the construction of Kashi Vishwanath Dham in Varanasi had made it tough for temple authorities to manage 5-6 tons of floral waste generated daily. To help the temple handle the disposal of the flowers offered to Lord Shiva at the temple, which is amongst 12 jyotirlingas in India, **CSIR-NBRI** has transformed the sacred floral waste into a Shiv bhabhut, as a special gift for devotees in the auspicious month of Shrawan. Moreover, NBRI also conducted successful toxicology tests on mice so that devotees using the bhabhut as 'tilak' had 100% herbal holy ash with zero side effects on the skin. NBRI has transferred its technology to a private firm so that the product reaches the common man soon. "We have come up with a unique product 'Shiv bhabhut', a sacred ash developed from the temple-offered flowers of Shri Kashi Vishwanath temple in Varanasi," said **CSIR-NBRI** director Ajit Kumar Shasany.

Source: Times of India

CSIR-NBRI develops herbal remedy to improve gout symptoms in elderly

The elderly suffering from gout can now look at a new plant-based natural supplement that can be useful in improving their daily lives, the Ministry of Science and Technology informed on Thursday. Lucknow-based **CSIR-National Botanical Research Institute (NBRI)** has developed a herbal product called '**NBRI**-Gout Out' which is a combination of five medicinal plants. Funded under the 'Scheme for Young Scientist and Technologist', the SEED Division of the Department of Science and Technology, the herbal supplement can help restore locomotion and ameliorate associated symptoms like pain, stiffness in joints, redness and so on. Developed by Dr Ankita Misra (principal investigator) and under

the mentorship of Dr Sharad Srivastava (chief scientist and head) at pharmacognosy division of **CSIR-NBRI,** the herbal remedy was found “synergically efficacious in gout/gouty arthritis, at par with standard drug colchicines”.
Source: Deshsewak

Develop tech that reduces human intervention in agri: Brajesh Pathak

Scientists and students associated with **Central Institute of Medicinal and Aromatic Plants (CIMAP)** were felicitated for conducting research in six fields, at the 46th Annual Day celebrations of the institute on Wednesday. The research activities were carried out in the fields of phytochemistry, bioprospection and product development, plant biotechnology, crop production and protection, plant breeding and genetic resource conservation, and technology dissemination and computational biology. **CIMAP** is a multidisciplinary research institute of **Council of Scientific and Industrial Research (CSIR)**. Deputy chief minister Brajesh Pathak was the chief guest on the occasion. He spoke about the improved varieties of medicinal and aromatic plants developed by **CSIR-CIMAP**, which not just provides a better yield but also benefits farmers. **CSIR-CIMAP** director Prabodh Kumar Trivedi, **CSIR-IITR** director Bhaskar Narayan and **CSIR-NBRI** director Ajit Kumar Shasany were present on the occasion.
Source: Hindustantimes

Farmer from Lakhimpur Grows "Videshi Phool" and Earns Significant Profits

In the heartlands of Lakhimpur Kheri, where the pervasive sight of dark brown sugarcane once dominated the agricultural view, has now experienced a vibrant transformation. Thanks to the collaborative efforts of the **Council of Scientific and Industrial Research-National Botanical Research Institute (CSIR-NBRI)** along with the local farmers, the landscape now boasts the bright colors of gladiolus and marigolds adorning the fields. Traditionally known as 'Videshi Phool' (foreign flowers) by the farmers, the introduction of floriculture has not only brought economic prosperity but has also sparked a newfound enthusiasm for diversifying agricultural practices in the region. One such farmer, Achal Kumar Mishra from Madai Purva block, has emerged as a pioneer in this colorful revolution. With the support of **CSIR-NBRI's** Floriculture Mission, Mishra received 60,000 tubers of gladiolus free of cost along with expert training from scientists like Sharad Srivastava. Additionally, 40,000 marigold plants were provided to him, enabling him to cultivate gladiolus on one acre of land and implement intercropping of marigold with sugarcane on an additional two acres.
Source: Krishijagran

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान

और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक, शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.

Source: **Indias.news**

Students have a date with plants, its science

CSIR-Central Drug Research Institute (CDRI) and **CSIR-National Botanical Research Institute (NBRI)** opened their gates for school students during **CSIR** Foundation Day celebrations held on Friday. At **CDRI**, students learned all about drug discovery, while at **NBRI** they had curious questions related to plant sciences while making a visit to laboratories, the botanic garden, herbarium, exposition and library. As many as 750 students and faculty were invited from across the region, including Sitapur, Hardoi, Rae Bareli, Unnao, Kanpur and Lucknow. "It was a unique opportunity for students to visit the **CDRI** laboratory and explore the world of cutting-edge research and innovation. Students actively participated in a variety of engaging and educational activities aimed at inspiring the next generation of scientists and researchers. Scientists and research scholars of **CDRI** organised a scientific exhibition highlighting the institute's major achievements and a video showcasing **CSIR-CDRI's** accomplishments was displayed in the auditorium," said **CDRI** spokesperson Sanjeev Yadav. He said school students also participated in a range of competitions, including theme-based science projects, quizzes and extempore competitions, while they toured the laboratory and interacted with scientists.

Source: **Times of India**

एनबीआरआई की लैब, उद्यान सभी के लिए खुले रहे

सीएसआईआर-एनबीआरआई के 83वें स्थापना दिवस के लिए गुरुवार को प्रयोगशालाएं और सुविधाएं दिन भर खुली रहीं। यहां शहर और आस-पास के 20 कॉलेजों, विद्यालयों के तकरीबन 1200 विद्यार्थी व शोधार्थी पहुंचे। उन्होंने संस्थान की कई प्रयोगशालाओं, वनस्पति उद्यान, पादपलय, अभिदर्शन का भ्रमण किया। बता दें कि 83वां दीक्षांत समारोह 30 सितंबर को होगा। मुख्य अतिथि उप मुख्यमंत्री ब्रजेश पाठक होंगे।

जबकि विशिष्ट अतिथि के तौर पर **सीएसआईआर** के तीन संस्थानों के निदेशक मौजूद रहेंगे। इनमें **सीमैप** के डॉ. डॉ. प्रबोध कुमार त्रिवेदी, **सीडीआरआई** के डॉ. राधा रंगराजन और आईआईटीआर के डॉ. भास्कर नारायण का नाम शामिल है। इस मौके पर संस्थान में 25 वर्ष की सेवा पूरी करने वाले और विगत एक वर्ष में सेवानिवृत होने वाले कर्मचारियों को सम्मानित भी किया जाएगा।

Source: Livehindustan

Floriculture blossoms in one of backward regions of Odisha

Jujumara, located in Odisha's Sambalpur district, is a forested region that has been a relatively a late entrant into the development process. However, it has now hit the headlines for being home to one of the first Farmer Producer Organisation (FPO) in the State, dedicated exclusively to flower cultivation. Farmers in Jujumara have long been familiar with floriculture, thanks to the region's favourable climate. However, flowers were never a primary source of income for them. In Sanatanpali, a small village in the area, only two or three farmers once grew flowers to sell in local markets a decade ago. Now, with over 10 acres dedicated to floriculture, the village is witnessing the early signs of a quiet revolution. Lucknow-based **CSIR-National Botanical Research Institute's intervention** with scientific inputs has made farmers more hopefuls. The productivity has shown improvement in recent years. "Farmers have traditionally focused on paddy cultivation, passing down the practice through generations. However, many remain unaware of the shifting market demands, where the need for diverse farm-based products is on the rise. Floriculture, in particular, has emerged as a lucrative cash crop, offering quick returns. Unlike conventional crops that require farmers to wait until the end of a harvesting season for profit, flower cultivation provides a steady and more immediate income stream," said **NBRI** Director Ajit Kumar Shasany.

Source: The Hindu

A quiet revolution: NBRI's innovation boosts liquid biofertilizer production in Odisha's Nabarangpur

Odisha's Nabarangpur, often dubbed one of poorest districts of country, is witnessing a quiet revolution that challenges the notion that innovation seldom transcends the laboratory. A local entrepreneur has collaborated with Lucknow-based **National Botanical Research Institute (NBRI)** - one of the 37 constituent labs of the **Council of Scientific and Industrial Research (CSIR)** - to harness latter's laboratory innovation to produce liquid biofertilizer. The **NBRI** has provided its proven, high-efficiency strains of bio-inoculants to Krishna Nayak, an entrepreneur from Uma Shankar Sabuja Dunia Limited (USSDL) in Nabrangpur. With this technical support, Mr. Nayak has set up a biofertilizer production unit with a capacity to produce 1,400 tonnes per annum - an achievement that would have seemed unimaginable in this remote region just a few years ago. **"NBRI's** mother cultures for stress-tolerant, plant-growth-promoting microbes are of superior quality compared to commercially available options. These include rhizobium for nitrogen fixation in legumes, azotobacter for non-leguminous plants, azospirillum for rice,

along with phosphate-solubilising bacteria and potash-mineralising strains," NBRI Director Ajit Kumar Shasany said.
Source: **The Hindu**

कानपुर विश्वविद्यालय के छात्रों ने किया शैक्षिक भ्रमण:CSIR NBRI का किया दौरा, 125 साल पुराने हर्बेरियम संग्रह को देख छात्र हुए उत्साहित

छत्रपति शाहू जी महाराज विश्वविद्यालय, कानपुर के स्कूल ऑफ लाइफ साइंसेज एंड बायोटेक्नोलॉजी के विद्यार्थियों ने सोमवार को **सीएसआईआर एनबीआरआई**, लखनऊ में शैक्षिक भ्रमण किया। यह शैक्षणिक यात्रा उनके पाठ्यक्रम का एक हिस्सा था, जिसमें छात्रों ने सौंदर्य और अनुसंधान के दृष्टिकोण से वनस्पति उद्यान की अवधारणा को समझा। छात्रों ने भारत के दूसरे सबसे बड़े हर्बेरियम का दौरा किया जिसमें दुनिया भर से विदेशी संग्रह रखे गए हैं। इतिहास जानने को उत्साहित दिखे छात्र खूबसूरती से संरक्षित 125 साल पुराने हर्बेरियम संग्रह को देखकर छात्र बहुत उत्साहित हुए। उन्होंने आईयूसीएन रेड डेटा सूची में सूचीबद्ध संकटग्रस्त पौधों की प्रजातियों को भी देखा। पोस्ट ग्रेजुएट लाइफ साइंस और अंडरग्रेफुएट बीबीजेड छात्रों ने अनुसंधान संस्थान में एनबीआरआई बॉटनिकल गार्डन, प्लांट कंजर्वेटरी, कैक्टि और सकुलेंट हाउस, मॉस हाउस, फर्न हाउस, साइकैड हाउस, बोनसाई, हर्बेरियम, संग्रहालय और प्रयोगशाला सुविधा का पता लगाया।
Source: **Drishyamindia**

"Mission Life" के तहत हुई कार्यशाला

नेताजी सुभाष चंद्र बोस राजकीय महिला स्नातकोत्तर महाविद्यालय अलीगंज में मंगलवार को **CSIR-NBRI** के माध्यम से "Mission Life" के तहत पर्यावरण सूचना, जागरूकता, क्षमता निर्माण एवं आजीविका कार्यक्रम से संबंधित एक कार्यशाला का आयोजन कार्यवाहक प्राचार्य प्रो. रश्मि बिश्नोई की अध्यक्षता में एवं प्रोफेसर कंचन लता के नेतृत्व में किया गया। एनबीआरआई लखनऊ की डाॅ. संध्या द्वारा "Mission life: Life Style For Environment" विषय पर एक व्याख्यान दिया गया। उन्होंने पर्यावरण संरक्षण के साथ सतत विकास पर भी प्रकाश डाला तथा प्लास्टिक अपशिष्ट प्रबंधन एवं e-waste प्रबंधन जैसे विषयों पर छात्राओं को जानकारी दी। कार्यक्रम के अंत में छात्राओं के लिए कोलाज मेकिंग एवं स्लोगन राइटिंग प्रतियोगिता का आयोजन किया गया। इस कार्यक्रम में महाविद्यालय की 100 से अधिक छात्राओं ने प्रतिभाग किया। कार्यक्रम के दौरान प्रो. शरद कुमार वैश्य, डॉ. राघवेंद्र नारायण, डॉ. विनीता लाल, डॉ. मीनाक्षी शुक्ला, डॉ. सविता सिंह, डॉ. राजीव यादव, डॉ. उमा सिंह, डॉ. ज्योति, डॉ. राहुल पटेल, डॉ. कुणाल दीक्षित सहित समस्त प्राध्यापक उपस्थित रहे।
Source: **Telescopetoday**

Save The Date for Lucknow's Much Awaited Flower Show By CSIR-NBRI!

Winters are here and it is an exciting time to be in Lucknow. Events, concerts, festivals, there's plenty to do every evening. While there are many unique and different experiences that the city of Nawabs can offer you, one event that every Lucknowite looks forward to during the winter season is the annual show organized by **CSIR – National Botanical Research Institute (NBRI),** Lucknow. This year, **CSIR – National Botanical Research Institute (NBRI),** Lucknow is back with the Chrysanthemum and Coleus Show in the month of December on 14th and 15th and it is every nature lover's heaven. The two-day Chrysanthemum and Coleus Show has always been a hit in the city. The event is open for participation every year by institutions, gardeners, floriculture based entrepreneurs and nurseries among others. It is a great opportunity for people to come and witness a diverse range of floral colours, shapes and sizes. Not just this, every year, more than 20+ varieties of Chrysanthemum flowers in bunches, miniatures and even single ones are on display and around 15 varieties of Coleus developed by **NBRI** are showcased.

Source: Lucknowwants

NBRI biofert cutting expense, boosting plant growth

A microbial biofertiliser, developed by **CSIR-National Botanical Research Institute,** reduces expense of using chemical fertilisers by up to 40% and enhances plant growth by 20 to 25% compared to other fertilisers. "Chemical fertilisers, though they increase crop yields, can affect soil microbial communities negatively. Soil microbial activity is crucial for nutrient availability and crop productivity, hence, we came up with microbial biofertiliser," said Ajit Kumar Shasany, **NBRI** director. He added that microbial biofertilisers were nutrient-rich biological fertilisers containing microorganisms, such as bacteria, algae and fungi, to promote plant growth. They are a more environment-friendly alternative to chemical fertilisers, which can harm soil and living organisms. Hence, the institute developed stress-tolerant biofertilisers to enhance plant growth, improve soil health and increase crop yield. These products reduce need for chemical fertilisers and pesticides, benefiting environment and farmers. "In last three years (2021-2024), 22.72 lakh packets (200g each; in Rabi and Kharif seasons) of biofertilisers were produced and distributed to UP farmers through state agriculture department, which accounts for more than 9.0 lakh acres of land coverage for different legumes and cereal crops," said Shasany, adding that results of **NBRI's** biofertilisers were overwhelming, benefiting farmers and society.

Source: Times of India

NBRI eases rules for taking part in annual flower show

City plant growers will have more chances to take trophies home during the **CSIR-National Botanical Research Institute's (NBRI)** annual chrysanthemum and coleus show. The institute has made changes in participation categories, making it more friendly for both professionals and people who grow plants as hobbies for its flower show to be held on Dec 14-15. From homemakers to gardeners, all can participate in the flower show. "Earlier, both categories and the rule book were a bit complex. Hence, in the best interest

of common people, we made some positive changes in our participation criteria for the flower show. For example, to win a particular trophy, having over two-dozen varieties of that plant is not essential," said **NBRI** Garden incharge SK Tiwari. He also said the new categorisation will give a chance to new people so that every year, winners of a particular category are not the same due to fewer people qualifying for it. Tiwari said as per the new prize distribution rule book, there will be broadly two categories: one as individual and the other as institute. In the upcoming flower show, there will be four sections: chrysanthemum, coleus, floral arrangement and photograph. Exhibitors having six pots, 12 pots or even one pot of chrysanthemum and coleus can participate. There will be three awards, namely King of the Show, Queen of the Show, and Prince of the Show, along with four trophies and two best group prizes for the chrysanthemum and coleus flower exhibit competition, he added.
Source: Times of India

Participate in NBRI's show in Lucknow with just single pot of blooms

It is your chance to shine at the annual Chrysanthemum and Coleus flower show. You need not have half-a-dozen Chrysanthemum and Coleus flower pots but even one pot, grown out of love for gardening, can help you win trophies and awards in the show this time. The show is a calendar event at the **Council of Scientific and Industrial Research – National Botanical Research Institute (CSIR-NBRI)** and this year the two-day event begins on Saturday. The entry fee for the event will be ₹10. The timing of the event for Saturday is from 2pm - 6pm and 10am-6pm on Sunday, shared **CSIR-NBRI** spokesperson Rajat Raj Rastogi. He also said that exhibitors interested in participating in the show are required to fill the entry form and submit their potted plants latest by 4pm on Friday, while those interested in submitting their entries for flower arrangement and photography are required to submit their entries by 9 am on Saturday. "This year, the show has been divided into four broad categories – Chrysanthemum, Coleus, flower arrangement and photography. Under Chrysanthemum – the competition is open to individuals and institutions, as part of which, they must display a group of 6 or 12 small and large Chrysanthemum and Coleus potted plants.
Source: Hindustantimes

Winter blooms with NBRI's annual flower show

Cotton Ball, Topaz and Velvet Queen were among the exhibits, in hues of white, dark maroon and orange, at the two-day annual Chrysanthemum and Coleus Show at **CSIR-NBRI** Central Lawns, on Saturday. Chief scientist and convener S K Tiwari 86 participants put up on show as many 267 varieties, including over 20 varieties in each shade of chrysanthemum and 150 varieties of coleus. 'Kelvin Victory' was tinted with a beautiful shade of pink, fading to a lighter tinge, while 'Raja' was splendid white turning light yellow towards the center. When asked about their favourite chrysanthemum on the lawn, a visitor, Rama, said, "I like large chrysanthemums, but it is difficult to pick one variety as they are all so beautiful and unique in their own way." Another visitor Arun Sinha said, "We wait for this event every year and have never missed it." J P Tripathi said, "I love the

‘Khushboo' as its colour is as fiery as it looks." ‘Perfecta' chrysanthemum shone with its majestic colour, while a variety of coleus presented a leafy foliage. Each coleus, in magenta purple, radiused with lush greens and enveloped with dark shades, was one of its kind. The prize distribution ceremony will be at 4 pm on Sunday. The show is open to public from 2 pm to 5:30 pm.
Source: Times of India

National Workshop on Ethnobotany Concludes at University of Jammu

The three-day National Workshop on Ethnobotany, organized by the Jammu, Kashmir and Ladakh Chapter of Society of Ethnobotanists (SEB), Department of Botany, University of Jammu, concluded successfully today. The workshop, titled “Exploring the Cultural Connections to Plant Life”, witnessed enthusiastic participation from researchers, academicians, and students from various institutes and research centres. According to a statement issued from Public Relations Office University of Jammu here, the Valedictory Ceremony was graced by Sh. O.P. Sharma Vidyarthi, Retd. IFS officer of the state cadre and founder of the acclaimed initiative Tree Talk, as the Chief Guest. In his address, Sh. Vidyarthi emphasized the need to bridge traditional knowledge systems with contemporary scientific practices to promote biodiversity conservation and sustainable development. Highlighting the importance of field-based learning, he shared his insights from accompanying the participants on a field tour to Akhnoor, where they explored local ethnobotanical resources and their cultural significance. In addition to this Mr. Kamal KishorVerma deliberated upon the uses of the wild plants by local people in Akhnoor. The workshop featured expert lectures by renowned resource persons, including Dr. A.K. Goel (SEB), Dr. V.V. Wagh **(CSIR-NBRI),** Dr. ArvindSaklani (Semi-Sabsina Group), Dr. Shreeker Pant (BGBSU), and Dr. Vartika Jain (Higher Education, Udaipur), who shared their expertise on various aspects of ethnobotany. These sessions provided participants with a deeper understanding of the interplay between traditional ecological knowledge and modern scientific approaches.
Source: Thekashmirhorizon

Go Back

CSIR-National Chemical Laboratory (CSIR-NCL)

EIL celebrates R&D Day

Engineers India Limited (EIL) radiated enthusiasm during its 2nd 'R&D Day' at EIL Office Complex, Gurugram on Friday. EIL's C&MD Vartika Shukla graced the inaugural session as chief guest along with functional directors with the spirited participation of senior officials and employees of EIL. Esteemed guests including EIL's Director (**CSIR-IIP)** Dr Harender Singh Bisht, Indian Oil's (Director- Planning & BD) Sujoy Chaudhury, HPCL's ED (R&D) VK Maheswari, BPCL's Head (R&D) Dr Ravi Kumar, HPCL's CGM (R&D) S Shriram and **CSIR-NCL** Dr Thirumalaiswamy Raja among other guests from the industry graced the occasion. The event was illuminated by inspiring words from EIL C&MD and luminaries participated in the event focusing on future perspectives.
Source: Psuwatch

Bits'n'bytes: Know about startup, business news in Pune

Ridesharing mobility space startup Advance Mobility closed seed funding of ₹16.60 crore at an undisclosed valuation in a round led by Finvolve. The round also witnessed participation from India Accelerator. The startup is involved in solving problems of value chain — from market players and customers to drivers, revolutionising the space of fleet operations. Advance Mobility has rapidly scaled up from its pre-round fleet size and is operating with a fleet of 425 CNG cars running in cities of Mumbai and Pune. **CSIR-NCL** honoured as top patent driven research organisation **CSIR-National Chemical Laboratory (CSIR-NCL),** Pune, was declared winner in the ASSOCHAM 3rd IP Excellence Awards, 2024 as top patent driven research organisation. The award is based on factors like number of patents granted, diversity in patent portfolio, rate and impact of technology commercialisation, contribution to sustainable development goals (SDG) and efforts taken to improve intellectual property (IP) ecosystem in the country.
Source: Hindustan Times

Green Hydrogen will play a key role in India's energy transition: CSIR-NCL Director

Green Hydrogen, a form of Hydrogen produced through processes with substantially low carbon emissions, will play a key role in India's energy transition, **CSIR-National Chemical Laboratory** Director Ashish Lele said here on Thursday. Lele was delivering the keynote lecture titled 'India's Energy Status and the Possibility of Using Green Gydrogen Fuel in the Country' at the city-based **CSIR-Centre for Cellular and Molecular Biology (CCMB),** which celebrated the birth anniversary of its Founder Director P M Bhargava. "Green hydrogen -- produced through processes with substantially low carbon emission -- will play a key role in India's energy transition particularly in the sectors of industry and heavy-duty commercialisation," a **CCMB** release quoted Lele as saying.

Source: Economic Times

Siddhartha College hosts meet on nanotechnology

Undetectable by the human eye, nanoparticles range between 1 to 100 nanometres in size.Nanoparticles can exhibit significantly different physical and chemical properties to their larger material counterparts, said B.L.V. Prasad, Director, Centre for Nano and Soft Matter Sciences and Senior Principal Scientist at **National Chemical Laboratory (CSIR-NCL).**Speaking at a workshop on 'Physics, Chemistry and Material Sciences- Emerging Trends' organised by the Department of Physics in Siddhartha College of Arts and Science on Wednesday, he spoke at length on how a nanoparticle is synthesised, its benefits and how it changes the environment.Director of International Advanced Research Centre on Powder Metallurgy and New Materials (ARCI), Hyderabad, Tata Narasinga Rao explained how the size of a battery can be shrunk with the help of nanoparticles and their conversion into supercapacitors.

Source: The Hindu

Dr Ashish Lele – Director, National Chemical Laboratory (NCL)

India's **National Chemical Laboratory (NCL),** one of the most well-established labs in the wider **Council of Scientific and Industrial Research (CSIR)** network, has made some major contributions to improving the country's manufacturing processes for pharmaceutical intermediates and APIs. Director Dr Ashish Lele outlines the approaches the lab is pursuing, such as continuous flow chemistry, to tackle India's over-dependency on Chinese APIs and discusses the government's Production Linked Incentives (PLI) scheme to encourage Indian industries to produce materials through organic chemistry. I am the current director of the **National Chemical Laboratory (NCL)** and a trained chemical engineer. I completed my bachelor's in chemical engineering at Mumbai University and my PhD at the University of Delaware in the US. I joined the National Chemical Laboratory as a scientist in 1993.

Source: Pharmaboardroom

Two Day International Conference on Sustainable Development in Chemical and Material Sciences (SDCMS-2024) Concludes at CUJ

A two-day International Conference on Sustainable Development in Chemical and Material Sciences (SDCMS-2024) was organized by Department of Chemistry from 4th to 5th April 2024 in the academic block of Central University of Jammu. The conference involved a gathering of renowned scientists and academicians across the country and abroad. On the 2nd day today, the scientific session started with a talk by eminent speaker Dr.Vivek Pachauri, RWTH Aachen University, Germany. He discussed the topic"Attempting Biologization at nano scale towards sustainable sensors technology". Other eminent speakers with various expertise in their field of the session were Prof. Pankaj Chauhan, IIT Jammu, Prof. Surendra B. Anantharaman, IITM, Dr. Suman Singh, **CSIR-CSIO** Chandigarh, Dr. Avishek Saha, **CSIR-NCL** Pune, Prof. Subrata Banik, Sastra University, Dr. Manoj Nayak, **CSIR-CSIO** Chandigarh, Dr. Rajesh Kanawade, **CSIR-NCL** Pune, Prof. Debabrata Patra, INST Mohali. The session had been concluded with the vote of thanks to all the eminent speakers with a token of appreciation and a gift.

Source: Takeonedigitalnetwork

NCL to host 'One Week One Theme' program on Energy and Energy Devices

CSIR-National Chemical Laboratory (CSIR-NCL) along with other sister **CSIR** laboratories, is set to organize 'One Week One Theme (OWOT)' event on the Energy and Energy Devices (EED) theme from June 24 to 28, 2024. This series of events will be held at various CSIR lab locations. As the nodal laboratory for **CSIR's** EED theme, **CSIR-NCL** will kick of the OWOT-EED event on June 24, 2024, at its Pune campus. The event will be held at the Shanti Swarup Bhatnagar Lecture Theatre in the Polymers, and Advanced Materials Laboratory (PAML) of **CSIR-NCL**. The inaugural event of OWOT-EED theme will feature various activities including the opening ceremony, technical sessions, outreach program, an exhibition and media interactions. Attendees will include professionals from sister **CSIR** labs, academic institutions, industries, start-ups, and school children.

Source: Thebridgechronicle

CSIR-NCL, Pune launches the One Week One Theme program in 'Energy and Energy Devices'

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, inaugurated the 'One Week One Theme (OWOT)' event on the Energy and Energy Devices (EED) along with other sister **CSIR** laboratories on 24 June 2024. Dr. Ashish Lele, Director, **CSIR-NCL,** gave the welcome remarks and highlighted in brief about the **CSIR's** work in the Energy and Energy Devices theme focusing on Hydrogen technologies, Next Gen batteries, Bio-fuels, Solar harvesting and storage, and coal-based fuels. Chief Guest Dr. Surya Moganty, Head of Technology at L&T Energy, delivered a keynote address titled "Energy Transition: From Materials Perspective" and inaugurated the exhibition at the 'One Week One Theme (OWOT)' program. Dr. Moganty's presentation was divided into two main parts. In the first part, he discussed energy minerals and materials, emphasizing the critical need for specific minerals and the opportunities this presents. He elaborated on the importance of recycling and creating a circular economy, highlighting technological innovations that utilize earth-abundant materials.

Source: Punekarnews

The Council of Scientific and Industrial Research -National Institute of Science Communication and Policy Research (CSIR-NIScPR) and National Chemical Laboratory (NCL) jointly organised OWOT campaign on 'TRL Assessment and Patent Landscaping of Energy Technologies'

The **Council of Scientific and Industrial Research (CSIR),** under the Department of Science and Technology has organised 'One Week One Theme (OWOT)' campaign from 24 June 2024, across its 37 labs in India. Union Minister of State (independent Charge) for Science & Technology, Earth Sciences, MoS PMO, Ministry of Personnel public grievances and pensions, department of atomic energy and space Dr. Jitendra Singh inaugurated One Week One Theme (OWOT) Campaign in the presence of DG CSIR Dr.

N. Kalaiselvi at India habitat Centre, New Delhi. Dr. Jitendra Singh also unveiled the OWOT logo along with launch of **CSIR** products, signing of MoUs and 12 Thematic Technology Transfers. OWOT is an initiative aimed at showcasing the wide-ranging thematic research and innovations across its numerous laboratories. This program serves as a platform to highlight **CSIR's** diverse contributions to scientific and industrial advancements in India and to engage with various societal sectors.
Source: Pib

Pruning Pollution: CSIR-NCL Translating Plastic to Diesel

The **National Chemical Laboratory (NCL),** situated in Pune, India, is celebrated as a premier research institution under the auspices of the **Council of Scientific and Industrial Research (CSIR).** Since its establishment in 1950, **NCL** has forged a distinguished path in chemical research and innovation, encompassing diverse scientific disciplines such as organic chemistry, materials science, chemical engineering, and biotechnology. **NCL's** world-class facilities and cutting-edge research initiatives magnetize top-tier scientists and researchers from around the globe. The laboratory has earned international acclaim for its pioneering contributions in green chemistry, polymer science, and catalysis. Collaborating closely with industry partners, **NCL** is at the forefront of developing sustainable technologies and innovative solutions to address complex industrial challenges. Beyond its research endeavors, **NCL** nurtures talent and disseminates knowledge.
Source: Theinterview

MRPL to Initiate Green Hydrogen Production for Internal Purposes

Mangalore Refinery and Petrochemicals Ltd (MRPL) announced launch of a 500 tons per annum (tpa) green hydrogen production unit at its refinery. The green hydrogen will be combined with the existing hydrogen produced at the refinery for internal purposes. As per India's green hydrogen policy, green hydrogen is defined as hydrogen produced through the electrolysis of water using renewable energy or from biomass. The national green hydrogen mission has identified refineries among the sectors for green hydrogen adoption. In partnership with **CSIR-National Chemical Laboratory (CSIR-NCL),** MRPL has developed and patented a new Iso Butyl Benzene (IBB) process technology. IBB is a crucial active pharmaceutical ingredient (API) used in painkillers and perfumes. The patented process enhances toluene conversion and shows high selectivity for isobutyl benzene production.
Source: Chemindigest

SKIMS hosts top experts for academic brainstorming

The Sher-i-Kashmir Institute of Medical Sciences (SKIMS), Soura, today held an interactive session featuring some of the country's leading clinicians and scientists. The event, part of the two-day "Inter-University Academic Brainstorming" jointly organized by SKIMS and SKUAST-K, took place at the SKIMS Auditorium. The session provided a valuable platform for SKIMS faculty to engage with distinguished experts from various

fields. Notable attendees included Dr. N. K. Mehra, Vice President (International Affairs), INSA, and Former Dean, AIIMS New Delhi; Dr. Abdul Masood Khan, Director Incharge of ICMR-JALMA; A. K. Pradhan, Advisor, CDSCO; Dr. Ashok Kumar, Director, IIT Kanpur; Dr. Anu Raghunathan, Senior Principal Scientist, **CSIR-NCL** Pune; Dr. Bushra Ateeq, Professor & Joy-Gill Chair, Senior Fellow, DBT-Welcome Trust India Alliance; and Dr. M. Jamal, Principal Scientist, **CSIR-IIIM** Jammu.
Source: Dailyexcelsior

Piezoelectric polymer nanocomposite developed can be used for energy harvesting

A new piezoelectric polymer nanocomposite material developed can be useful for pressure sensing and energy harvesting applications. Researchers from Centre for Nano and Soft Matter Sciences (CeNS), an autonomous institute of Department of Science and Technology, in collaboration with scientists from **National Chemical Laboratory (CSIR-NCL)**, Pune have developed a security alert system based on piezoelectric polymer nanocomposite. This development was based on the finding that metal oxide nanomaterials with appropriate crystal structure and surface properties when used as fillers in a polymer composite lead to a significant enhancement in the piezoelectric response. In today's world, energy creation and harvesting from readily available sources is crucial. Mechanical energy is a plentiful and easily accessible source that can be transformed to electrical energy through a variety of techniques, including contact electrification/triboelectric effect and piezoelectric effect. Flexible, portable, sustainable, and wearable sensors and energy harvesting devices are critical nowadays. Polymers and nanoparticles are playing a major role in present flexible electronic systems.
Source: Pib

CSIR-NCL and Danish Patent Office Collaborate on Biotech and Medtech Patent Issues

CSIR-NCL (Council of Scientific & Industrial Research - National Chemical Laboratory) organized a roundtable discussion recently, as part of a collaborative effort between the Office of the Controller General of Patents, Designs, and Trademarks (CGPDTM) and the Danish Patent and Trademark Office (DKPTO). The roundtable focused on "Patenting of Inventions in Biotechnology and Biomedical Fields," with the objective of addressing the unique challenges and opportunities within these rapidly evolving sectors in both India and Denmark. The roundtable, hosted by **CSIR-NCL's** Intellectual Property Group, brought together over 40 invited participants, including officials from all four Indian Patent Offices, Danish patent examiners, and representatives from various **CSIR** labs involved in biotech and medtech intellectual property. The event also saw participation from key national labs based in Pune, such as ICMR-NIV, NCCS, and the ICAR-Grape Research Institute, as well as members of the industry body ASSOCHAM.
Source: Thebridgechronicle

CSIR-NCL Hosts Prof. K. Venkataraman Memorial by Dr. Mukund Gurjar

The **CSIR-National Chemical Laboratory (CSIR-NCL**) in Pune hosted the prestigious Prof. K. Venkataraman Memorial Lecture on September 19, 2024. The featured speaker, Dr. Mukund K. Gurjar, Chief Scientific Officer and member of the Board of Directors at Emcure Pharmaceuticals Limited, captivated the audience with an insightful lecture titled "My Science Journey and Where I Am Now." Dr. Gurjar recounted his early fascination with science, beginning with his research work at Nagpur University and continuing through his academic tenure at the University of London. He discussed his pivotal Ph.D. work, particularly his mechanistic studies on the Stobbe reaction, and explained his discovery of the rapid formation of the 3',6'-Anhydro ring compared to the 1,2-anhydro ring, driven by the influence of neopentyl CH2OH. His insights shed light on the structural dynamics of the furanose ring. Dr. Gurjar's presentation spanned a wide array of his scientific contributions, including oligosaccharide synthesis, understanding N-glycan biosynthetic pathways, and the synthesis of cell wall arabinogalactan peptidoglycans in Mycobacterium tuberculosis.

Source: Thebridgechronicle

'Living Lab' set to bolster UK-India effort to decarbonise pharmaceutical industry

Part of the UK-India Net Zero Innovation Centre, this 'Living Lab' will act as a testbed for companies to explore and de-risk advanced pharmaceutical manufacturing technologies that could significantly reduce greenhouse gas emissions. The Indian pharma industry owns over 20% of the global pharma supply chain and contributes to approximately 60% of the worldwide demand for vaccines. It also provides 40% of the generic drug demand in the US and supplies 25% of all medicines in the UK. Established by CPI, one of the UK's leading technology innovation centres, and the **CSIR-National Chemical Laboratory (NCL),** a premier R&D institute in India, the state-of-the-art 'Living Lab' facility at **CSIR-NCL** in Pune will initially develop and demonstrate the potential of continuous manufacturing and solvent-free manufacturing methods. Today, 16 October 2024, the 'Living Lab' has welcomed its first set of pharmaceutical companies in India to sign up for the partnership. Aarti Industries, Glenmark Life Sciences, USV, Anthem Biosciences, Corning and GMM-Pfaudler will work together with CPI and **CSIR-NCL** to create world-leading manufacturing practices.

Source: Manufacturingmanagement

Key Role Of Structural Defects In Amorphous Solid Deformation Uncovered By Researchers At IISER And NCL Pune

Researchers at the Indian Institute of Science Education and Research (IISER) Pune and the **CSIR-National Chemical Laboratory (NCL)** Pune have shown that the macroscopic deformation of amorphous solids is controlled by structural defects within the material. This joint effort, led by Dr. Vijayakumar Chikkadi at IISER Pune and Dr. Sarika Bhattacharyya at **CSIR-NCL,** Pune, combines experimental studies on colloidal glasses—model systems for amorphous solids—with a theoretical framework based on the structural order parameter. Published in the Proceedings of the National Academy of

Sciences USA, the findings address a long-standing question in materials science and condensed matter physics. All materials deform when external stresses are applied. In 1934, G.I. Taylor, M. Polanyi, and E. Orowan independently explained that macroscopic deformation originates from the dynamics of defects within the material. In crystalline solids, identifying these defects is relatively straightforward due to lattice distortions.
Source: Punekarnews

CSIR-NCL Enhances Oxygen System in MiG-29 Jets for Indian Navy

The **CSIR-National Chemical Laboratory (CSIR-NCL)** in Pune has advanced the On-Board Oxygen Generation System (OBOGS) in MiG-29 fighter jets, improving oxygen production for pilots during high-altitude missions. This milestone project, launched at the request of the Indian Navy, was led by Dr. Vijay Bokade, Head of **CSIR-NCL's** Catalysis and Inorganic Chemistry Division, alongside Dr. Prashant Niphadkar and their research team. The OBOGS system, crucial for delivering oxygen at extreme altitudes, operates through zeolite materials that adsorb nitrogen to yield pure oxygen. Over time, exposure to moisture weakens the effectiveness of these zeolites. In response, **CSIR-NCL** developed a specialized rejuvenation process that increased the oxygen output in OBOGS units from 30% to an impressive 85%.Testing at the Naval Aircraft Yard in Goa confirmed this enhancement, and the process has since been expanded to rejuvenate approximately 54 kg of zeolite material, with multiple MiG-29s now operating with the revitalized units.
Source: Thebridgechronicle

Innovative use of silk in medical devices

Unlike many who go to the US to study and build a career there, Anuya Nisal returned to India after her Master's degree in Material Science from the University of Delaware, USA. "I wanted to contribute to the science ecosystem in India," she said. She joined GE Plastics as a scientist where she could explore and gain practical experience in polymer applications. The job deepened her understanding of the potential that lies in materials science and how it could be harnessed to better human life. Initial research on silk by Anuya and her colleagues at **CSIR-NCL (Council of Scientific and Industrial Research-National Chemical Laboratory),** Pune, revealed the potential of silk in medical applications. This meant the team had to now work on harnessing this potential to create medical devices that could heal wounds and fill bone voids, to begin with. As a first step, Anuya verified the potential of silk for tissue regeneration at the **CSIR-NCL,** together with seasoned researcher-inventor Dr Premnath Venugopalan. In 2015, Serigen Mediproducts was established along with co-founders Dr Swati Shukla and Dr Premnath Venugopalan. Serigen was created as a spin-off company of **CSIR-NCL** and incubated at Pune's Venture Centre, which is India's largest science and technology business incubator.
Source: Hindustantimes

CSIR Gives Cutting Edge Tech with Eye on Future

"Science should focus on carbon capture utilisation and pollution control measures. The **CSIR** is trying to come up with smog towers that can capture and manage carbon dioxide. But for a country this big, technology could take some time to make an impact," asked Dr N. Kalaiselvi, director-general of the **Council of Scientific and Industrial Research (CSIR)** said. **CSIR** was also working on the technologies that can improve green mobility, she said. Talking to Deccan Chronicle, Dr Kalaiselvi said, "For instance, we are working on supercapacitors for sustainable aviation fuel. We have converted used cooked oil into a sustainable aviation fuel. This year's Republic Day parade had two aircraft in the flypast fuelled by converted used cooking oil." "We have industry collaborations in Maharashtra and Tamil Nadu to commercialise this technology. As to road transportation, the **CSIR-National Chemical Laboratory**, Pune, in collaboration with KPIT Technologies recently built a hydrogen fuel cell-powered bus," she explained. Dr Kalaiselvi earlier inaugurated the P.M. Bhargava Auditorium at the **CSIR- Cellular and Molecular Biology (CCMB)** on Monday, named after its founder-director Pushpa Mittra Bhargava. The institute will observe its 37th Foundation Day on November 26. Dr Kalaiselvi was joined by Dr D. Srinivas Reddy and Dr Prakash Kumar, directors of **IICT** and **NGRI** respectively. She congratulated **CCMB** on its work on sickle cell anaemia. In her speech, she spoke extensively on climate change.
Source: **Deccanchronicle**

Lab to Launch: CSIR-NCL Highlights Research Innovation at IISF Curtain-Raiser

The **CSIR-National Chemical Laboratory (CSIR-NCL)** hosted a curtain-raiser event for the 10th India International Science Festival (IISF) 2024, coupled with the inauguration of the 6th **NCL**-RF Annual Students Conference. The event spotlighted advancements in science and technology, fostering innovation and collaboration among budding researchers and established professionals. The IISF, an initiative by the Ministry of Science and Technology and Ministry of Earth Sciences in collaboration with Vijnana Bharati, serves as a premier platform to showcase India's scientific achievements and promote the spirit of innovation. Dr. Premnath Venugopalan, Head of **NCL** Innovations and Director of Venture Center, emphasized the importance of such conferences in shaping scientific breakthroughs. "These platforms inspire creative thinking and deeper insights into the scientific process," he remarked. The curtain-raiser featured Prof. Santanu Chaudhari, CTO of Thermax Limited, as the chief guest. Prof. Chaudhari delivered a compelling plenary talk on "Advancing Materials Design and Scale-Up Using Physics-Informed AI: Preparing the Workforce for the Future of Energy Transition." He highlighted the transformative role of green technologies, sustainable practices, and advanced materials research in addressing global energy challenges.
Source: **Thebridgechronicle**

NARAKAS (SOC-2) Hosts Fifth Biannual Meeting at CSIR-NCL Pune

The fifth biannual meeting of the Town Official Language Implementation Committee (NARAKAS SOC-2), Pune, was held on November 25, 2024, at **CSIR-National Chemical Laboratory (CSIR-NCL).** The event was presided over by Dr. Ashish Lele, Director of

CSIR-NCL and Chairman of NARAKAS (SOC-2), Pune. The meeting saw participation from 12 central institutions and 60 central offices, with over 100 representatives attending. Distinguished guests included Dr. Sushmita Bhattacharya, Deputy Director, Department of Official Language, Ministry of Home Affairs; Dr. Prashant Dhakephalkar, Director, Agharkar Research Institute; and K.S. Hosalikar, Head of Climate Research and Services Office, India Meteorological Department. Dr. Swati Chaddha, Hindi Officer at **CSIR-NCL** and Secretary of NARAKAS (SOC-2), welcomed participants and outlined the objectives of the committee. Dr. Sushmita Bhattacharya presented a review of the biannual report and provided guidance on the effective use of the official language in institutional activities. She encouraged institutions to contribute meaningfully to the progress of the language.

Source: Thebridgechronicle

Session held with thrust on innovation, technology and entrepreneurship at IIT Guwahati

The four-day-long 10th edition of the India International Science Festival (IISF) 2024 that began on November 30 at IIT Guwahati is celebrating the integration of science and technology in addressing real-world challenges. This year's event features various thematic discussions, with the **CSIR-National Chemical Laboratory (NCL)** co-chairing the "Start-up Mission" sub-theme, focused on innovation, technology, and entrepreneurship, alongside **CSIR-CCMB**. Dr. Lele, Director of **CSIR-NCL,** inaugurated the session by emphasizing the transformative potential of lab-based technologies to benefit communities, particularly in agriculture-a cornerstone of India's economy. The keynote address was delivered by B.K. Sohliya, Executive Adviser and Chairman of the Meghalaya Farmers' Empowerment Commission. He highlighted the collaborative efforts between **CSIR-NCL** and the Commission in driving the "Sweet Revolution." Through innovations such as honey profiling technologies, this partnership is enhancing the quality, global recognition, and marketability of Indian honey while uplifting beekeepers' livelihoods. This initiative exemplifies the role of science in solving practical challenges and promoting India's honey heritage.

Source: Sentinelassam

8th PLASTO 2025 from 8 to 11 January 2025 at Pune International Exhibition & convention Centre, Moshi will be organised by Association for the Promotion of Plastics, Pune.

The Techno-Polymer exhibition to focus on promoting sustainability and circular economy. Pune, 30 November 2024: A special event to promote ‘Plasto 2025’, the techno-polymer exhibition by the Association for the Promotion of Plastics (APP) to be held from 8 to 11 January 2025 at Pune International Exhibition & convention Centre, Moshi was organised with a launch function at the Grand Sheraton Hotel. Union Minister of State for Civil Aviation and Cooperation, Mr. Muralidhar Mohol was present as the chief guest., Mr. Ghanshyam Deshpande President Technological excellence of Praj Industries Ltd, Mr. Ashwin Shastri, Chief Transformation Officer Tata Autocomp Systems Ltd, Dr.

Ashish Lele, Director, **CSIR-NCL** graced the occasion as Guests of Honour. Over 400 delegates of plastic fraternity and other companies attended the event. Speaking on the occasion, Union Minister of State for Civil Aviation and Cooperation, Mr. Muralidhar Mohol said, the industry has played a major role in putting our city on global map and Plastic industry has a role in economic growth of the city. Director of **CSIR-NCL** Dr. Ashish Lele said that Pune is a phenomenal place to have exhibition as it has a confluence of various sectors. He added that Sustainability and circular economy are key mega trends not just for the world, India but also cities like Pune.

Source: Plastemart

Go Back

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI)

CSIR-NEERI organized Indo-US workshop on environmental public health

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), NIH-National Institute of Environmental Health Sciences (NIH-NIEHS) USA and ICAR-National Institute of Occupational Health (ICAR-NIOH) Ahmedabad are jointly organizing an Indo-US Workshop on 'Emerging issues in Environmental Public Health: Dissecting Genetic and Expo some Perspectives' on 3-5 January 2024 in the **NEERI** Auditorium, Nagpur.

Source: **The Live Nagpur**

Madras High Court asks litigants to approach NGT to determine distance criteria between stone crushing units

The Madras High Court on Tuesday asked a batch of litigants to approach the National Green Tribunal (NGT) challenging Tamil Nadu Pollution Control Board's July 31, 2019 notification which relaxed the 2004 requirement of maintaining a distance of one kilometre between stone crushing units. Though Advocate General R. Shunmugasundaram requested the court to not extend the interim stay since it was granted prior to a study conducted by the **Council of Scientific and Industrial Research-National Environmental Engineering Institute (CSIR-NEERI),** the judges said, they had extended it only for a limited period. The A-G also told the court that the **CSIR-NEERI** study, conducted with respect to air pollution caused by stone crushing units in Tamil Nadu, had concluded that there was no need to prescribe any distance criteria between the stone crushing units and that they could function even in clusters.

Source: **The Hindu**

Pune reported 150 cases of JN.1 variant

Rapid testing and genome sequencing at Pune's key laboratories of B J Government Medical College and Indian Council of Medical Research – National Institute of Virology among others has helped quickly identify the JN.1 covid variant. According to the state health department, Pune has identified at least 150 cases of JN.1 Covid variant of the 250 cases reported so far from across Maharashtra. The state has identified other laboratories like the **Council of Scientific and Industrial Research – National Environmental Engineering Research Institute (CSIR-NEERI)** at Nagpur, apart from Haffkine Institute and Kasturba Hospital for infectious diseases in Mumbai.

Source: **Indian Express**

Trapping & analyzing viruses in waterbodies turn seamless with NEERI's cartridge technology

CSIR-NEERI has simplified the process of analyzing viruses in water bodies by developing a novel on-field bacteriophage/virus concentration device that cuts the water sample size 100 times and improves its quality for better study. The cartridge, modelled on affinity technology, promises to be a game changer in river studies and aid global researchers interested in waterbody analysis. **CSIR-NEERI's** environmental virology cell felt the need for this portable device during the Namami Ganga project when they had to move huge volumes of water samples from the site to its laboratory in Nagpur. The **NEERI** scientists spent 10 years studying the river's self-cleansing properties. Researchers found the exercise time consuming besides posing manpower and logistical challenges. The team encountered several challenges from Gaumukh to Gangasagar such as tough terrain and mammoth length of the river.

Source: Times of India

The road from 8% to 67% plastic recycling rate in India

India's plastics recycling rate stood at 8% in 2019. The country generates nearly 26,000 tonnes of plastic waste every day, more than any economy expect the United States and the European Union. In an effort to build a circular plastics economy in India, a consortium of Indian and Australian research organisations has developed a roadmap to 2035 including a comprehensive view of the entire plastics value chain and systemic policy recommendations. The roadmap was produced as part of an Australia-India Comprehensive Strategic Partnership involving an international team of Australian and Indian research institutes including CSIRO, the University of New South Wales, the University of Technology Sydney Institute for Sustainable Futures, The Energy and Resources Institute (TERI), the Council of Scientific and Industrial Research-National Environmental Engineering Research Institute **(CSIR-NEERI)** and Development Alternatives.

Source: Sustainableplastics

IIT-I, CSIR-NEERI to work on academic & research prog

Indian Institute of Technology Indore (IIT-I) has collaborated with the **Council of Scientific and Industrial Research - National Environmental Engineering Research Institute (CSIR-NEERI)** to share knowledge in the fields of natural resource management, environment, sustainability, climate change and related areas. The institutes have signed a memorandum of understanding. IIT-I assistant professor in department of civil engineering Dr Ashootosh Mandpe said, "This MoU sets the stage for enhanced collaboration between **CSIR-NEERI** and IIT-I, facilitating joint research projects, academic programmes, and exchange initiatives. By leveraging each other's expertise and resources, this partnership will foster innovation, knowledge sharing, and skill development."

Source: Times of India

Pollution Control Board signs pact with CSIR-NEERI for study on polluted canals

The Kerala State Pollution Control Board (KCBC) has signed a memorandum of understanding (MoU) with the **Council of Scientific and Industrial Research-National Environmental Engineering Research Institute (CSIR-NEERI**), Nagpur, to conduct a feasibility study on the development of process package treatment method to check pollution of pollution of Pallikkalar in Karunagappally, and Edappally and Perandoor canals in Kochi. The board has released an advance of ₹26.5 lakh towards initiating the project from its environment protection fund. The feasibility study was proposed after the Southern Bench of the National Green Tribunal (NGT) directed the State authorities to consider the wastewater treatment technology developed by **NEERI** to tackle the increasing faecal contamination of Pallikalar, and Edappally and Perandoor canals. The agency is expected to complete the study within 12 months.
Source: The Hindu

Lake desilting helps farmers, ups water table: IISc scientist

Bengaluru is facing a severe water crisis while there is no such scarcity 400km away in Moodabidri taluka of Dakshina Kannada district in Karnataka. A decade ago, when the place faced acute water shortage, TV Ramachandra, professor and coordinator, Energy & Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science (IISC), Bengaluru, suggested desilting all 32 lakes in the region and creation of new water bodies. “Today, they don’t have a water crisis,” Ramachandra said.He was delivering the Science Day lecture on ‘Society Relevant Science for Human Well-being – Indigenous Technologies for Viksit Bharat’ organized by **CSIR-NEERI** at its auditorium on Wednesday. **NEERI** director Atul Vaidya, department heads and students were present.
Source: Times of India

613 Trees to be felled for widening of road near Ambazari dam, MSTA gives nod

Maharashtra State Tree Authority (MSTA) has given nod for the felling of 613 trees to undertake widening of Ambazari Road from Vivekand Statue till the dam, that spreads till the University land near Pandhrabodi slums. Nagpur Municipal Commissioner got the letter granting permission for cutting down the trees, in addition to trees that are being chopped that pose a threat to embankment of the dam. These trees are on the slope of the Ambazari dam that is parallel to the existing two-laned road. Among the trees that are planned to be removed includes 60 tagged with heritage status and letter is signed by Director (Environment) and Member Secretary, Maharashtra State Tree Authority. As per the permission letter, MSTA has mandated NMC to submit report from **NEERI, CSIR, NGRI, SERC** specifying need for cutting the trees as same are necessary for the structural safety of the dam. It was also directed to the local body to explore possibility of transplantation of heritage trees as their conservation is necessary. Also, there was direction to first undertake plantation of new native or indigenous species trees before undertaking cutting as part of compensatory afforestation. The same would be equivalent to cumulative age of the trees that are earmarked for cutting.
Source: The Hitavada

Nagpur-based institute to study pollution in Byrnihat

The **CSIR-National Environmental Engineering Research Institute,** Nagpur has been tasked by the state government with conducting a study in order to identify the source of the pollution and implement appropriate remedial measures. The government anticipates that the study's results will be available by December of this year as it must cover all four seasons.
Source: The Shillong Times

Lecture on 'Inspiring Inclusivity in the Workplace' by NEERI

CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) is organising a lecture and panel discussion on 'Inspiring Inclusivity in the Workplace' at its auditorium at 3 pm on March 15. This event is based on women empowerment, aimed at creating an inclusive workplace culture. Famous Mountaineer Mrs. Bimla Deoskar will deliver a lecture. Aachal Goyal, Additional Commissioner, Nagpur Municipal Corporation, Dr Radha Munje, Former Dean, Indira Gandhi Government Medical College and Hospital, Dr Atul Vaidya, Director, **CSIR-NEERI,** Dr Bigyan Verma, Director, Institute of Management Technology (IMT), Nagpur, Prof Pramod Padole, Director, VNIT, Nagpur, and Dr Atya Kapley, Chief Scientist, **CSIR-NEERI** will share their experiences and insights during the panel discussion.
Source: Thelivenagpur

The chemists dedicated to making drinking water safer

Chemist Rita Dhodapkar is the principal technical officer and science secretary at the **Council of Scientific & Industrial Research's (CSIR's) National Environmental Engineering Research Institute** in Nagpur, India. She is also the project coordinator of the Indian arm of Paniwater (Photo-irradiation and Adsorption based Novel Innovations for Water-treatment) – a consortium of researchers from across Europe and India who are developing six unique technologies for water treatment, three specific to drinking water. In India – where a significant proportion of the population still lack access to safe drinking water – the main contaminants of concern are linked to microbial pollution. 'In specific areas we have some geogenic contaminants like arsenic, fluoride, iron,' says Dhodapkar. 'But they are not all over. In India, we have safe drinking water supply systems but bacterial contamination is something we [all) have to deal with.'
Source: Chemistryworld

Why 'too pure' drinking water might actually not be good for your health

If you are under the impression that reverse osmosis (RO) filtered water is best for you, think again. Experts warn that the so-called pure water, which is devoid of all essential dissolved solid material, could in fact be harmful to your health. They say that if you must have a RO, then it must be ensured that the total dissolved solids of treated water should be 200-250 milligram per litre, in order to contain all essential minerals, including calcium and magnesium. This was stated by principal scientist, water technology & management division, **CSIR-National Environmental Engineering Research Institute,** Nagpur, Dr Atul V Maldhure at a webinar on RO systems recently. Besides removing impurities, RO can remove beneficial minerals too, he added.
Source: Times of India

'Made in India devices in hospitals in 5 to 10 years'

n the next 5-10 years hospitals in the country will be well-equipped with Made in India equipment, ending reliance on imports of high-end medical devices, said Defence Research and Development Organisation (DRDO) director-general (life sciences) UK Singh on Monday. "Currently, India is importing medical equipment worth Rs 40,000 crore every year," he said. Singh was delivering a talk on various projects ranging from infrastructure, biofuels, agriculture, biotech, health and information technology during the 66th foundation day of **CSIR-NEERI** at its auditorium. "The govt is supporting production-linked investment in areas where most of the medical equipment are being manufactured. Investigation machines like MRI have already been made in Mumbai and Bengaluru," he said. Earlier, **CSIR-NEERI** director Atul Vaidya outlined the genesis of the institute. He said the institute has positioned itself to address the challenges posed by environmental issues. He described various parameters on which **CSIR-NEERI** is performing well, including technological developments and planning aligned with the vision for 2047 to ensure sustainable development.

Source: Times of India

NEERI celebrates Tech Day with talk on wastewater treatment

Emphasising the importance of technology development for both industry and society in the present era, former managing director of Vadodara Enviro Channel Limited Satish Panchal said wastewater treatment remains a challenge for industry all over the country. Panchal was speaking at the **CSIR-National Environmental Engineering Research Institute's (CSIR-NEERI)** National Technology Day, on Monday, in **NEERI** auditorium.Atul Vaidya, director of **CSIR-NEERI,** was also present at the event. Panchal highlighted wastewater treatment as a significant challenge confronting the industrial sector. Speaking on Sustainable Development Goal 6 (SDG 6), he underscored the necessity to think differently to protect water bodies for future generations, emphasizing the crucial roles of wastewater treatment and recycling. He stressed upon the need to adopt automation, digitization, and Internet of Things (IoT), which include sensors and software, for the smart functioning of wastewater treatment plants in industries.

Source: Times of India

NEERI scientists remove poisonous mercury from toxic site at Kodaikanal hills

The pristine hill town of Kodaikanal in Tamil Nadu may finally breathe easy with **NEERI** scientists using advanced technology to remove the poisonous heavy metal, mercury, that contaminated a vast area of the 20acre thermometer factory that shut down in 2001, following protests over toxic exposure in the eco-sensitive zone. The big breakthrough in remediation and reclamation of industrial hazardous waste was achieved by top scientists of Nagpur-based **CSIR-National Environmental Engineering Research Institute (NEERI),** who claim to have nearly completed India's first full-fledged removal of hazardous contaminants from the polluted site. "Kodaikanal is the only hazardous waste contaminated site in India, where a full-scale remediation procedure was undertaken. Our assessment found mercury levels up to 9000 mg/kg of soil in a three-acre area of

thefactory. We attribute our success to support from industry, which funded the project. The entire thermometer plant machinery had to be dismantled and disposed of in a safe way," said project coordinator and chief scientist Dr Mahendra Patil, who also designed and developed soil washing and thermal retort technology to rid the area of mercury.
Source: Times of India

Gondwana University-NEERI to sign MoU for academic research

CSIR-National Environmental Engineering Research Institute will celebrate World Environment Day on June 5. Dr Prashant Bokare, Vice-Chancellor of Gondwana University, Gadchiroli will be the chief guest. **NEERI** Director Dr Atul Vaidya will remain present on the dais. Dr M P Patil, Chief Scientist, Dr Lala Singh, Principal Scientist will be the other speakers. A Memorandum of Understanding (MoU) between **CSIR-NEERI** and Gondwana University for joint research and academic projects will be signed on the occasion. The programme will be held at the NEERI's auditorium at 4 pm on June 5.
Source: Thelivenagpur

'Waste dumping sites need scientific disposal'

The waste management vertical of **CSIR-NEERI** showcased its recent achievements in land reclamation through remediation and ecological restoration of wasteland, at its auditorium, on World Environment Day, on Wednesday. Chief scientist Dr Mahendra Patil, who is the head of the waste management vertical, and its principal scientist Dr Lal Singh, presented the national research institute's remediation achievements at Kodaikanal in Tamil Nadu and Koradi-Khaparkheda near Nagpur. Dr Patil said a detailed assessment of most hazardous waste-contaminated sites has not been done yet. "There are more than 3,000 municipal solid waste dumping sites in the country that need scientific disposal," he said. Dr Patil also discussed projects implemented in different industries for the remediation of hazardous waste-contaminated sites.
Source: Times of India

Eichhornia: NEERI to find long-term solution

Despite combined efforts of Nagpur Municipal Corporation (NMC) and citizens, the wild growth of Eichhornia weeds in Ambazari lake continues, compelling the civic body to explore a long-term solution of this issue. **CSIR-National Environmental Engineering Research Institute (CSIR-NEERI)** has extended its help to NMC to get rid of this menace. It will conduct a study on this matter and prepare a report for long-term management of Eichhornia weeds in Ambazari lake. "There are many factors involved in spreading of weeds in the water body and we are exploring all facets to work on a long-term solution of this problem," Dr Paras Pujari, Senior Scientist, **CSIR-NEERI** told 'The Hitavada'. Couple of weeks ago, NMC, with the help of citizens and NGOs removed the weeds from the lake. A large number of people came forward and cleaned the lake premises and removed Eichhornia weeds from the water body with the help of Fire Department divers and NMC staff. Despite all these efforts, weeds are still spreading in the water body and the machinery of the civic body is frequently working to remove it.

Source: The Hitavada

NEERI to Review Buffer Zone Recommendations for Bhandewadi Dump

Minister Uday Samant informed the Legislative Assembly that a proposal had been submitted to the **National Environmental Engineering Research Institute (NEERI)** to eliminate the 300-meter buffer zone at the Bhandewadi Dumping Yard. This proposal, originally submitted earlier, will now be resubmitted following local representatives' requests. Minister Samant stated during Tuesday's Assembly session that further steps would be taken once NEERI's report is received. Member Krishna Khopde raised a 'Point of Attention' in the Assembly regarding this issue. Minister Samant clarified that under the Central Government's Solid Waste Management Manual, a 'No Development Zone' of 500 meters is mandatory around waste collection and processing sites. **NEERI** had recommended maintaining a safe distance of 270 to 300 meters from the dumping yard in their initial report. The Nagpur Municipal Corporation subsequently endorsed this recommendation through a resolution.

Source: Nagpurtrends

Green Campus Conclave at NEERI auditorium today

Promoting long-term climate solutions through education, the Climate Project Foundation (TCPF) is launching the Green Campus Conclave (GCC) to transform traditional campuses into sustainable and eco-friendly environments. The conclave will take place at **CSIR-NEERI** auditorium on Friday at 2.30pm. GCC is powered by The Times of India and organized by the Global Shapers Nagpur (GSN) Hub in collaboration with Jigyasa and TCPF. This event will bring together educators to instil environmental values in students, fostering a generation conscious of and committed to the planet's well-being. While talking about the event, Kartik Saboo of GSN said, "The agenda of the Green Campus Conclave allows the schools to access hands-on learning opportunities about renewable energy, waste management, and conservation, equipping students with valuable skills and knowledge for the future.

Source: Times of India

WBPCB ties up with NEERI, IIT & TERI to study urban pollution

With an aim to tackle urban pollution, the West Bengal Pollution Control Board (WBPCB) has tied-up with TERI, **NEERI**, and IIT-Delhi for conducting source apportionment studies across six non-attainment cities, including Kolkata, Howrah, Barrackpore, Haldia, Asansol and Durgapur. The studies are in the final stage. They aim to identify the sources of each pollutant, enabling targeted measures to neutralize pollution at its origins. The studies include preparation of emission inventories, monitoring of ambient air quality for various pollutants at selected locations (7 to 10 locations with different land use), chemical speciation of PM 10 and PM 2.5 as well as source emissions, application of receptor (CMB8) & dispersion models to assess the contribution from various sources, future projections and evaluation of various control options to develop cost-effectiveplans.

Source: Times of India

Green Campus Conclave ends with green message

The Green Campus Conclave (GCC), an event to educate teachers and students on how to enhance sustainable practices at campus, concluded on Friday at the **National Environmental Engineering Research Institute (NEERI)** auditorium. Organized by The Climate Project Foundation (TCPF), the event focused on promoting tree plantation, utilizing wastewater, and fostering a sustainable campus environment. Powered by The Times of India and organized by the Global Shapers Nagpur (GSN) in collaboration with 'Jigyasa', the event witnessed participation of an enthusiastic crowd who showed interest in the green campus programme. In his inaugural speech, a GSN representative introduced the concept of a green campus, emphasizing its benefits for a balanced ecosystem.

Source: Times of India

Sonic doom: Rising levels of noise in India's cities

Legend has it that Julius Caesar took the first step against noise pollution when he prohibited the plying of horse chariots in Rome's cobblestone streets for several hours in the day and the night. His administration enforced the ban strictly. After 2,000 years, in a country 6,500 km away, it is the lack of enforcement of noise pollution norms that impacts people. Pragati, an engineer in Bengaluru, has spent the past five months in agony. With the construction of two mega-apartment complexes, there is not a moment of peace in her locality in Electronic City. "My partner and I even went on to raise complaints with the police because construction activities continue even at night. The police intervention only changed the situation for a day or two. Then the activity resumed," she says. Ritesh Vijay, a senior scientist at the **Council of Scientific and Industrial Research's National Environmental Engineering Research Institute (NEERI),** Nagpur, says technical solutions are available but strong policy support is necessary to contain the monster.

Source: Deccanherald

Species migrating because of degrading ecosystems

Expressing concerns over degrading ecosystems, Botany professor ML Khan said that species from lower altitudes are migrating to higher altitudes in the northeastern state of Arunachal Pradesh and called for urgent damage control measures. Khan, senior professor (HAG Grade), department of botany, Harisingh Gour Vishwavidyalaya, Sagar (MP), was the chief guest at the 'Dr Ashok S Juwarkar memorial lecture', on Monday. Atul Vaidya, director, **CSIR-NEERI,** was present on the dais. On degraded ecosystems, Khan emphasised the need for long-term solutions through science and policy involving everyone. Citing personal observations on climate change, he said that species at lower altitudes are migrating to higher altitudes in Arunachal Pradesh and there is a change in the flowering season and overall snowfall pattern. He presented several management options for mitigating climate change and its impacts on biodiversity in Arunachal Pradesh.

Source: Times of India

NEERI proposes natl wastewater screening to detect, track viruses

In a novel initiative aimed at bolstering India's public health defence, the Council of Scientific and Industrial Research-National Environmental Engineering Research Institute **(CSIR-NEERI)** has proposed a nationwide wastewater surveillance programme at the GLOWACON (Global Consortium for Wastewater and Environmental Surveillance for Public Health) at its recent meet at Singapore. **CSIR-NEERI** plans to compile a national network of wastewater surveillance data, which will enable researchers and policymakers to access and analyse data from across the country. "This network will be a valuable resource for understanding the spread of infectious diseases and developing strategies for future pandemic preparedness. Existing Covid-19 facilities in India can be leveraged for surveillance," said Dr Krishna Khairnar, who represented WHO CoViNet at the meet.
Source: **The Hindu**

CSIR-NEERI to hold national conference on EIA

The **CSIR-NEERI**, Hyderabad zonal centre, will organise a one-day national conference titled 'Environmental Impact Assessment: Resource Management and Policy Making 2024' at National Institute for Micro, Small and Medium Enterprises (ni-msme) in Yousufguda on July 19 (Friday). Minister for Environment, Forest, Science and Technology and Endowments Konda Surekha will be the chief guest. The conference is spread over three sessions — insights into EIA, resource management and policy making. The main goal of the conference is to address the regulations and policies of EIA by bringing government authorities, researchers and industrial personnel on a common platform to discuss the best practices and the challenges faced by industries, said chief scientist of the local centre Shaik Basha in a press release. **CSIR-NEERI** director Atul N. Vaidya will deliver the welcome address.
Source: **The Hindu**

Hazardous waste of unit at Cuncolim ind estate to be analysed: Sequeira

The Goa State Pollution Control Board (GSPCB) has appointed **CSIR-National Environmental Engineering Research Institute (CSIR-NEERI**) to analyse the hazardous waste generated by a unit in the Cuncolim Industrial Estate. The analysis will ascertain the percentage of hazard and explore the possibilities of putting the waste to other uses. Repeatedly, residents near the industrial estate have raised concerns over the hazardous waste stored by M/s Sunrise Zinc Ltd. Over the past five years, GSPCB has incurred an expenditure of Rs 21.31 lakh to cover the hazardous waste dump with tarpaulin sheets to prevent water contamination during the monsoon. "Based on these findings, the Board will take a call," said environment minister Aleixo Sequeira, replying to Cuncolim MLA Yuri Alemao and Fatorda MLA
Vijai Sardesai.
Source: **Navhindtimes**

Alarming Call: DNA traces of LSDV found in humans

Scientists at **CSIR-NEERI** have made an unexpected finding that shows DNA traces of Lumpy Skin Disease Virus (LSDV) in the upper respiratory tract microbiome of human subjects. Siddharth Singh Tomar and Dr Krishna Khairnar stated that their finding raises concerns about the possibility of the virus or viral DNA traces being transferred from animals to humans and highlights the need for further research. Dr Kharinar is principal scientist and head at Environmental Epidemiology and Pandemic Management , **CSIR-National Environmental Engineering Research Institute (CSIR-NEERI).** Tomar is a doctoral student of Dr Khairnar, affiliated with Academy of Scientific and Innovative Research, Ghaziabad, at **CSIR-NEERI.** LSDV is known to affect cattle and is spread by arthropod vectors such as mosquitoes and flies. The virus can be transmitted through blood, nasal discharge, lacrimal (tear duct) secretions, semen, and saliva. The disease can also be transmitted through infected milk to suckling calves. LSDV is not typically considered a zoonotic virus capable of infecting humans. However, the researchers detected LSDV reads (portion of genome) in 12 out of 48 human samples tested, using whole-genome metagenome sequencing to analyze the microbial diversity of the human respiratory tract.
Source: **Times of India**

International workshop at NEERI calls for creating awareness about ills of silicones
Experts called for raising awareness about silicone use in various sectors, providing hands-on analytical training, exploring ways to mitigate the environmental impact of silicones, addressing misconceptions about it, and investigating its accumulation in the environment during an international workshop at **CSIR-NEERI** on Monday. Silicones, a diverse group of compounds containing silicon-oxygen bonds, are integral to our daily lives. These siloxane molecules are widely used in personal care products like shampoos, cosmetics, and deodorants, as well as in industrial applications like dry-cleaning solvents and industrial cleaning fluids. The two-day workshop was inaugurated by the chief guest Raju Mankar, vice-chancellor, Laxminarayan Innovation Technological University, guest of honour Ved Prakash Mishra, director, hazardous substances management, ministry of environment, forest and climate change, Atul Vaidya, Director, **CSIR-NEERI,** and K Thomas, executive director, Global Silicones Council (GSC), USA.
Source: **Time of India**

भारत में कूड़े-कचरे से जलाकर बिजली बनाना व्यवहारिक नहीं, देश के सर्कुलर इकोनॉमी के है नुकसानदायक

प्रभात कुमार **सीएसआईआर-नीरी** ने कहा है कि भारत में बड़े पैमाने पर मिश्रित कूड़े-कचरे को जलाकर बिजली बनाना न तो व्यवहारिक है और न ही लोगों के स्वास्थ्य के लिए सही। नेशनल ग्रीन ट्रिब्यूनल में **सीएसआईआर-नीरी (वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद-राष्ट्रीय पर्यावरण इंजीनियरिंग अनुसंधान संस्थान)** में पेश रिपोर्ट में बड़े पैमाने पर कूड़े से बिजली बनाने के लिए संयंत्र लगाने को ठोस कचरा प्रबंधन अधिनियम 2016 के खिलाफ बताया है। एनजीटी प्रमुख जस्टिस प्रकाश श्रीवास्तव की

अगुवाई वाली पीठ के समक्ष पेश रिपोर्ट में कहा गया है कि बड़े पैमाने पर मिश्रित कचरे को जलाकर बिजली उत्पादन करने के लिए संयंत्र लगाने से देश की सर्कुलर इकोनॉमी भी प्रभावित होगा। **सीएसआईआर-नीरी** के प्रमुख वैज्ञानिक महेंद्र पी. पाटिल की ओर से दाखिल रिपोर्ट में कहा गया है कि 'मिश्रित कूड़े-कचरे को बड़े पैमाने पर जलाकर बिजली बनाने वाले संयंत्रों को बढ़ावा देने से देश की सर्कुलर इकोनॉमी खत्म हो जाएगी। उन्होंने कहा है कि दरअसल, देश में निकलने वाले ठोस कचरा में से 90 फीसदी दोबारा से इस्तेमाल किए जाने योग्य होगा है और सिर्फ 10 फीसदी कचरा ही खत्म करने योग्य। एनजीटी में पेश रिपोर्ट में कहा गया है कि यदि मिश्रित कूड़े को जलाकर बिजली बनाने के संयंत्र को बढ़ावा दिया जाता है तो 10 फीसदी के साथ-साथ 90 फीसदी वह कूड़ा भी खत्म हो जाएगा, जिसका दोबारा से इस्तेमाल करने के नये उत्पाद बन सकता है जो कि अर्थव्यवस्था को मजबूती प्रदान करता है।

Source: Livehindustan

Sewage discharge polluting Edappally, Thevara-Perandoor canals, finds report

An interim report of the **Council of Scientific and Industrial Research-National Environmental Engineering Research Institute (CSIR-NEERI)** has revealed discharge of stormwater and domestic sewage from households into Edappally and Thevara-Perandoor canals. The draft interim report on the feasibility study on development of a process package for domestic sewage dated September 12, 2024, found high suspended solid content in water samples collected from both canals, indicating higher water turbidity and decreased photosynthesis. The ecological condition was similar in Pattoli and Valiyath canals flowing into Pallikkalar in Kollam, which was also included in the feasibility study. The water quality in the Edappally canal was monitored at three locations. The pH values of water samples at different locations varied from acidic to alkaline (6.4-7.3), with temperatures of 32.6 to 35.1 degrees Celsius. The high suspended solids content at the three locations varied from 276 to 372 mg/l respectively. The physicochemical characteristics of water samples collected from the Edappally canal were low in organics, inorganics, and nutrients and thus classified as low strength. The presence of heavy metals was below the detectable limits or present in extremely low concentrations, according to the report.

Source: The Hindu

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating

its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.
Source: Pib

CSIR Foundation Day Celebrations held in Chennai

The foundation day of **Council of Scientific & Industrial Research (CSIR),** New Delhi, an autonomous organization under Ministry of Science & Technology, Govt. of India, was celebrated with great enthusiasm on 26 September 2024, at the **CSIR** Campus in Taramani, Chennai by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). As a part of the foundation day celebrations Open Day was observed at **CSIR** Campus, Taramani, Chennai, and at TTRS (Tower Testing and Research Station) Campus, Tirusulam, Chennai, **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and Regional Units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML**. All laboratories in the **CSIR** Campus and TTRS were kept open for the general public between 9.30 am and 3:00 pm. Elaborate arrangements were made to receive the visitors. State-of-the-art facilities, Technologies and products were showcased and demonstrated for the benefit of the visitors. More than 9200 people including school and college students, teachers, professionals from the industry, entrepreneurs and the general public visited the campus with great enthusiasm.
Source: Pib

State issues green guidelines for clean festivals to cut down on pollution

The state has issued a standard operating procedure to be followed during festivals, including pujas, so that the celebrations comply with environmental norms and minimise pollution. “It has always been a challenge to reduce emissions, noise pollution and water contamination during a festival of such a grand scale. But small steps by puja organisers and revellers can bring in significant changes. The SOP aims to protect the environment from air, water and other forms of pollution,” said Bengal pollution control board chairman Kalyan Rudra. Revellers can burst only green crackers, which should comply noise limits set by the **CSIR-NEERI** guidelines, and within specified hours. At the end of the festivity, organisers will have to follow the norms of West Bengal Prevention and Control of Water Pollution (Procedure for Immersion of Idols after Pujas) Rules, 2018, which prohibits immersion of plaster of Paris idols and decorations and synthetic paint, containing heavy metals.
Source: Times of India

Power plants may not need to install Sulphur removing gear as study shows emissions are not impacting air quality

India could halt installation and award of new flue gas desulphurisation (FGD) units at public sector coal-based power plants as a recent study found that sulphur dioxide emissions from Indian coal-based power plants were not adversely impacting ambient air quality. Niti Aayog, the government's premier think-tank, has held stakeholder consultations in this regard and is likely to recommend this in its final report by month end, officials said. The Aayog had made such a suggestion in a draft report, after which intensive consultations were carried out before firming up the view, they said. The move comes after a study conducted by the **Council of Scientific & Industrial Research (CSIR)-National Environmental Engineering Research Institute (NEERI)** found that SO2 emissions from Indian coal-based power plants were not adversely impacting ambient air quality. The **CSIR-NEERI** study has instead shifted focus to particulate matter (PM), which exceeds emission regulation. Senior government officials have also flagged huge financial implications of FGD units. "This data will assess if there is any cost benefit analysis and impact on power tariff," the draft report said.
Source: Economictimes

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.
Source: Pib

Ngp can be Winter Capital of India due to central location & good connectivity to metros: IIM-N director

The Orange City can be the winter capital of India, argued IIM-Nagpur director Bhimaraya Metri while stressing on its central location and robust connectivity with metros across the country. Metri was delivering the keynote address during the Indian Water Works Association (IWWA) conference's at VNIT auditorium on Friday. "Nagpur is already the winter capital of Maharashtra. It is well connected by air, rail and road with all major cities.

Hence, it is important to hold all important conferences such as this one in Nagpur to cut our carbon emissions," Metri said. He also emphasised digital transformation and water resource management as essential strategies, adding, "We must learn to conserve water resources to benefit all living beings and restore the Earth's glory." The two-day conference has been organised by IWWA in association with VNIT and **CSIR-NEERI.** Atul Vaidya, director, **CSIR-NEERI,** spoke on water's vital role in sustainable development, noting, "In case of water scarcity, survival is limited. Sustainable development is fundamentally about being environmentally, economically viable, and socially acceptable. Without water, there is no development."
Source: **Times of India**

NEERI advocates for global wastewater watch for coronaviruses

CSIR-NEERI emphasised the importance of institutionalising wastewater surveillance for coronaviruses (SarsCov2) through the World Health Organisation (WHO) Coronavirus Network (CoViNet) initiative during an international meeting supported by the United States Agency for International Development (USAID) and Program for Appropriate Technology in Health (PATH) in Ukraine on Monday. CoViNet is an initiative to enhance global efforts in tracking emerging SarsCov2 variants, MERS and other coronaviruses. Dr Krishna Khairnar, principal scientist and head of environmental epidemiology at Neeri, made a virtual presentation during the seminar on ‘Fundamentals of Epidemiological Surveillance of Wastewater'. During a talk on ‘Environmental Surveillance of Coronaviruses: A WHO Perspective', he shared insights on institutionalising wastewater surveillance for coronaviruses through the WHO CoViNet initiative. Dr Khairnar told TOI that **NEERI** plans to develop advanced technologies for wastewater-based epidemiology, including the use of artificial intelligence and machine learning algorithms to analyse wastewater data and predict disease outbreaks. PATH India's senior diagnostic lead, Praveen Kandasamy, discussed integrating Covid-19 testing infrastructure into broader pathogen surveillance systems.
Source: **Times of India**

Need to preserve natural resources amidst rapid urbanisation: AV Ranganath

HYDRA Commissioner AV Ranganath has underscored the urgent need to preserve natural resources amidst rapid urbanisation. Speaking at a seminar on urban lake management organised by the **Council of Scientific and Industrial Research – National Environmental Engineering Research Institute (CSIR-NEERI)** at Tourism Bhavan here on Tuesday, Ranganath stated that Telangana’s urbanisation rate surpasses the national average by 12 percent, currently at 47 percent, and is expected to rise to 75 percent by 2050, stressing the importance of protecting environmental assets for future generations. The State government established the Hyderabad Disaster Response and Assets Monitoring and Protection (HYDRA) in July 2023, integrating the GHMC’s Enforcement Vigilance and Disaster Management (EVDM) wing to protect lakes, parks, and other public resources from encroachment, he reminded. The HYDRA Commissioner said the lake preservation is critical, given that 61 percent of Hyderabad’s

lakes have already disappeared due to land demand. “HYDRA has initiated measures to protect the remaining 39 percent, employing resources like satellite mapping and village records from the National Remote Sensing Agency, Survey of India and Telangana survey department,” he disclosed. Experts, including **CSIR-NEERI** Director Dr. A.N. Vaidya and Hyderabad Zonal Chief Scientist Dr. Shaik Basha, shared strategies for sustainable urban lake management.
Source: **Therahnuma**

NEERI director Atul Vaidya named LITU vice-chancellor

Atul Narayan Vaidya, director of **CSIR-NEERI**, has been appointed as the vice-chancellor of Laxminarayan Innovation Technological University (LITU). Governor and chancellor CP Radhakrishnan announced Vaidya's appointment for a term of five years or until he reaches the age of 65, whichever is earlier. Vaidya will be superannuating on December 31 and is likely to take charge only after completing his tenure at the country's premier research institute. Born on December 4, 1964, Vaidya earned his MSc in chemical engineering from LIT and his PhD from Nagpur University. Since 1990, he progressed from a junior scientist to the director at Neeri. Vaidya has extensive experience in research, teaching, and administration. The governor formed a selection committee chaired by senior scientist Raghunath Mashelkar. The members included Ashish Lele, director of the National Chemical Laboratory; professor E Suresh Kumar, former VC of The English and Foreign Languages University, Hyderabad; and Vikas Chandra Rastogi, principal secretary of the higher and technical education department.
Source: **Times of India**

NEERI tech to help Sanskrit University recycle wastewater & develop garden

The Kavikulguru Kalidas Sanskrit University (KKSU) is likely the first university in the region to initiate recycling wastewater and use it to develop a beautiful garden on its 10-acre campus in Ramtek. In association with **CSIR-NEERI**, the university will set up a compact faecal sludge separation and treatment (CFSST) plant using the premier research technology already implemented at the nearby Gau Vigyan Anusandhan Kendra in Deolapar. The move followed KKSU's search for a solution to its wastewater management, water conservation and ensuring a clean campus. Vice-chancellor Hareram Tripathi told TOI that they grappled with a poor sewage network, causing wastewater choking close to the campus giving out a foul stench. "Our initiative is in line with PM Modi's Swachh Bharat campaign as well as being part of a green revolution. During a visit to Deolapar, I was impressed with the work of **NEERI** senior scientist Ritesh Vijay and his team. I realised **NEERI** could help us, and we approached its director Abhay Vaidya, who readily extended support," he said. The project has been funded by the govt, Tripathi said, adding that additional funds would be provided by the university.
Source: **Times of India**

Indo-UK project on anti-microbial resistance begins at Mafsu

The Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, recently launched the Indo-UK Joint Farmed Animal Diseases and Health project entitled 'A Comparative One-Health Approach: Tackling AMR Infections in UK and Indian Livestock'. This programme, approved under the Indo-UK Joint Call on Farmed Animal Diseases and Health (FADH) by the department of biotechnology (DBT), extends MAFSU's research on antimicrobial resistance (AMR) and includes collaborative work from several esteemed institutions across India and the UK. Dr NV Kurkure, research director at MAFSU, underscored the vital importance of this joint initiative in addressing the escalating AMR challenge. He noted that AMR presents a substantial risk to both human and animal health worldwide, requiring coordinated efforts across institutions and disciplines. He expressed satisfaction with MAFSU's sustained dedication to AMR research and stressed the significance of implementing a one-health strategy, incorporating human, animal, and environmental health aspects. The research director acknowledged the project's thorough structure, which enhances the university's existing work whilst uniting prominent institutions and specialists. The collaboration includes Nagpur Veterinary College, Mafsu; Central India Institute of Medical Sciences (CIIMS), **CSIR-National Environmental Engineering Research Institute (NEERI),** Acharya Narendra Dev College, University of Delhi; and researchers from the University of Nottingham, UK. Each institution received specific assignments to fulfil the project's goals effectively.
Source: Times of India

'Desalination units a must to meet ever-increasing demand of water'

The ever-increasing demand for fresh water for domestic and industrial purposes can be met through the installation of desalination plants using multiple technologies across India, said Kannan Srinivasan, director of **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI).** He added that desalination is one of the solutions to address the challenge of meeting water necessities. Srinivasan also pointed out that India's piped water network can ease the task of distribution through desalination plants. He made these remarks during a panel discussion on water and wastewater management at the 'One Week One Theme – Green Horizon Summit 2024' held at **CSIR-NEERI** on Tuesday. The session was moderated by Rajesh Biniwale, co-chair, SEP Vertical, **NEERI.** "We have nine states and four union territories with 63 coastal districts. Water is becoming increasingly saline in these districts. The ingress of salinity is becoming more prevalent in these areas. This is putting serious stress on sources of potable drinking water and leading to water shortage for households, agriculture, and coastal industry establishments where freshwater requirement is inevitable," he said. Srinivasan said that one of the possible solutions, based on global experiences, is desalination. "Desalination as a market has emerged in the country in the last 15 years. Based on interests by coastal states, a huge amount of desalination capacity is going to be set up. Water is going to be a pricey commodity in future," Srinivasan said.
Source: Times of India

'Industry engagement needed in environmental solutions'

Ajit Kumar Saxena, CMD of Moil, highlighted the critical need for expertise in addressing environmental challenges and stressed the importance of industry involvement in environmental problem-solving. He called for practical solutions and emphasised the necessity of societal engagement in tackling these complex issues. Saxena was the chief guest at the Green Horizon Summit-2024 hosted by **CSIR-NEERI** at its auditorium on Tuesday. **NEERI** collaborated with CII to launch the 'One Week One Theme' campaign focusing on E3OW (Ecology, Environment, Earth and Ocean Sciences and Water). The event featured prominent leaders including JNARDDC director Anupam Agnihotri, CII Vidarbha Zone chairman Shailesh Awale, **CSIR-NEERI** director Atul Vaidya, **CSIR-NIO** director Sunil Singh, **CSIR-CSMCRI** director Kannan Srinivasan, CII Vidarbha Zone vice chairman Shree Jamdar, and **CSIR-NEERI** senior principal scientist Amit Bansiwal. Saxena emphasised that while there are many environmental issues, there is a lack of adequate expertise, making events like this essential to bridge the gap. He commended the participation of the Confederation of Indian Industry (CII), highlighting the importance of direct engagement with industry to tackle environmental challenges effectively. Saxena expressed hope that pragmatic and implementable solutions would emerge from such events to address issues related to ecology, environment, and water. He also underscored the need to involve society, as environmental problems are both pervasive and complex.

Source: **Times of India**

Humansy currently consuming resources at 1.4 times Earth's capacity: Scientist

Padma Shri Sharad Kale, former scientist at Bhabha Atomic Research Centre (BARC), on Monday emphasised the importance of maintaining nature's equilibrium. He stated that whatever we take from nature, we must give back to preserve its balance. He cautioned that humans are currently consuming resources at 1.4 times the Earth's capacity and highlighted the urgent need to achieve 100% resource recovery to sustain future generations. He spoke during a one-day workshop on 'Sustainable Waste Management: Challenges & Opportunities' at **CSIR-National Environmental Engineering Research Institute (CSIR-NEERI).** Kale underscored the critical role of sustainability in resource management and stressed the importance of recognising our responsibilities towards nature. He called for the development of practical, replicable methods that can be easily adopted by others to promote sustainable practices on a larger scale. During the panel discussions, experts shared valuable insights and explored innovative strategies on topics such as the remediation of contaminated sites, solid waste management, and the circular economy, with a focus on advancing sustainable waste management practices. Mahesh Patil, chairman of the Goa State Pollution Control Board, was the guest of honour and inaugurated the workshop.

Source: **Times of India**

NEERI to characterise hazardous waste dump at Cuncolim Ind Estate

The Goa State Pollution Control Board (GSPCB) has appointed **National Environmental Engineering Research Institute (NEERI)** for undertaking characterisation of hazardous

waste dump of M/s Sunrise Zinc Ltd, located in Cuncolim Industrial Estate. Sources informed that **NEERI** has already collected samples of the dump for analysis and the report will be submitted to the Board shortly. "The **NEERI** report will help us to understand the present condition of the dump and will be feasible to remediate or relocate to the Pissurlem landfill site, as proposed before," sources said. Around 30,000 tons of hazardous zinc waste has piled up in the form of dump at Cuncolim industrial area since 2007. The dump is categorised as one of the contaminated sites by the Central Pollution Control Board (CPCB). Sources informed that in 2021, the Board had decided to transport the hazardous waste from Cuncolim IDC to Pissurlem landfill site, and for which the State government had sanctioned Rs 5 crore. "However, it was decided to undertake study of the dump before relocating it," sources said. The Board had sought a total grant of Rs 13 crore from the government to rid the Cuncolim Industrial Estate of the hazardous waste accumulated there.

Source: Thegoan

Final report soon on developing process package to check pollution of Edappally, Perandoor canals

The Kerala State Pollution Control Board (PCB) will soon submit data on various sources of domestic sewage being discharged into the Edappally and Perandoor canals, as part of a feasibility study conducted by the **Council of Scientific and Industrial Research-National Environmental Engineering Research Institute (CSIR-NEERI)** to develop a solution for the issue. The secondary data on the pollution loads from sewage discharge along the canals will be compiled by the board and submitted to the research team for the final report. The study was initiated as per the directives issued by the Southern Bench of the National Green Tribunal (NGT), which took suo motu cognisance of the report 'Faecal contamination high in Perandoor, Edappally Canals,' published in The Hindu online on January 28, 2021. An order issued on August 20, 2024, by the Bench comprising Justice Pushpa Sathyanarayana, Judicial Member, and Dr. Satyagopal Korlapati, Expert Member, directed the board and **CSIR-NEERI** to submit the final report immediately, as the "case has been pending since 2021 without any remedy."

Source: The Hindu

CSIR Highlights Advanced Technologies at IISF-2024 in Guwahati

The **Council of Scientific and Industrial Research (CSIR)** is showcasing its cutting-edge technologies and significant contributions to the North-East region at the India International Science Festival (IISF-2024), which began on November 30, 2024, in Guwahati. The event was inaugurated by Dr. Jitendra Singh, Hon'ble Minister of State (Independent Charge) for Science and Technology. Among the highlights were **CSIR-NEERI's** advancements in sustainable technologies, including Up-flow Compact Constructed Wetland-based Sewage Treatment Plant (STP): A solution for efficient wastewater management. Compact Faecal Sludge/Septage Separation and Treatment Plant (CFSST): An innovative approach to waste treatment. **NEERI**-KSHAN Air Quality Monitoring System: A versatile device for measuring air quality parameters like PM, SO_2,

NO_x, and CO in both rural and urban settings at various heights. The exhibition also featured milestones achieved by **CSIR** in diverse sectors, reflecting its commitment to scientific innovation and regional development. The inaugural ceremony witnessed the presence of several distinguished dignitaries, including: Prof. Ajay Kumar Sood, Principal Scientific Advisor to the Government of India, Dr. V. K. Saraswat, Member, NITI Aayog, Dr. N. Kalaiselvi, Director General of **CSIR** and Secretary, DSIR, Prof. Abhay Karandikar, Secretary, DST, Dr. Rajesh Gokhale, Secretary, DBT
Source: Chemindigest

NIO hosts conclave on ecology, environment, earth, ocean sciences and water

The **CSIR-National Institute of Oceanography (CSIR-NIO)**, in collaboration with **CSIR-NEERI,** Nagpur; **CSIR-NGRI**, Hyderabad; and **CSIR-CSMCRI,** Bhavnagar, hosted a stakeholder conclave on Ecology, Environment, Earth, Ocean Sciences and Water (E3OW). The event, organised in a hybrid mode, was held at the **CSIR-NIO,** Dona Paula, as a part of the 'One Week One Theme' campaign of the **CSIR**, which aims to showcase and strengthen research and technological advancements aligned with national priorities. The event brought together industry representatives, academic partners, and research scientists to foster collaborations and advance research and development (R&D) initiatives. The inaugural session was chaired by Dr. Atul Vaidya, Director, **CSIR-NEERI** and Prof Sunil Kumar Singh, Director of **CSIR-NIO**, alongside Dr Prakash Kumar, Director, **CSIR-NGRI,** and Dr Kannan Srinivasan, Director, **CSIR-CSMCRI.** The leaders emphasised the critical role of stakeholder engagement in developing impactful technologies and achieving the Government of India's Vikasit Bharat 2047 vision. A significant highlight of the conclave was the signing of a Non-Disclosure Agreement between **CSIR-NIO** and The Kelp Agro and Minerals, Raigad, to develop Type II collagen from jellyfish. This pioneering technology, developed by Dr Supriya Tilvi and her team at **CSIR-NIO**, offers promising applications in biomedicine and nutraceuticals.
Source: Heraldgoa

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CSIR-North East Institute of Science and Technology (CSIR-NEIST)

Awareness programme on National Certification System for Tissue Culture Plants

An impactful awareness programme on the National Certification System for Tissue Culture Raised Plants (NSC-TCP) was organized by DBT-National Institute of Plant Genome Research (NIPGR), New Delhi in collaboration with the CSIR-North East Institute of Science and Technology (NEIST), Jorhat, Assam aiming at disseminating awareness and promoting the advantages of the NCS-TCP programme. This significant event was held in Jorhat on Saturday.
Source: Sentinel Assam

EV batteries get extra power from coal in new experiment

Coal can inject some extra life into chargeable batteries for electric vehicles (EV) without burning, a new study has found. An advanced model of a hybridized battery management system (HBMS) using coal-based pouch cell supercapacitors and Li-ion batteries in an experiment by a team of scientists helped increase the maximum speed of e-rickshaws to 45 km per hour with an additional power gain of 433 watts. The authors of the study are Binoy K. Saikia, Santhi Maria Benoy, Mousumi Bora, Dipankar Neog, Dhrubajyoti Bhattacharjya, Akhil Rajbongshi, and Prasenjit Saikia. They are associated with **Council of Scientific and Industrial Research (CSIR)-North East Institute of Science and Technology** in eastern Assam's Jorhat.
Source: The Hindu

New flowering plant discovered in Arunachal Pradesh

Researchers from the University of Science and Technology Meghalaya (USTM), collaborating with researchers from **CSIR-Northeast Institute of Science and Technology,** Jorhat in Assam have recently made a significant discovery—a new flowering plant named "Begonia Narahari" in Arunachal Pradesh. This remarkable find occurred in the Lohit district of Arunachal Pradesh. Dr Nazir Ahmad Bhat, an assistant professor at USTM in Meghalaya and Bipankar Hajong, a PhD scholar at **CSIR-NEIST,** encountered and collected intriguing specimens belonging to the Begonia genus of the Begoniaceae family. They received guidance from Dr Pankaj Bharali, a senior scientist at **CSIR-NEIST**, and transported the specimens to the laboratory for analysis. After meticulous examination and comparison with known Begonia species worldwide, the researchers confirmed its identity as a previously undescribed and new species within the genus Begonia.
Source: Northeast Now

A new flowering plant found in Arunachal Pradesh is named after a Hyderabad scientist

A new colourful flowering plant species, 'Begonia Narahari', with a distinctive feature of displaying a vivid blue iridescence in direct light, was discovered in Mishmi Hills of Arunachal Pradesh's Lohit district by scientists. If this latest find once again indicated the unexplored flora and fauna potential in the region, the interesting part is the plant has been named after a scientist from Hyderabad, G. Narahari Sastry, who also happens to be a former **CSIR-Director** of **North East Institute of Science and Technology (NEIST),** Jorhat (Assam). Begonia is considered to be one of the largest and fastest growing genera of flowering plants, belonging to the family Begoniaceae, having more than 2,100 species and mainly distributed in tropical and subtropical regions of the world.
Source: The Hindu

CSIR-NEIST unveils cutting edge loading frame facility

CSIR-North East Institute of Science and Technology, Jorhat, has created a state-of-the-art loading frame facility with a capacity of 3000 kN at its premises. The facility was inaugurated on Wednesday by Dr Virendra M Tiwari, director **CSIR NEIST**, in the presence of **CSIR-NEIST** staff. An official stated that the main objective of the facility is to test the structural behaviour of normal and deep beams, s teel and concrete columns, trusses, arches, bearing plates, girders, precast tunnel lining units, sleepers, rails, etc. This facility shall be useful for testing the engineering materials used in the construction of infrastructure projects such as bridges, dams, refinery units, and power sectors. The official further mentioned that considering its importance, the facility will be of great benefit not only for the institute but also for the entire North East region.
Source: Thehillstimes

CSIR-NEIST celebrates 64th Foundation Day

CSIR-North East Institute of Science and Technology, Jorhat, the premier institute of CSIR in the Northeast celebrated its 64th Foundation Day on Monday in a befitting manner. A special function was held at the Dr J N Baruah Auditorium where Bhupendra Nath Goswami, SERB distinguished fellow of the Cotton University and former director of the Indian Institute of Tropical Meteorology (IITM), Pune delivered the foundation day lecture as chief guest while D Ramaiah, former director of **CSIR-NEIST** attended was the guest of honour for the occasion. In the foundation day lecture on "Climate Change and Crisis of Sustainable Development" Goswami held the audience spellbound with his critical analysis on the various aspects of climate change and its implications on sustainable development. He explained how the major drivers of climate change are human population growth and industrial developments backed by global average temperature change.
Source: Thehillstimes

JNC conducts national seminar

The Chemistry department of J.N. College here in collaboration with Dhemaji College (in Assam), organized a national seminar on "Recent Developments in Medicinal Chemistry and Catalysis" on blended mode on Tuesday. It was sponsored by the higher and

technical education department, GoAP. Participating in the seminar, prof. Diganta Sarma from Dibrugarh University shared profound insights of the advancements in medicinal chemistry and catalysis. Other invited speakers included Dr. Bolin Chetia from Dibrugarh University, Dr. Chandan Tamuly, senior principal scientist at **CSIR-NEIST**, Itanagar branch and Dr. Dwipen Kakati from Rajiv Gandhi University. The scholars and researchers from Assam, Arunachal Pradesh and Gujarat presented 62 papers during the seminar. (DIPRO)
Source: Arunachaltimes

Assam scientists make biodegradable packaging with freshness indicator

According to the World Health Organization (WHO), an estimated 600 million, or nearly one in ten people, cases of illness were caused by contaminated food supplies in 2023, and 420,000 people die each year as a result of contamination from food, which led to the loss of 33 million healthy life years. Food packaging retains product quality, reduces product damage, aids in transportation, allows safe storage, and acts as another type of product communication. Packaging plays a significant role in maintaining or monitoring food quality. Scientists from the North East Institute of Science and Technology, Jorhat, have developed a biodegradable packaging bag for meat and fish with freshness indicator. The work was led by Dr Swapnali Hazarika, Senior Principal Scientist at **NEIST**, and assisted by Krishnakamal Hazarika, Dr Achyut Konwar.
Source: Eastmojo

Governor lauds CSIR-NEIST, promotes medicinal plants

Governor Anusuiya Uikey attended the distribution of honey-bee boxes and quality planting materials of medicinal & aromatic plants to farmers organised by **CSIR-North East Institute of Science & Technology NEIST**, Branch Laboratory, Lamphelpat under **CSIR**-Floriculture & Aroma Mission Projects at its campus on Wednesday. During the programme, the Governor also released a book entitled Hidak Kanaraba Pambishing, (A treatise of medical, aromatic & economic plants) written by **CSIR-NEIST** Branch, Lamphelpat chief scientist Dr Huidrom Birkumar Singh. Speaking at the event, Governor Anusuiya noted that **CSIR** has been at the forefront of scientific innovation, research education and support to private industries and farmers. "Initiatives like Floriculture Mission and Aroma Mission projects under the mandate of **CSIR** have helped farmers and entrepreneurs alike through economic uplift and development of the rich bio-resources of the region" .
Source: E-pao

CSIR-NEIST organizes Yusuf Hamied Residential Chemistry camp for school students in Jorhat

CSIR-NEIST along with Royal Chemistry India Foundation (RCIF), India, is organizing the Yusuf Hamied Residential Chemistry Camp for Grade IX school students under Dr Yusuf Hamied's Inspirational Science Programme at the **CSIR- North East Institute of Science and Technology** which started from Tuesday and it will continue up to April 25. A total of 76 class IX students from government or government-aided schools in and

around Jorhat participated in this three-day residential chemistry camp. The camp will enable the students to enjoy Chemistry and motivate them to develop both awareness and a long-term interest in the subject through an action-packed programme which includes hands-on practical activities in institute's laboratories, exciting chemical demonstrations, a chance to meet like-minded students. The students will have the experience of life staying in hostels of National Research laboratory, and also, more importantly, the camp activities are delivered in the local language in addition to English.
Source: **Sentinelassam**

CSIR-NEIST BioNEST's Ideathon Challenge to fuel innovation in NE

CSIR-North East Institute of Science and Technology (**CSIR-NEIST** BioNEST) has announced an Ideathon Challenge worth Rs. 8 lakh to support entrepreneurs and start-ups in the region. The challenge, named 'Udyamita 1.0 – Empowering Innovation from NE India', is open to individuals or groups of individuals, entrepreneurs, early-stage start-ups, research scholars, scientists, students, faculties, and other professionals with a passion for problem-solving. The initiative is aimed at providing a platform for the growth of innovative ideas and business models in the sectors of food technology, nutraceutical, health technology, industrial biotechnology, green technology, agriculture, and other allied areas.
Source: **Eastmojo**

Manipur Governor interacts with farmers, distributes honey-bee boxes under CSIR project

The Governor of Manipur, Anusuiya Uikey distributed honey-bee boxes to the selected farmers of Manipur under a programme organized by the **Council of Scientific and Industrial Research (CSIR) — North East Institute of Science and Technology** at the Raj Bhavan on Wednesday. The programme on the distribution of Honey-bee boxes and quality planting materials of medicinal and aromatic plants to farmers was held under the **CSIR** — Floriculture and Aroma Mission Projects of the **CSIR-North East Institute of Science and Technology,** Branch Laboratory, Imphal. During the programme, Anusuiya further said that beekeeping is an important venture for farmers in terms of additional income.
Source: **Northeast Now**

32 projects worth Rs 61.82 crore approved under State Disaster Mitigation Fund

Under the State Disaster Mitigation Fund (SDMF), an amount of Rs 61.82 crore has been approved for 32 projects of PWD (roads), Irrigation, Soil Conservation departments in the state, and **CSIR-NEIST,** Jorhat. Before the enforcement of the model code of conduct for the Lok Sabha election, the 50th State Executive (SEC) meeting of the State Disaster Response Fund (SDRF) was held as per Government of India guidelines. The newly-introduced SDMF is part of the SDRF. The funding pattern of amounts under the SDRF is 90:10, with 90% provided by the Centre and 10% by the state. Of the 32 projects approved for the state, the highest of 24 projects have been sanctioned for the PWD (roads) department, with an amount of Rs 19.75 crore. The Irrigation department comes

in second in terms of project allocation, with six projects worth Rs 1.56 crore. Moreover, Rs. 40 crore has been approved for the **Council of Scientific and Industrial Research—North East Institute of Science and Technology (CSIR-NEIST), Jorhat**. An amount of Rs 50 lakh has also been allocated for a project in the Soil Conservation department under SDMF.
Source: Sentinelassam

Biodiversity not permanent: H Birkumar Singh

Chief Scientist of **CSIR-North East Institute of Science and Technology** H Birkumar Singh said, Manipur being a part of Indo-Burma Biodiversity hotspot is not a permanent feature and the status may change due to human intervention complemented by climate change. Birkumar was speaking as a guest of honour on Wednesday during observance of International Day for Biological Diversity held at State Botanical Garden, Khonghampat (Laikon), Imphal West. The observation was conducted under the theme 'Be Part of the Plan'. He said, a large number of endemic flora and fauna are available in the state and many are yet to be properly identified and scientifically studied. So, lots of research is needed in the field. Due to several factors man-made and natural causes, the number of endemic plant and animal species are diminishing, he added.
Source: Ifp

State Environment Journos Hold Climate Change Dialogue under Tree Cover

In a broad deviation from the usual classroom model, young journalists under a program of the Directorate of Environment and Climate Change, Government of Manipur's 'Media Fellowship on Climate Change Reporting' gathered under the shade of tall imposing trees within the lush green setting of the State Botanical Garden at Khongampat in Imphal West District on Saturday. Saturday's program saw the fifth batch of the fellowship award. As part of the monthly interaction program held for the fellows with open-ended interactions with scientists, academicians and other knowledgeable persons, the program had well-known scientist Dr Huidrom Birkumar, Chief Scientist at the **CSIR-NEIST,** Lamphelpat, and wildlife expert Dr Kh Shamungou (Sangai Shamungou) sharing their views on climate-related floral and faunal scenario in the State.
Source: Thefrontiermanipur

Lemongrass saplings distributed

Encouraging organic farming, Jorhat (Assam)-based **North East Institute of Science & Technology (NEIST)** distributed more than 50,000 saplings of lemongrass to farmers here in West Kameng district on Friday, at the initiative of the West Kameng Organic Farmer Produce Company Ltd (WKOFPCL). WKOFPCL CEO Tsering Thongdok said, "The motive of our company is to encourage people for organic farming. We cannot replace inorganic farming completely. However, it could minimise the use of chemicals for commercial agricultural produce." "Use of chemicals in cultivation is harmful to the land, air and water of our fragile environment. Three years back, we established our company to encourage organic farming," he added.

Source: Arunachaltimes

CSIR-NEIST Hosts DBT Consultative Meeting to Shape Biotechnology Roadmap for Northeast India

CSIR-NEIST, Jorhat organized a two-day Consultative Meeting of Department of Biotechnology (DBT) titled "Developing a roadmap for supporting and nurturing Biotechnology in NER by DBT during the next five years" from 21st to 22nd June, 2024. The meeting was attended by all heads and representatives of S&T Councils, Health Departments, Veterinary Departments of all the 8 States of NER and many leading scientists of NER Research Institutes like IBSD-Imphal, Pasteur Centre-Shillong, Guwahati Medical College, Jorhat Medical College, Tezpur University, Mizoram University, Veterinary Colleges of Assam, ADMac-Guwahati, NRC-Mithun-Dirang, NRC-Yak-Mefziphema, NRC-Pig-Guwahati and several others alongside many eminent scientists and technical experts from across India to discuss the current state of progress and identify the major challenges of NER in Medical, Veterinary, Agriculture, Aquaculture, Environment and Bioenergy sectors of Biotechnology for developing a roadmap of DBT to strengthen effective and inclusive support to NER.

Source: Sentinel Assam

CSIR-NEIST holds training on MFMPU & millet processing in remote Namte

Naharlagun **CSIR-North East Institute of Science and Technology** branch laboratory of in collaboration with Tawang district agriculture officer organised a demonstration-cum-training for utilization of 'multipurpose food and millet processing unit' (MFMPU) in Namet village on Wednesday. It facilitated promotion of sustainable food processing technologies among 65 participating e farmers, KVK scientists and agricultural department field functionaries. Kitpi EAC T. Kakki, speaking as chief guest, stressed on maintaining hygiene while processing value added food products. He asked the farmers to adopt scientific cultivation practices with special emphasis on organic farming. District agronomist L. Zimba advised them to utilize processing machineries to full capacity. Entomologist K.B. Kayastha spoke on different aspects of packaging and marketing of processed food items for profitability. In technical session, **CSIR-NEIST** senior principal scientist Dr. Chandan Tamuly highlighted importance and potential impact of food processing technologies for value addition followed by demonstration on millet and multipurpose food processing units.

Source: Arunachalobserver

Study shows accelerating groundwater depletion in north India

Groundwater in north India remains a vital food and water security resource for more than one billion people. But, the summer monsoon drying, and winter warming pose considerable challenges for rapidly declining groundwater, says a new research study. The study in which scientists of the **CSIR-National Geophysical Research Institute (NGRI)** in Hyderabad**/ Northeast Institute of Science and Technology** (**NEIST**-Jorhat (Assam)) participated along with Indian Institute of Technology (IIT) Gandhinagar,

Columbia University, New York (US) and King Abdullah University of Science and Technology, Thuwal, (Saudi Arabia) showed that groundwater depletion has been accelerating in this region for the past 70 years and will continue in the projected future .The study got published in the latest edition of 'Earth's Future', a leading journal of American Geophysical Union.
Source: The Hindu

RGU holds seminar on computational models

The computer science and engineering department (CSED) of Rajiv Gandhi University (RGU) recently conducted a three-day seminar, named AICTE-VAANI, on "Computational models to assist in enhancing agricultural activities and productivity in Assamese". In technical session, Dr Bharalli, an inventor, to receive Padma Shri award, spoke on "Adulteration of food products, colour and microplastics". Other resource persons spoke on different topics: RGU assistant Prof Dr. Samikhya Bhuyan on 'Agriculture and its different models'; Dr. Samujjal Baruah on "Drone sensor & UAV mapping'; Jorhat-based **CSIR-NEIST** scientist Dr. Hridoy Jyoti Mahanta on 'Paradigm of scientific discovery- AI & ML for trans-disciplinary fields'; **CSIR-NEIST** Scientist Dr. Pankaj Bharalli on 'internet of plants (connection between plants), hydroponic farm & DNA barcoding' while coordinator RGU assistant Prof Dr. Rupam Kumar Sharma earlier spoke on 'Data-driven insights, image recognition, precision agriculture and autonomous systems: highlighted importance of computational models on agriculture'.
Source: Arunachalobserver

Geology department collects INR 990.31 lakh from coal sector

The Department of Geology and Mining collected revenue of INR 990.31 lakh from the coal sector during 2022–23. During the period, it granted 12 coal prospecting licenses, four coal mining leases, and coal royalty collection-cum-coal depot licenses to 11 firms, according to the appraisal work on mineral exploration conducted by the Directorate of Geology and Mining. The department carried out G3 exploration of Shatuza Limestone Block I (Phase 1) in Phek district, with exploratory drilling beginning in October 2022. Four boreholes were drilled, totalling 221.35 metres, at the block, which is part of the Naga Hills Ophiolites and is located 2 km south of Shatuza village. During this period, geological mapping covered an area of 1: 51 square kilometres at a 1:5000 scale, with 1,082.80 meters drilled across five boreholes. Three coal zones were encountered, and 29 samples were sent for chemical analysis at **CSIR-NEIST,** Jorhat.
Source: Easternmirrornagaland

From Khar to fibre

"Aita'r posola" — an antiquated metaphor to refer to the nostalgic bond of the older generation with the younger one — is also a testament to the popularity of the innocuous banana plant amongst the Asomiya people through the ages. If you have a backyard, you would inevitably have a kol gos. From paat'ot diya maas (fish wrapped in banana leaf) to Khardwi (an alkaline Bodo dish), the banana plant is indispensable in Assamese cooking.

And, indeed, in its religious and social life. Think of Diwali and images of shiny, green banana plants with neat rows of earthen lamps placed on bamboo planks crop up. “Unlike in this region, in Japan, banana fibre is widely used as a blending material in the textile sector. In fact, the Japanese currency notes (the Yen) are made out of banana fibre! There’s a high demand for it in countries like the USA, Malaysia, Korea, the European Union, etc. So, exporting banana fibre will bring in substantial foreign exchange,” asserts Dr. Dipul Kalita, Senior Principal Scientist, North East Institute of Science and Technology **(CSIR-NEIST)**, Jorhat, whose core research has been on fibre science and technology.
Source: Assamtribune

5 scientists secure spot in World’s Top 2% Scientists List

In a remarkable achievement, five distinguished scientists from **CSIR-North East Institute of Science and Technology (CSIR-NEIST),** Jorhat have been recognized among the top 2% of scientists worldwide. This prestigious recognition, bestowed by a Stanford University study, celebrates their outstanding contributions to scientific research across diverse fields. Including these five scientists in the list reinforces **CSIR-NEIST’s** Jorhat role as a scientific innovation and excellence leader. Dr VM Tiwari, Director, **CSIR-NEIST,** expressed extreme happiness in this significant accomplishment, noting that including the institute’s scientists on this global platform showcases the region’s growing prominence in research and innovation. He further added, “This recognition not only highlights the individual achievements of our scientists but also strengthens our institute’s reputation as a hub of high-impact scientific research and innovation.” The five distinguished scientists, include Dr. Mohan Lal, Dr.Binoy Kumar Saikia, Dr.Manash Ranjan Das, Dr.Prasenjit Manna, and Dr.Ravindra K. Rawal whose contributions range from medicinal and aromatic plants to chemistry and material science to environmental sustainability, which have been instrumental in advancing research that benefits both academia and industry.
Source: Sentinelassam

CSIR-North East: विज्ञान-प्रौद्योगिकी संस्थान ने मनाया 83वां स्थापना दिवस

सीएसआईआर-नॉर्थ ईस्ट इंस्टीट्यूट ऑफ साइंस एंड टेक्नोलॉजी, जोरहाट ने सोमवार को अपने शीर्ष निकाय, **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर)** का 83वां स्थापना दिवस बहुत उत्साह और उमंग के साथ मनाया। ‘अकादमिक जगत में नेतृत्व’ विषय पर अपने व्याख्यान में, आईआईटी कानपुर में चेयर प्रोफेसर और आरएबी **(सीएसआईआर**) के अध्यक्ष, पद्म श्री पुरस्कार विजेता प्रोफेसर विनोद के सिंह ने अनुसंधान और शिक्षाविदों में नेतृत्व गुणों को विकसित करने के महत्व पर जोर दिया। उन्होंने कहा कि विज्ञान और शिक्षा जगत में नए नेताओं का निर्माण करना भारत जैसे देशों के लिए महत्वपूर्ण और जरूरी है। इस अवसर पर मुख्य अतिथि प्रोफेसर विनोद के सिंह ने भी काम, जिम्मेदारी और समय प्रबंधन के महत्व पर जोर दिया। उन्होंने उल्लेख किया कि एक महान नेता के गुण, जैसे विचार और प्रस्तुति में स्पष्टता, सही निर्णय लेने की क्षमता और शासन और प्रबंधन की समझ, साथियों के प्रति

सम्मान, नैतिकता, नैतिकता, ईमानदारी और अखंडता के साथ होने चाहिए। प्रोफेसर सिंह ने सुबह डॉ. जेएन बरुआ ऑडिटोरियम में आयोजित एक विशेष कार्यक्रम में अपना संबोधन दिया, जिसमें जोरहाट जिले के गणमान्य व्यक्तियों, आमंत्रितों और प्रतिष्ठित व्यक्तियों के साथ-साथ **सीएसआईआर-एनईआईएसटी** बिरादरी की एक बड़ी सभा ने भाग लिया। **सीएसआईआर-एनईआईएसटी** के निदेशक डॉ. वीएम तिवारी ने समारोह की अध्यक्षता की। अपने स्वागत भाषण में, डॉ. तिवारी ने इस अवसर पर अपनी शुभकामनाएं दीं।

Source: Jantaserishta

Training on bamboo processing begins at MU

The North East Cane and Bamboo Development Council (NECBDC), in collaboration with the Apunba Imagi Machasing (AIMS) inaugurated a 30-day training programme on "Bamboo and Cane Processing" at the Department of Forestry, Manipur University today. The event, sponsored by the NEC, Ministry of DoNER, was focused on developing skills in bamboo and cane processing for restoring livelihoods in the conflict-affected regions of Manipur. Prof Gopal Kumar Niroula Chhetry, Dean, School of Agricultural Science, Manipur University, Dr Huidrom Birkumar Singh, Chief Scientist at **CSIR-NEIST,** Imphal, Thoudam Dorendra, an agriculturist from Mantripukhri and H Priyokumar Singh, Manager-Training at NECBDC, Guwahati, Assam among others attended the programme. At the event, Prof Gopal Kumar Niroula Chhetry, Dean, School of Agricultural Science, MU, underlined the cultural and economic value of bamboo and cane in Manipur and pointed out its potential to create and enhance livelihoods. During the 30-day programme, 50 participants will be trained in various aspects of bamboo and cane processing.

Source: E-pao

Assam scientist Dr Prasenjit Saikia honoured with NESA Fellowship of the Year Award 2024

Renowned scientist from the Coal and Energy Division of **CSIR-North East Institute of Science and Technology (CSIR-NEIST)** in Jorhat, Assam, Dr. Prasenjit Saikia was honoured with the NESA Fellowship of the Year Award, 2024. The award was presented by Dr. N. Kalaiselvi, Director General of the **Council of Scientific and Industrial Research (CSIR),** during a grand ceremony at Banaras Hindu University (BHU), Varanasi. The event was the part of the International Conference on “Advancements in Basic Science, Environmental Studies, and Traditional Medicine for Translational Drug Discovery and Development (TMT3D-2024)” held at Banaras Hindu University (BHU), Varanasi from November 21 to 23. The National Environmental Science Academy (NESA), one of the prominent academies in the country with its headquarters in New Delhi, presented this Fellowship as an annual recognition for individuals who have made exemplary contributions to environmental science, energy, and sustainable development. Dr. Saikia’s groundbreaking work in coal and energy technologies has earned him

widespread acclaim, positioning him amongst the leading scientists in these fields. With over two decades of dedicated service at CSIR-NEIST, Jorhat, Dr. Saikia has led critical research initiatives focusing on clean energy solutions and sustainable coal resource utilization.

Source: **Indiatodayne**

Go Back

CSIR-National Geophysical Research Institute (CSIR-NGRI)

CSIR-NGRI, GSI ink ₹99 crore pact for mineral exploration

A collaboration with **CSIR-National Geophysical Research Institute (NGRI),** the ₹99.73-crore project focusses on a comprehensive 'Deep Seismic Reflection Survey (DSRS) and Magnetotelluric (MT) Survey', spanning 700 kilometres across Rajasthan and Madhya Pradesh, to study the intricate crustal architecture and unlock the region's latent mineral potential. The initiative is being spearheaded by **CSIR-NGRI** Director Prakash Kumar and GSI Director-General Janardan Prasad, according to an official release.

Source: thehindu

Arunachal Pradesh highly prone to seismic trigger: NGRI study

HYDERABAD: Hyderabad-based **National Geophysical Research Institute** said the Arunachal Pradesh region is extremely stressed and even tiny stresses can cause seismic triggering. **NGRI** scientists, who investigated dynamic triggering in Arunachal using data of 34 significant remote and distant quakes, have identified triggered seismicity in the form of microearthquakes and non-volcanic tremors during six remote mainshocks.

Source: The Times of India

Ayodhya: Earthquake hazard tests for Ram Mandir matched those for big dams & nuclear power plants

Three years ago, a team of scientists from the Hyderabad-based **National Geophysical Research Laboratory (NGRI**) landed in Ayodhya for a study that they generally reserve for big bridges, dams and even nuclear power plants. The scientists from **NGRI**, a 1961-founded research laboratory of the **Council of Scientific and Industrial Research (CSIR)** under the Union Ministry of Science and Technology, arrived in Ayodhya in November 2020 for a visit to the construction site of the Ayodhya Ram temple.

Source: Moneycontrol

Shri Ram Mandir construction has been technically assisted by atleast four leading National Institutes of CSIR (Council of Scientific & Industrial Research) and DST (Department of Science & Technology) under Ministry of Science & Technology, in addition to certain inputs from other institutions like IITs as well as ISRO (Indian Space Research Organisation), says Union Minister Dr Jitendra Singh

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Source: Pib

Hyderabad-based CSIR-NGRI took up seismic study of Ayodhya Ram Temple site during peak COVID-19

Hyderabad-based **CSIR-National Geophysical Research Institute (NGRI)** took about a month during the peak COVID-19 pandemic to finalise the various geo-scientific studies at the Sri Rama Janmabhoomi Temple site before the construction began to ensure that the structure is built on a solid foundation and will be able to withstand a quake of up to 8.2 on the Richter Scale. The premier institute was approached by the then DG-CSIR following a meeting with the chairman, construction committee, Shri Ram Janmabhoomi Teerth Kshetra Trust to investigate the site for seismic hazard, as the site lies in the Indo-Gangetic plain which is vulnerable to the hazards from the Himalayan earthquakes..
Source: The Hindu

Rare Minerals Race

Rare and critical minerals hold the key to a raft of new technologies: AI-powered devices, electric vehicles (EVs), automation, lithium batteries, chips, robotics, telecom and space satellites. India has an estimated six per cent of global rare earth element (REE) deposits. China accounts for 90 per cent of REEs, complicating India's strategy going forward. There are 17 rare earth minerals, most with exotic names but important technology uses: cerium, erbium, europium, etc. India is accelerating its search for REEs. Last year the **National Geophysical Research Institute (NGRI),** based in Hyderabad, discovered 15 of the 17 known REEs at a site in the Anantapur district of Andhra Pradesh.
Source: Businessworld

Why scientists are starting to worry about the moon shrinking

For hundreds of millions of years, our moon has been shriveling like a raisin. Now, scientists say that decrease in circumference is leading to shallow moonquakes — including near NASA's potential sites for human visits. "A concept that I think that many people have is that the moon is this geologically dead body, that something on the moon never changes," said lunar geologist Tom Watters. But "the moon is a seismically active body." Studies of moonquakes date back to the Apollo era. More than 50 years ago, astronauts placed seismometers around the near side of the moon's surface to record

trembles. The most powerful shallow quake was located near the south pole, which is near landing spots for NASA's Artemis III mission to send people back to the moon, potentially in 2027. The lunar south pole region is enticing because it contains permanently shadowed regions that some speculate could have water-based ice. "It is too early to argue for such hazard scenarios to Artemis sites, [which) might devastate the lunar base," said Kumar, a researcher at the **National Geophysical Research Institute** in Hyderabad, India.
Source: Washingtonpost

613 Trees to be felled for widening of road near Ambazari dam, MSTA gives nod

Maharashtra State Tree Authority (MSTA) has given nod for the felling of 613 trees to undertake widening of Ambazari Road from Vivekand Statue till the dam, that spreads till the University land near Pandhrabodi slums. Nagpur Municipal Commissioner got the letter granting permission for cutting down the trees, in addition to trees that are being chopped that pose a threat to embankment of the dam. These trees are on the slope of the Ambazari dam that is parallel to the existing two-laned road. Among the trees that are planned to be removed includes 60 tagged with heritage status and letter is signed by Director (Environment) and Member Secretary, Maharashtra State Tree Authority. As per the permission letter, MSTA has mandated NMC to submit report from **NEERI, CSIR, NGRI, SERC** specifying need for cutting the trees as same are necessary for the structural safety of the dam. It was also directed to the local body to explore possibility of transplantation of heritage trees as their conservation is necessary. Also, there was direction to first undertake plantation of new native or indigenous species trees before undertaking cutting as part of compensatory afforestation. The same would be equivalent to cumulative age of the trees that are earmarked for cutting.
Source: The Hitavada

Gujarat's mysterious crater is not Harappan. Something crashed from space

Scientists have confirmed that the massive 1.8 km wide crater in Gujarat's Kutch region is the result of one of the biggest asteroid crashes from space on Earth. The spot, known as the Luna structure, formed when a massive object primarily made of iron struck the planet. It was for long linked to the ancient Harappan Civilisation. Using a method called radiocarbon dating, scientists found out that these plants lived about 6,905 years ago. The details of the study conducted by scientists from the University of Kerala, Geological Survey of India, National Centre for Earth Science Studies, Kachchh University, Physical Research Laboratory, and **CSIR-National Geophysical Research Institute** have been published in the journal Science Direct.
Source: Indiatoday

OIL eyes geothermal energy in Arunachal, Assam

Oil India Limited chairman and managing director Ranjith Rath has proposed tapping into the geothermal energy potential of Arunachal Pradesh and Assam by reviving deep bore wells originally drilled for hydrocarbon exploration in the two states. This suggestion was made during a meeting held at the **CSIR-National Geophysical Research Institute**

(NGRI) in Hyderabad on Tuesday. The meeting, held in response to directives from NITI Aayog, aimed to establish a "Consortium of Geothermal Energy" to harness 10 MW of geothermal energy by 2030.
Source: Eastmojo

OIL to evaluate India geothermal potential in Arunachal Pradesh, Assam

Oil India Limited (OIL) will be working with the Centre for Earth Sciences and Himalayan Studies (CESHS) to carry out research studies on the abundant deep and shallow oil wells in the Arunachal Pradesh and Assam in India to evaluate the region's geothermal resource potential. Additionally, OIL and the **CSIR-National Geophysical Research Institute (NGRI)** will conduct an MT survey at potential geothermal sites in Arunachal Pradesh and will help in mobilizing a rig for drilling operations. These plans were decided during a meeting held in Hyderabad by the policy think tank NITI Aayog that aims to establish a "Consortium of Geothermal Energy" to develop 10 MW of geothermal energy in India by 2030. Ministry of Earth Sciences union secretary Dr M Ravichandran chaired the session.
Source: Thinkgeoenergy

KABIL inks MoU with CSIR-NGRI for Advancing Geophysical Investigations in Critical and Strategic Minerals Sector

Khanij Bidesh India Limited (KABIL) signed a Memorandum of Understanding (MoU) with the **Council of Scientific and Industrial Research - National Geophysical Research Institute (CSIR-NGRI)** to foster a long-term collaboration in the field of geophysical investigations to bolster its ongoing projects and activities in critical and strategic minerals. The MoU was signed by Shri Sadashiv Samantaray, Director (Commercial), NALCO & CEO, KABIL and Dr. Prakash Kumar, Director, **CSIR-NGRI**, in the presence of Shri Sridhar Patra, CMD, NALCO & Chairman, KABIL, at NALCO Corporate Office in Bhubaneswar. This collaboration will focus on Geophysical, Geochemical and Geological surveys, data analysis, interpretation and modelling, scientific knowledge sharing, technical support and advisory services. Shri Sridhar Patra, CMD, NALCO & Chairman, KABIL, said that this collaboration will pave the way for driving innovation and actionable insights towards the ongoing KABIL projects.
Source: Pib

Geothermal energy resource potential map mooted

The necessity of developing a resource potential map for geothermal energy, the urgency to enhance survey activity for geothermal exploration; and initiating a pilot project to showcase the effectiveness of geothermal potential was emphasised by Ministry of Earth Sciences Secretary M. Ravichandran on Friday. Participating in a brainstorming session on 'Geothermal Energy' organised by **the CSIR-National Geophysical Research Institute (CSIR-NGRI)** here, he said there is a need to evaluate technical feasibility and economic viability for the proposed work and called for robust collaborations among various entities, including national research institutes, State organisations, industries, and other relevant stakeholders.

Source: The Hindu

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Source: Thinkgeoenergy

CSIR-NGRI presents geothermal energy innovations in Raipur

The **Council of Scientific and Industrial Research-National Geophysical Research Institute (CSIR-NGRI)** hosted an interaction meet on geothermal energy at the state-run Pt. Ravishankar Shukla University in Raipur, on Thursday. Focused on the Tatapani Geothermal Province, a region in Chhattisgarh with promising potential for geothermal energy development, the objective of the meet was to showcase **CSIR** technologies and knowledge base to stakeholders and academic institutions. Dr. Prakash Kumar, director

of **CSIR-NGRI,** highlighted the significance of geothermal energy and emphasized its clean and sustainable nature, positioning it as a crucial resource for India's goal of achieving net-zero emissions by 2070. He noted that the interaction meet is part of the One Week One Theme (OWOT) celebrations under the energy and energy devices (EED) theme. The inaugural function of OWOT was held in New Delhi on June 24, graced by Dr. Jitendra Singh, minister for science and technology, and Dr. Kalaiselvi, director general of **CSIR**.
Source: Times of India

NIT-CSIR-NGRI ink pact for research

The National Institute of Technology (NIT) Raipur and the **CSIR-National Geophysical Research Institute (CSIR-NGRI)** Hyderabad have signed a Memorandum of Understanding (MoU) with a motive to step ahead towards advancing research in geophysics, geology, and energy extraction from natural resources. The agreement signed by NIT Raipur and **CSIR-NGRI** outlines key areas of operation. They will work together on research projects in geophysics, geology and energy extraction from natural resources. Both institutions will promote joint research programs and offer consultancy services, using their combined expertise. They will set guidelines for sharing intellectual property from their collaborations. The agreement also allows for cooperation in other mutually beneficial areas.
Source: Times of India

Hyderabad-based NGRI discovers nickel deposits in Cuddapah basin

In a significant discovery, city-based **National Geophysical Research Institute (NGRI)** researchers have found nickel deposits in the Cuddapah basin. India has no nickel deposits and the metal, which is widely used in electronics, is being imported. Nickel is used in many electronics due to its ability to conduct electricity and heat, as well as resist corrosion. While there is increasing demand across the world for battery metals, India has no primary nickel-copper-platinum elements' group production from magmatic sulfide ore deposits. The magmatic sulfide potential in the Cuddapah Basin in Andhra Pradesh was geologically assessed by researchers. The research paper, 'Primary Olivine in Picritic Sills of Cuddapah Basin. Future India Nickel Prospect', was published in The Canadian Journal of Mineralogy and Petrology.
Source: Times of India

North India lost 450 cubic km of groundwater in 2 decades: Study

About 450 cubic km of groundwater was lost in northern India during 2002-21, and climate change will further accelerate its depletion in the years to come, according to a new study from IIT Gandhinagar. This is about 37 times the quantity of water the Indira Sagar dam — India's largest reservoir — can hold at full capacity, lead author Vimal Mishra, Vikram Sarabhai chair professor of civil engineering and earth sciences at IIT Gandhinagar, said. Using on-site observations, satellite data and models, researchers found that across north India, rainfall in the monsoon season (June-September) has reduced by 8.5 per cent from

1951-2021. Winters in the region have become warmer by 0.3ºC over the same period, they found. The team, also comprising researchers from the **National Geophysical Research Institute (NGRI)** in Hyderabad, said lower rainfall during monsoon and warming of winters will increase irrigation water demand and reduce groundwater recharge, further stressing the already depleting groundwater resource in north India.
Source: **Nationalheraldindia**

Global recognition for CSIR-NGRI scientist

CSIR-NGRI chief scientist Subash Chandra has been elected global vice-chair of the Society for Exploration Geophysics' Near Surface Geophysics Technical Section for a term of two years. Mr. Subash Chandra is an expert in groundwater research specialising in electromagnetics, aquifer mapping and converting geophysical data into hydrogeological models. His research in the Ganga plains led to the discovery of a paleo river near Prayagraj, enhancing understanding of river aquifer interactions, according to a press release.
Source: **The Hindu**

NGRI scientists unravel geological link between India and Antarctica

A team of scientists from city-based **National Geophysical Research Institute (NGRI) has** made a new discovery that sheds light on the ancient connection between the Indian subcontinent and Antarctica. Their research provides compelling evidence of a collision between India and East Antarctica over a billion years ago. The **NGRI** team, including Dr K Chandrakala, OP Pandey, Biswajit Mandal, K Renuka, and N Prem Kumar, has revealed the presence of a hidden ridge beneath Darsi and Addanki regions of AP. This structure is attributed to the historic collision, and the study also suggests that the Cuddapah basin had tilted towards the south. Moreover, the region shows signs of historical seismic activity, indicating the possibility of a marginal ocean basin along the east coast during the Columbia and Rodinia supercontinent assembly periods. By reprocessing seismic data along a 325-km profile from Alampur to Ganapeswaram, the team investigated the subsurface crustal seismic structure of the north Cuddapah basin. Their findings revealed a thin layer of alluvium underlain by Gondwana sediments and Proterozoic sedimentary layers. Gondwana was an ancient supercontinent that included present-day South America, Africa, Arabia, Madagascar, India, Australia, and Antarctica.
Source: **Times of India**

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services, using their combined expertise. They will set guidelines for sharing intellectual property from their collaborations. The agreement also allows for cooperation in other mutually beneficial areas.
Source: Times of India

Dr Prasanta K Patro Awarded National Geoscience Award 2023

Dr B Prasanta K Patro, Chief Scientist at the **CSIR National Geophysical Research Institute (NGRI)** in Hyderabad, has been honored with the prestigious National Geoscience Award 2023 by the Ministry of Mines, Government of India. This recognition celebrates his outstanding contributions to Geophysics and Applied Geophysics, an **NGRI** statement said on Tuesday. Dr Patro's academic journey commenced with a B.Sc. from Berhampur University, Odisha, followed by an M.Sc. from Andhra University, Visakhapatnam. He pursued his PhD from Osmania University, Hyderabad, after joining **NGRI**. His research primarily focuses on the resistivity structure of the Earth's crust and upper mantle using the magnetotelluric (MT) method, which utilizes electromagnetic induction. Resistivity, a crucial parameter in geophysics, is sensitive to fluids and minerals. Dr. Patro's studies have provided profound insights into seismotectonics and resource exploration (hydrocarbon, geothermal). He has applied advanced MT techniques to tackle various geophysical and exploration challenges.
Source: Uni India

Study shows accelerating groundwater depletion in north India

Groundwater in north India remains a vital food and water security resource for more than one billion people. But, the summer monsoon drying, and winter warming pose considerable challenges for rapidly declining groundwater, says a new research study. The study in which scientists of the **CSIR-National Geophysical Research Institute (NGRI)** in Hyderabad**/ Northeast Institute of Science and Technology** (**NEIST**-Jorhat (Assam)) participated along with Indian Institute of Technology (IIT) Gandhinagar, Columbia University, New York (US) and King Abdullah University of Science and Technology, Thuwal, (Saudi Arabia) showed that groundwater depletion has been accelerating in this region for the past 70 years and will continue in the projected future .The study got published in the latest edition of ‘Earth’s Future’, a leading journal of American Geophysical Union.
Source: The Hindu

CSIR-NGRI and NRSC-ISRO sign pact to study Himalayan range for quakes

CSIR-National Institute of Geophysical Research Institute (NGRI) and the National Remote Sensing Centre (NRSC) of the Indian Space Research Organisation (ISRO) have signed a memorandum of understanding to conduct a detailed investigation of the tectonic strain build up for the earthquakes in the Himalayan ranges on Tuesday. **NGRI** director Prakash Kumar and NRSC deputy director K. Sreenivas were the signatories for the partnership. Both the organisations will collaborate for the next three years using the information on the crustal deformation measured at the ground through continuous GPS and satellite-based observations to calculate high resolution images of crustal

deformation in the western Himalayas for the seismic hazard assessment, said a press release.
Source: **The Hindu**

Dr. Bantu Patro Wins National Award for Geoscience Research

Dr. Bantu Prasanta Kumar Patro, chief scientist at the **CSIR-National Geophysical Research Institute (NGRI)** in Hyderabad, has been honoured with the prestigious National Geoscience Award 2023 in the Geophysics/Applied Geophysics category. The award was presented by President Droupadi Murmu in recognition of Dr Patro's contributions to the field of Geoscience. Dr Patro has received praise for his pioneering research in creating a three-dimensional map of the electrical properties beneath important geological areas of the Indian shield. The "Indian shield" refers to a large, stable region of the earth's crust in India that forms the foundation for much of the country's geology. By mapping the 3D electrical subsurface structure, Dr. Patro has helped to reveal detailed information about what lies beneath the surface, such as different rock layers and potential mineral resources, etc. His work has significantly enhanced the understanding of India's geological complexities, offering valuable insights into the country's natural resources and tectonic framework.
Source: **Deccanchronicle**

CSIR-NGRI and GSI Sign MoA for Ground Gravity and Magnetic Work in Southern Region under FSP: 2024-26

The **Council of Scientific and Industrial Research – National Geophysical Research Institute (CSIR-NGRI)** and the Geological Survey of India (GSI) have signed a Memorandum of Agreement (MoA) to carry out Ground Gravity and Magnetic studies in the parts of Kerala and Tamilnadu region for 2024-26. The signing ceremony took place on the 5th of September, 2024, marking a significant step towards advancing geophysical research and exploration in India. This collaboration aims to strengthen the geological understanding of the Southern Region by Generation of new geophysical database of high quality and resolution in order to promote mineral prospecting. Under this MoA, **CSIR-NGRI** will leverage its expertise in geophysical research and will provide comprehensive approach to data acquisition and interpretation. The outcomes of this project are expected to have a wide range of applications, including natural resource exploration, tectonic studies, and improved geological mapping in the region.
Source: **Ngri.res**

ASI and CSIR-NGRI to examine Ratna Bhandar of Shree Jagannath temple on sept 18

The Archaeological Survey of India (ASI) and Hyderabad-based **CSIR-National Geophysical Research Institute (CSIR-NGRI) will** carry out a preliminary examination of the Ratna Bhandar of Shree Jagannath temple at Puri on September 18, said chief administrator of the temple Arabinda Padhee on Thursday. While a technical team of ASI will conduct a non-invasive technical assessment of the Ratna Bhandar to determine damages in the structure, **CSIR-NGRI** experts will examine the chambers to ascertain the

geo-physical equipment, light and other elements required for conducting ground penetrating radar (GPR) survey in the treasury. The state government has approved a standard operating procedure (SOP) for the entire process. The investigation, sources said, will be carried out in the afternoon. The preliminary investigation will be carried out under the supervision of DG ASI by the national conservation body's technical experts including ADG (conservation), director (science), regional director, among others.
Source: Newindianexpress

NGRI scientists find meteorite in Kurnool

Scientists from the city-based **National Geophysical Research Institute (NGRI)** have discovered a meteorite in Jonnagiri, Kurnool, Andhra Pradesh. **NGRI's** chief scientist, Dr Prof PV Sunder Raju, along with his student Dr Linga Raju, identified the meteorite through a series of physical, chemical, and physiological tests. The findings were unveiled during a presentation titled 'A commentary on the discovery of a probable meteorite from Jonnagiri' held at **CSIR-NGRI** on Friday. Meteorites are pieces of rock or metal that have fallen to Earth from outer space. While over 90% of meteorites are composed of rock, the rest consist primarily of iron and nickel. Prof Sunder Raju explained that the meteorite in question belongs to the stony-iron type. "The specimen shows typical Widmanstätten structures, along with iron and nickel sulphides, as well as native copper and iron," he said. Sunder Raju also pointed out that Jonnagiri is well-known for diamonds, which are often associated with meteor impacts. "Studying the geochemistry of kimberlite pipe rocks and conducting mineralogical studies to identify high-pressure minerals can be valuable in determining whether diamonds are formed as a result of impact-generated magmatism," he said.
Source: Times of India

GPR survey of Srimandir over ahead of schedule

The ground penetrating radar survey of Shree Jagannath Temple's Ratna Bhandar, being conducted by **CSIR-National Geophysical Research Institute** (GPRI), Hyderabad concluded on Sunday. GPR specialist Anand Pandey, who led the team of **NGRI** engineers and technocrats in conducting the survey said dimension wise (horizontal and vertical) pictures of the entire Ratna Bhandar including its floors and walls were taken using three GPR cameras of 200,400 and 900 MHz frequencies. The cameras penetrated 10 metre down the floor to take the photos which will be processed in a laboratory and synchronised into full images. The data will be analysed in seven phases and the report presented to the Archaeological Survey of India (ASI) which will then submit it to Shree Jagannath Temple Administration for further action, Pandey said. On September 18, laser scanning of both the Ratna Bhandars (Bhitara and Bahar) was conducted by **CSIR-NGRI** in the presence of the Ratna Bhandar committee.
Source: Newindianexpress

Maa Kamakhya Corridor project: CSIR submits proposal for hydrological study

The State government on Tuesday told the Gauhati High Court that the joint team of Public Works Department (PWD), Indian Institute of Technology (IIT-G) and Hyderabad-based **Council of Scientific & Industrial Research-National Geophysical Research Institute (CSIR-NGRI)** has conducted an inspection on the Nilachal hills in connection with the proposed Maa Kamakhya Access Corridor project. The three-day inspection was conducted last month and on the basis of that various correspondences and negotiations are going on. A feasibility survey report and proposal for a hydrological study have been submitted by **CSIR**, which is being looked into by IIT-G. A clearer picture is likely in a month's time. The geophysical and hydrological study is being necessitated following concerns that the Rs. 400-crore corridor project may disturb the eternal underground springs, which are sacred to the revered hill. Earlier, contractor L&T had called for a proposal from a private firm-Parsan Overseas Pvt Ltd- but it was found that the firm did not have the required expertise.
Source: Assamtribune

Students of government schools in Virudhunagar take part in CSIR Jigyasa programme in Hyderabad

Hundred students of government schools, who showed keen interest in chemistry, and toppers in academics along with 10 teachers from Virudhunagar district participated in a two-day residential training programme conducted under **CSIR** Jigyasa programme in Hyderabad. The training programme was organised by **CSIR-Indian Institute of Chemical Technology, CSIR-National Geophyscial Research Institute and The Centre for Cellular and Molecular Biology** on October 17 and 18. Director of **CSIR-National Geophysical Research Institute** Prakash Kumar spoke about mother earth, studying and preserving natural resources and importance of geophysical and geographical research. He touched upon the role of geophysics in ensuring sustainability and resource management for future generations. On the second day, Director of Indian Institute of Chemical Technology Srinivasa Reddy spoke about the importance of chemistry in daily life.
Source: The Hindu

CSIR-NGRI joins Fit India Movement, promotes health and fitness

The **Council for Scientific and Industrial Research – National Geophysical Research Institute (CSIR-NGRI)** joined the Fit India Movement on Friday, aligning with the national initiative to promote health and fitness among citizens. Dr Prakash Kumar, Director of **CSIR-NGRI,** led the institute's staff in taking the Fit India pledge, setting a positive tone for a health-focused culture. Following the pledge, the institute's Staff Club organized a fitness run, with over 150 senior scientists, officials, and other colleagues enthusiastically participating. "A healthy and fit workforce is essential for achieving our scientific goals," said Dr. Prakash Kumar. "By joining the Fit India Movement, **CSIR-NGRI** reaffirms its commitment to fostering a culture of health and well-being among our employees." **CSIR-NGRI** has consistently prioritized employee health and fitness. The institute offers state-of-the-art sports facilities, including a shuttle court, volleyball ground, table tennis, carrom,

and chess boards, to encourage regular physical activity and a healthy lifestyle among its staff.
Source: Uni India

CSIR, IMD stalls win awards at science and technology expo

The three-day National Science and Technology Expo concluded at the G. Pulla Reddy Memorial School in Dilsukhnagar, Hyderabad, on Sunday (October 20, 2024). The event attracted over 50,000 visitors, including students and members of the public, who had the opportunity to interact with scientists and explore a wide range of exhibits. Among the many highlights of the event, the stalls by **CSIR** and IMD were particularly well-received. Both were awarded 'Best Stall' prizes. The expo featured 100 stalls from prominent scientific organisations such as ISRO, NRSC, **CSIR, NGRI, NAL, SERC, IMMT,** IMD, UIDAI's Aadhaar Card Division, the Visvesvaraya Industrial and Technological Museum, the National Council for Science Museums, NIIST, IITM Pune, NIOT, and MOES, among others. These stalls displayed science models and projects, offering a deep dive into various fields of scientific research and innovation.
Source: The Hindu

Odisha Government Clarifies that No Secret Chambers inside Puri Temple

Law Minister Prithviraj Harichandan has stated that there are no hidden chambers or tunnels within the Ratna Bhandar, the treasury of the Shri Jagannath Temple in Puri. In a press briefing on Friday, Harichandan remarked, "Based on initial discussions with the scientists and experts conducting the Ground Penetrating Radar (GPR) survey, it has been confirmed that there are no concealed chambers or tunnels in either the Bahara (outer) or Bhitara (inner) sections of the temple treasury." The final report from the GPR survey is anticipated to be released shortly. In September, the Archaeological Survey of India (ASI) collaborated with the **CSIR-National Geophysical Research Institute (CSIR-NGRI**) from Hyderabad to perform the GPR survey of the Ratna Bhandar. The Minister also indicated that the inventory of the deities' jewels and ornaments will begin after the New Year. He explained, "Due to the high volume of visitors during the Hindu month of Kartik, repair work can only commence following Kartik Purnima.
Source: Odisha

NGRI discovers geothermal reservoir linked to springs

A potential new geothermal reservoir has been uncovered in eastern Ladakh by scientists from the city-based **National Geophysical Research Institute (NGRI).** Ladakh is known for hot springs in areas such as Nubra Valley, Panamik, Wanla, and Damchok. This discovery opens up the possibility of harnessing geothermal energy in the region, which could have noteworthy implications for sustainable energy development in Ladakh. The research was conducted along the Ukdungle-Hanle-Koyul-Fukche profile in eastern Ladakh, focusing on both the geothermal potential and the tectonic evolution of the area. The **NGRI** team, using magnetotelluric (MT) surveys along a 40 km profile in the region, mapped the upper crustal structure and identified significant electrical resistivity

variations. These findings pointed to a deep hot water aquifer, potentially linked to a widespread zone of partially molten rock beneath. The Ladakh Himalaya, part of the India-Eurasia plate margin, was shaped by the collision of the Indian and Eurasian tectonic plates. The research revealed that a sizeable conductive zone exists approximately 4 km beneath the surface, which is connected to deeper conductive layers extending from southern Tibet to Ladakh. These layers, representing partially molten material, are believed to be the source of geothermal energy observed at the surface.
Source: Times of India

CSIR Gives Cutting Edge Tech with Eye on Future

"Science should focus on carbon capture utilisation and pollution control measures. The **CSIR** is trying to come up with smog towers that can capture and manage carbon dioxide. But for a country this big, technology could take some time to make an impact," asked Dr N. Kalaiselvi, director-general of the **Council of Scientific and Industrial Research (CSIR)** said. **CSIR** was also working on the technologies that can improve green mobility, she said. Talking to Deccan Chronicle, Dr Kalaiselvi said, "For instance, we are working on supercapacitors for sustainable aviation fuel. We have converted used cooked oil into a sustainable aviation fuel. This year's Republic Day parade had two aircraft in the flypast fuelled by converted used cooking oil." "We have industry collaborations in Maharashtra and Tamil Nadu to commercialise this technology. As to road transportation, the **CSIR-National Chemical Laboratory**, Pune, in collaboration with KPIT Technologies recently built a hydrogen fuel cell-powered bus," she explained. Dr Kalaiselvi earlier inaugurated the P.M. Bhargava Auditorium at the **CSIR- Cellular and Molecular Biology (CCMB)** on Monday, named after its founder-director Pushpa Mittra Bhargava. The institute will observe its 37th Foundation Day on November 26. Dr Kalaiselvi was joined by Dr D. Srinivas Reddy and Dr Prakash Kumar, directors of **IICT** and **NGRI** respectively. She congratulated **CCMB** on its work on sickle cell anaemia. In her speech, she spoke extensively on climate change.
Source: Deccanchronicle

CCMB inaugurates PM Bhargava auditorium on occasion of 37th Foundation Day

The **Centre for Cellular and Molecular Biology (CCMB)** inaugurated the PM Bhargava auditorium, a day before its 37th Foundation Day. Named after the institute's Founder Director, Dr Pushpa Mittra Bhargava, renowned for his vision of how science should integrate with society, the auditorium is the first one for **CCMB** to have on its campus. Dr N Kalaiselvi, Director-General, **Council of Scientific and Industrial Research (CSIR),** who was the Guest of Honor, inaugurated the auditorium complex, which is a three-floored complex with a 300-seater auditorium, a 100-seater lecture hall and 2 smaller 25-seater lecture halls. Alluding to the many research institutes and Osmania University in the vicinity of CCMB, Dr Kalaiselvi said, "Hyderabad should consider naming this street as the Science Corridor of Hyderabad. An auditorium complex like this is an asset for the entire community." Dr Kalaiselvi was joined by Dr D Srinivasa Reddy and Dr Prakash Kumar, Directors, **CSIR-Indian Institute of Chemical Technology** and **CSIR-National**

Geophysical Research Institute, Hyderabad. Senior scientists and Heads of **CSIR** laboratories opined that the auditorium adds to the scientific infrastructure of the city, and augments the possibilities of the kinds of programs that the **CSIR** labs and other research institutes in the city can consider hosting.
Source: Telanganatoday

Scary visuals show moment when 5.3-magnitude earthquake hit Telangana's Mulugu

An earthquake measuring 5.3 on the Richter scale struck Mulugu district in Telangana at 7.27am on Wednesday, according to the National Center for Seismology. Tremors were felt across multiple districts, prompting residents to evacuate buildings. Mulugu superintendent of police Shabarish told TOI that no immediate damage was reported. "Our police teams are patrolling and trying to ascertain the impact, but so far, there is no damage," he said. District forest officer Rahul Jadhav noted the brief duration of the tremor, adding that the epicentre was approximately 7 kilometres from an area recently affected by massive tree falls during heavy rains. Historically, Telangana has experienced seismic activity, although earthquakes of this magnitude are uncommon. In April 2020, a 4.8-magnitude earthquake occurred north of Ramagundam. According to **CSIR-NGRI** director and chief seismologist Prakash Kumar, data from various seismic stations confirm the earthquake's epicentre was in the Medaram region of Mulugu district. He told TOI, "The magnitude is around 5, as per local observations. The area falls within the Godavari rift zone, where seismic activity has been observed previously. The magnitude is not significant enough to pose a serious threat to installations, though vibrations were felt across the region."
Source: Times of India

Telangana’s Mulugu ‘moderate’ earthquake second biggest recorded in the region in last 55 years

CSIR-National Geophysical Research Institute (NGRI) scientists said that the ‘moderate’ earthquake of 5.0 magnitude on the Richter Scale occurred at Medaram in Mulugu district of Telangana - about 250 km from Hyderabad - on Wednesday (December 4, 2024) is the second biggest one recorded in the last 55 years in the region, but there is “nothing for the general public to be alarmed about”. The biggest earthquake in the region “An earthquake of 5.7 on Richter Scale was recorded in Bhadrachalam on July 5, 1969 which is the biggest so far in this region, and we have had two more earthquakes of magnitude 4.8 in Medchal in 1983 and 4.6 in Pulichintala in 2021,” explained **NGRI** Director Prakash Kumar on Wednesday. Tremors of today’s earthquake which occurred at about 7.27 a.m. (Indian Standard Time) were felt in some parts of the twin cities and nearby districts too more than 200 km away and the Director attributed it to the density and the composition of the rock formations. These are not “big earthquakes” Mr. Kumar advised the general public not to be worried as these are not “big earthquakes” and such seismological events keep happening in the Godavari Rift Basin which is a fault zone.

There are several fractures and faults along the Godavari and Krishna rivers and surroundings.
Source: The Hindu

ASI begins restoration work on Jagannath Temple's Ratna Bhandar

Archaeological Survey of India (ASI) began repair work on the Ratna Bhandar of Puri Jagannath Temple on Tuesday, five months after the treasury was opened for structural inspection and to carry out an inventory of the valuables. The Ratna Bhandar was opened on July 14 after a gap of 46 years. This marks the ASI's first such repair work of the Ratna Bhandar since taking over conservation responsibilities of the 12th century shrine in 1975. The state govt has instructed ASI to ensure superior quality workmanship that would last for at least five decades. "Keeping the next 50 years in mind, the ASI will be completing all the necessary repairs in Ratna Bhandar. Although they have given a time estimation of three months for completion of the work, we expect them to finish before that," state law minister Prithiviraj Harichandan said. ASI superintending archaeologist (Puri circle), Dibishada Garnayak, said their initial task involves removing wall plasters from both the outer and inner chambers of Ratna Bhandar after the installation of scaffoldings. Last month, **CSIR-National Geophysical Research Institute (CSIR-NGRI)** from Hyderabad shared their ground-penetrating radar survey results involving the Ratna Bhandar with the ASI. The results reveal that no hidden tunnels or underground treasury exist within the temple grounds. ASI officials said the **NGRI** report identified two significant vertical cracks, measuring 30-35 cm deep, at the junction of the outer and inner chambers of Ratna Bhandar, alongside some damaged stone beams.
Source: Times of India

Tremors felt in Bapatla and Prakasam districts of Andhra Pradesh

Tremors were felt in some villages of Bapatla and Prakasam districts in Andhra Pradesh on Saturday (December 21). Though the residents panicked for some time, the district authorities informed no loss of life or property. As per **CSIR-NGRI** Hyderabad records, an earthquake of 3.1 magnitude on the Richter scale struck Addanki in Bapatla district. Tremors were felt in other parts of the district and parts of Prakasam district. The tremors were felt in Polavaram, Sankarapuramu, Pasupughallu, Ulaghallu, Maarella and Kamampadu villages in Mundlamooru mandal, as well as Lakkavaram, Sivaramapuramu, Rambhadrapuram, Gangavaram, Ramanalavaripalem, Korrapadu, Thurakapalem and Dhosakayalapadu villages in Thalluru mandal for a few seconds at 10.22 a.m. on Saturday. Sensing the tremors, school students and residents came out of their houses. National Disaster Response Force (NDRF) 10th Battalion Commandant, V.V.N. Prasanna Kumar told The Hindu that the control room staff received an alert about the tremors in Prakasam district. "We are closely monitoring the situation and will take appropriate measures," he added.
Source: The Hindu

NIO hosts conclave on ecology, environment, earth, ocean sciences and water

The **CSIR-National Institute of Oceanography (CSIR-NIO)**, in collaboration with **CSIR-NEERI,** Nagpur; **CSIR-NGRI**, Hyderabad; and **CSIR-CSMCRI,** Bhavnagar, hosted a stakeholder conclave on Ecology, Environment, Earth, Ocean Sciences and Water (E3OW). The event, organised in a hybrid mode, was held at the **CSIR-NIO,** Dona Paula, as a part of the 'One Week One Theme' campaign of the **CSIR**, which aims to showcase and strengthen research and technological advancements aligned with national priorities. The event brought together industry representatives, academic partners, and research scientists to foster collaborations and advance research and development (R&D) initiatives. The inaugural session was chaired by Dr. Atul Vaidya, Director, **CSIR-NEERI** and Prof Sunil Kumar Singh, Director of **CSIR-NIO**, alongside Dr Prakash Kumar, Director, **CSIR-NGRI,** and Dr Kannan Srinivasan, Director, **CSIR-CSMCRI.** The leaders emphasised the critical role of stakeholder engagement in developing impactful technologies and achieving the Government of India's Vikasit Bharat 2047 vision. A significant highlight of the conclave was the signing of a Non-Disclosure Agreement between **CSIR-NIO** and The Kelp Agro and Minerals, Raigad, to develop Type II collagen from jellyfish. This pioneering technology, developed by Dr Supriya Tilvi and her team at **CSIR-NIO**, offers promising applications in biomedicine and nutraceuticals.
Source: **Heraldgoa**

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सीएसआईआर का अंतर्विषयी आयाम
Interdisciplinary face of CSIR

CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)

Month-long global science fest to be held in Kerala

Thiruvananthapuram: Global Science Festival of Kerala will be held in Thiruvananthapuram from January 15 to February 15. The month-long event to be held at the Bio 360 Life Sciences Park will feature scientific discoveries, creative innovations and artistic brilliance. The theme of the event is 'Life Science.' Department of Science and Technology, Kerala State Council for Science, Technology and Environment (KSCSTE) and Amuseum ArtScience, a non-profit public trust, are jointly organising the event. International and national entities like the US Consulate General, the British Council, the German Consulate, Alliance Française, IISER Thiruvananthapuram and **CSIR-NIIST** are also participating.

Source: Deccan Herald

Kerala youth's novel device to ensure clean water in hinterland

Bacteria-free drinking water remains a distant dream for many people, especially those living in rural and remote parts of the country. But this could soon be a thing of the past, thanks to 26-year-old Adarsh P Kumar, who has developed a cost-effective, solar-powered device that can be affixed to water pipelines and taps to distribute purified drinking water. He launched his startup, Hydronest, in August 2023 to supply drinking water to the hinterlands. The startup has signed a memorandum of understanding (MoU) with Thiruvananthapuram-based Central government institution **CSIR-NIIST** (**Council of Scientific and Industrial Research-National Institute** for Interdisciplinary Science and Technology) to co-develop the device. In Kerala, drinking water is to be distributed with the support of the Kerala Water Authority (KWA) and respective local self-governments.

Source: New Indian Express

New efficiency record set in indoor light harvesting

In a technological milestone, scientists at **CSIR-National Institute for Interdisciplinary Science & Technology (CSIR-NIIST)** have set a new efficiency record of 35.6% in indoor light harvesting using dye-sensitized solar cells (DSCs), which can provide a sustainable alternative to one-time use primary batteries and reduce environmental pollution. C Anandharamakrishnan, director, **CSIR-NIIST**, said the integration of DSCs into IoT

(Internet of Things) systems offers a sustainable solution by creating self-powered devices that operate for extended periods without the need for battery replacements.
Source: Times of India

Gaps in pollution control systems: PCB sends notices to erring units in Eloor-Edayar industrial area

The Kerala State Pollution Control Board (PCB) has issued notices to nearly 20 rubber and meat processing units in the Eloor-Edayar industrial area asking why action should not be taken for their failure to set up systems to control emissions. The board has set March 31 as the deadline for the units to comply with the directions. Action was initiated on the basis of a report of the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),** Thiruvananthapuram, that found violations of norms by rubber and meat processing units. Failure to comply with the directions will result in legal action including closure of units, disconnection of electricity/water supply, and imposition of environmental compensation, according to the board. Incidentally, local residents had been complaining of foul smell emanating from the units owing to lack of proper biofilters.
Source: The Hindu

Know-How Technology on "Bamboo Composites" transfers on the Day-2 of IISF 2023

One of the unique and extraordinary mega science festival — India International Science Festival (IISF 2023) is being organized during 17-20 January 2024 in Faridabad, Haryana. During the second day of this science festival on 18 Jan 2024, the Know-How Technology on "Bamboo Composites" was transferred to a well-known materials manufacturing company, M/s Asili Bamboo Products, Meerut, in the presence of Dr. Avanish Kumar Srivastava, Director, **CSIR-AMPRI,** Bhopal, and Mr Akshay Joshi, Director, M/s Asili Bamboo Products, Meerut. On this occasion various other dignatries were also present, namely Mr Md. Ali Shah, Sadhana; Dr. C. Anandharamakrishnan, Director, **CSIR-NIIST** Trivandrum; Prof. Manoranjan Parida, Director, **CSIR-CRRI**, New Delhi; Dr. B. Chandrasekaran, Former Director, **CSIR-CLRI;** Prof. Sudhir Singh Bhadauria, Director, UIT RGPV Bhopal; Shri Mayank Mathur, RC Member from **CSIR**-Headquarter; Dr. J.P. Shukla, Chief Scientist; Mr. Somnath Mazumder, CoA; Dr. J.P. Chourasia, Head PPD, **CSIR-AMPRI;** Dr. Sandeep Singhai, Head Business Development; Dr. Sarika Verma, PI and Principal Scientist; Dr. Neeta V.M. Khalkho, Sr. Principal Scientist, **CSIR-AMPRI;** and Dr. Satanand Mishra, Principal Scientist, **CSIR-AMPRI**, Bhopal.
Source: Pib

Study reveals serious lapses in odour control systems in industrial units at Edayar

A detailed study by **the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),** Thiruvananthapuram, has found several deficiencies in the operation of biofilter units installed in nearly 20 bonemeal units, chicken waste rendering plants, and rubber processing units in the Edayar industrial area. The study, which was commissioned by the Kerala State Pollution Control Board (PCB) in September 2022,

revealed that odour and volatile organic compounds (VOCs) were getting released from the erring units during raw material processing and plant operation owing to the poor operational efficiency of the units. The team of scientists shortlisted 10 possible reasons for uncontrolled emission into the atmosphere.
Source: The Hindu

CSIR- NIScPR, UBA, VIBHA, DSIR and Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blairjointly organized Two day Workshop cum Training on "Making Value Added Products Using CSIR Technologies in Andaman Region"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with Unnat Bharat Abhiyan (UBA), Vijnana Bharati (VIBHA), Department of Scientific and Industrial Research (DSIR), and Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM) jointly organized a two-day Workshop cum Training on "Making Value Added Products Using **CSIR** Technologies in Andaman Region" at Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM), Port Blair, Andaman & Nicobar Islands from 11-12 January 2024. The workshop aimed towards providing training and exposure to farmers and women self-help groups (SHGs) and aspiring entrepreneurs on **CSIR** Technologies like making value added products from Pandanusfruitusing technology developed by **CSIR-Institute of Himalayan Bioresource Technology (IHBT);** Decentralized Solar Thermal Dryer for Hygienic Drying of Food Products developed by **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Dehumidified Dryer Technology by **CSIR-NIIST** Trivandrum and Managing Fungus Problems in Betel Nuts technology developed by **CSIR-Institute of Himalayan Bioresource Technology (IHBT).**
Source: Pib

Self-reliance in strategic materials vital to secure Atmanirbharta, says former Scientific Advisor to Defence Minister

Achieving self-reliance in strategic materials along with their manufacturing capabilities is vital to secure the goal of Atmanirbharta in defence production, G. Satheesh Reddy, former Scientific Adviser to the Defence Minister, said here on Friday. Dr. Reddy, also the president of Aeronautical Society of India, was speaking at the inauguration of the industry connect meet on Strategic Materials and Manufacturing Technologies organised by **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** on its campus at Pappanamcode here.
Source: The Hindu

CSIR-NIIST in Kerala transfers enzyme technology to industry for production of biofuels

The **National Institute of Interdisciplinary Science & Technology (CSIR-NIIST),** a constituent laboratory of the **Council of Scientific and Industrial Research(CSIR**) based here, has entered into a technology transfer agreement with a Maharashtra-based company for commercial production of beta glucosidase enzyme used by the biofuel industry. The institute has signed an agreement with Sarthak Metals Ltd, Nagpur, Maharashtra, for transfer of the technology. As per the agreement, the **CSIR-NIIST** will grant licence to Sarthak Metals Ltd for utilising the know-how for production of beta

glucosidase using filamentous fungus through solid state fermentation (SSF) process. The enzyme can be used in biofuel production, particularly for the hydrolysis of biomass in combination with cellulases as an enzyme cocktail.
Source: The Hindu

Meet to bolster homoeopathy's global presence

Global Homoeopathy Foundation (GHF), Vijnana Bharati (ViBha) and **CSIR- NIIST** are jointly organising a national homoeopathy conference in Thiruvananthapuram on February 28. The fifth edition of the Homoeopathy Vijnana Sammelan 2023-24 is set to host a thousand delegates, including distinguished doctors, scientists, and policy makers at the **CSIR-NIIST** campus. Backed by recent research showcasing the efficacy of homoeopathy as a medical discipline, the conference endeavours to establish Indian homoeopathy on the global stage. Organisers view the event as a precursor to the World Homoeopathy Summit (WHS) scheduled to take place in Kolkata later this year.
Source: New Indian Express

CSIR-NIIST transfers technology for single-use biodegradable tableware

The **National Institute for Interdisciplinary Science and Technology (NIIST**), Thiruvananthapuram, a constituent laboratory of **CSIR,** has signed an agreement with East Corridor Consultant India Pvt. Ltd., a Lucknow-based clean-tech start-up, for transferring its technology for manufacturing single-use biodegradable tableware from rice and wheat waste. The developed cutlery is shelf-stable for up to 10 to 12 months and can serve hot/boiled solid and liquid food. It has enough tensile strength to hold food item according to its shape and can resist microbial growth for up to 12 months in India's humid atmospheric conditions.
Source: The Hindi

CSIR-NIIST transfers technology for single-use biodegradable tableware

The **National Institute for Interdisciplinary Science and Technology (NIIST),** a constituent laboratory of the Council of Scientific and Industrial Research (CSIR), has signed an agreement with East Corridor Consultant India Pvt Ltd, a Lucknow-based clean-tech startup, for transferring its technology for manufacturing single-use biodegradable tableware from rice and wheat waste. This is the 16th company acquiring the technology from **CSIR-NIIST**. The developed cutlery is shelf-stable for up to 10 to 12 months and can serve hot/boiled solid and liquid food. It has enough tensile strength to hold the food item according to its shape and can resist microbial growth for up to 12 months in India's humid atmospheric conditions.
Source: New Indian express

Homoeopathy conference calls for integrated health solutions

The fifth edition of the Homeopathy Vijnana Sammelan, spearheaded by the Global Homeopathy Foundation (GHF), has called for an integrated approach to solving health problems by utilising the capacities of homoeopathy. The 2023-24 event, held at the **CSIR - National Institute for Interdisciplinary Science and Technology (NIIST)** campus in Thiruvananthapuram on Sunday, showcased cutting-edge research in homoeopathic treatments for ailments affecting humans, animals and plants. Researchers who spoke at

the one-day event also highlighted homoeopathy's shortcomings, which they stressed could be addressed by improving basic and inter-disciplinary studies.
Source: New Indian Express

CSIR-NIIST Offers to Support for Greywater Treatment and Reuse

CSIR- National Institute for Interdisciplinary Science and Technology (CSIR-NIIST) has offered to extend technical expertise to meet the goals set out as part of the national mission programs in waste management such as greywater treatment and reuse. Presiding over a two-day capacity building programme for officers of the Kerala Rural Water Supply & Sanitation Agency (KRWSA) on Grey Water Treatment and Management, **CSIR-NIIST** Director Dr C Anandharamakrishnan said the institute's expertise in this area could be leveraged in collaborative efforts for the benefit of the community. Dr. Dinesan C, IAS, Executive Director KRWSA, inaugurated the programme held last week, which was attended by around 70 officers of KRWSA from different districts.
Source: Newsexperts

NIIST transfers know-how for treatment of organic waste water rangement

The **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** here has made a breakthrough by developing and patenting a sustainable technology for treatment and disposal of organic waste water discharged by hotels, restaurants, catering units and similar businesses – which is a big problem in cities, especially in locations without proper sewerage network.As a sustainable solution, the on-site waste water technology, named NOWA, developed by **CSIR-NIIST,** has the advantage of recovering valuable resources like reuse quality water, bio-energy and organic manure and soil conditioner from waste-water.
Source: The Hindu

Workshop on IPR, patent filing and drafting on Thursday

The **National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram, will host a workshop on 'IPR, Patent filing and drafting on Thursday in connection with World IPR Day celebrations.GM Nair, President, Kerala Academy of Sciences, will inaugurate the one-day event at 9.30 am to be presided over C Anandharamakrishnan, Director, **NIIST**. An official spokesperson said here technical sessions will cover topics ranging from a general introduction to IPR and patent, patent filing procedures and patentability, patent search, drafting and case studies to strategies on intellectual property management. Registrations may be made with RS Praveen Raj, Senior Principal Scientist, **NIIST**, on 9995632522 or by email praveenraj@niist.res.in.
Source: The Hindu Business Line

CSIR-NIIST transfers technology for bio tableware, plant leather

The **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** on Thursday inked a pact with Tamil Nadu-based Aquagri Processing Pvt. Ltd. for transferring the technology it developed for manufacturing multi-use biodegradable tableware and plant leather from seaweed and chitosan. C. Anandharamakrishnan, Director, **CSIR-NIIST**, Thiruvananthapuram, and Tanmaye Seth, Director, Aquagri

Processing, exchanged the documents of the memorandum of understanding (MoU) at a function held on the institute campus at Pappanamcode, here. Aquagri Processing, a venture in which the Indian Farmers Fertiliser Cooperative (IFFCO) has a 50% stake, produces seaweed-based organic products for use in agriculture, animal husbandry, and food processing.
Source: **The Hindu**

CSIR-NIIST, VSSC Tie-up to Scale up Research on Materials for Space Programme

CSIR – National Institute for Interdisciplinary Science and Technology (CSIR-NIIST) has entered into a collaborative Memorandum of Understanding (MoU) with Vikram Sarabhai Space Centre (VSSC) to scale up research and delivery of strategically advanced materials for India's space programme. NIIST Director Dr C Anandharamakrishnan and VSSC Director Dr S Unnikrishnan Nair exchanged the umbrella MoU in this regard recently. The agreement facilitates VSSC and **CSIR-NIIST** identify the broad areas of collaboration, leading to delivery of advanced materials like engineered alloys, coatings and functional materials, which have critical applications in space programme.
Source: **Newsexperts**

CSIR- NIIST Conducts Biomedical Waste Management Conclave on March 26

CSIR-National Institute of Interdisciplinary Science and Technology (NIIST), a constituent laboratory under the Council of Scientific and Industrial Research, Ministry of Science and Technology, Government of India, will conduct a one-day Biomedical Waste Management Conclave and Stakeholders Meet on 26 March, 2024. The conclave will start at 10.00 am in Bhattnagar Auditorium at **CSIR-NIIST** campus located at Pappanamcode, Thiruvananthapuram. The conclave has been envisioned to address the challenges associated with scientific management of biomedical waste and discuss new avenues in proper and safe disposal of pathogenic waste. The inaugural session of the conclave will be presided over by Dr. N. Kalaiselvi, Hon'ble Secretary, DSIR and Director General, **CSIR.**
Source: **Newsexperts**

CSIR-NIIST unveils innovative solution for biomedical waste management

An innovative technology for the safe, sustainable and cost-effective management of biomedical waste, developed by a team of scientists at the the **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** was unveiled at a one-day Biomedical Waste Management Conclave held at **CSIR-NIIST** campus here on Tuesday. Management of biomedical waste, which contains potentially infectious pathogenic substances is a perpetual challenge as improper segregation or inadequate incineration of these wastes can release many harmful toxins, ash and particulate matter into the environment. The search for alternatives, which are innovative and environment-friendly, has led **CSIR-NIIST** to develop a dual disinfection-solidification system that can spontaneously disinfect and immobilise pathogenic biomedical waste from operation theatres and laboratories and convert it into value-added soil additives.
Source: **The Hindu**

A UP man's tryst with Kerala startup ecosystem and a growing 'green' business

Amid the exodus of Malayali youth in pursuit of employment and business opportunities to other parts of the world, two young brothers from Uttar Pradesh have set up a promising 'green' business in the southern state. Rishabh Suri and his brother Rohan Suri founded Qudrat, a startup manufacturing disposable tableware, in Thiruvananthapuram in 2020 as they explored the business opportunities emerging out of waste management. He was into motorcycle dealership before that. Rishabh set up his startup in Thiruvananthapuram as he wanted the technical support of the **National Institute for Interdisciplinary Science and Technology** under **CSIR** for the research and development of his products.
Source: Onmanorama

New technology unveiled at CSIR-NIIST conclave

A new technology for biomedical waste management was presented at the Biomedical Waste Management conclave conducted by the **CSIR-NIIST,** Pappanamcode, under the Union Ministry of Science and Technology. "The advanced technology converts 1kg of biomedical waste into a harmless soil additive, which can be useful for agricultural purposes, within just three minutes," explained C Anantharamakrishnan, director of **CSIR-NIIST**. M Srinivasan, director of AIMS New Delhi, inaugurated the conclave. The function was presided over by Kalaiselvi, secretary and director general of **CSIR-NIIST.** The conclave also witnessed the participation of more than 250 delegates from the healthcare fraternity, including experts, policymakers, and technical experts from renowned medical colleges, hospitals, and NGOs. "Hazardous BMW (biomedical waste) can be disinfected and disposed off at its source at a very low cost.
Source: Newindianexpress

Workshop on IPR, patent filing and drafting on Thursday

The **National Institute for Interdisciplinary Science and Technology (CSIR-NIIST**), Thiruvananthapuram, will host a workshop on 'IPR, Patent filing and drafting on Thursday in connection with World IPR Day celebrations.GM Nair, President, Kerala Academy of Sciences, will inaugurate the one-day event at 9.30 am to be presided over C Anandharamakrishnan, Director, NIIST. An official spokesperson said here technical sessions will cover topics ranging from a general introduction to IPR and patent, patent filing procedures and patentability, patent search, drafting and case studies to strategies on intellectual property management. Registrations may be made with RS Praveen Raj, Senior Principal Scientist, NIIST, on 9995632522 or by email praveenraj@niist.res.in.
Source: The Hindu Business Line

CSIR-NIIST opens innovation centre for start-ups

The **CSIR-National Institute for Interdisciplinary Science Technology (CSIR-NIIST)** has set up a dedicated innovation centre on its campus here to incubate technology-driven start-ups and help them develop innovative and marketable products. Krishna Ella, chairman and managing director, Bharat Biotech International Ltd. and chairman of **Research Council of CSIR-NIIST, inaugurated the facility recently, in the presence**

of CSIR-NIIST director C. Anandharamakrishnan. After executing the agreements with the selected incubatees, the keys for the co-working spaces for them were handed over by Dr. Anandharamakrishnan on May 1, marking the commencement of their collaboration with the institute.
Source: The Hindu

Meet on IPR exhorts scientists to document traditional knowledge

A workshop on Intellectual Property Rights (IPR) held at **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** here has called upon the scientific community to document traditional knowledge in a judicious manner to guard against their misuse by vested interests by various means including bio piracy. The workshop was held at **CSIR-NIIST** campus here earlier this week in connection with World IPR Day, for which this year's theme was "IPR and Sustainable Development Goals - Building our common future with innovation and creativity."
Source: The Hindu

CSIR-NIIST, NIT Calicut ink tie-up to promote research in cutting-edge domains

CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) has inked an MoU with National Institute of Technology, Calicut (NIT-C) to collaborate in research and education through exchange of students and faculty members in interdisciplinary areas of science and technology. The MoU was signed on the sidelines of the National Technology Day celebrations held at **CSIR-NIIST**, Pappanamcode, here, by Dr. C Anandharamakrishnan, Director, **CSIR-NIIST** and Prof. Prasad Krishna, Director, NIT-C. Setting out the context of the collaboration, Dr Anandharamakrishnan noted the tie-up opened big opportunities for NIT students to explore research stints in frontier areas of materials science and engineering, food technology, biotechnology, chemical sciences and environmental technology in addition to the fast emerging fields of artificial intelligence and machine learning.
Source: Newindian

National Conference on Efficient Food Processing for Climate Change Trends (EFFECT) Highlights Importance of Sustainability for the Future

The Ministry of Food Processing Industries (MoFPI), Govt. of India, and National Institute of Food Technology Entrepreneurship and Management, Kundli (NIFTEM-K), An Institute of National Importance, organized a two-day national conference on Efficient Food Processing for Environmental and Climate-Change Trends (EFFECT), which concluded on May 16 at NASC Complex, Pusa, New Delhi. The event brought together esteemed dignitaries and experts to address the pressing challenges facing the food processing industry in the wake of climate change. To maintain food processing sustainability in the future, C. Anandharamakrishnan, Director, **CSIR-NIIST** (Trivandrum), highlighted the importance of the 3Ps, i.e., production, processing, and packaging of the food. He concluded his session with the words of Mahatma Gandhi, saying, "The future depends on what we do in the present."

Source: Krishijagran

CSIR-NIIST collaborates with Kerala firm to make vegan leather

The **Council of Scientific and Industrial Research (CSIR) - National Institute for Interdisciplinary Science and Technology (NIIST)** has inked a pact with Kerala-based Alter Wave Eco Innovations (AWEI) to transfer the technology it developed for manufacturing vegan leather. This was stated in a report by IANS. The new technology allows the company to manufacture environment-friendly replacements for animal leather from plant sources like pineapple leaves, banana stems, rice straws, and so on, without using plastic as a core ingredient. C Anandharamakrishnan, Director of **CSIR-NIIST,** Thiruvananthapuram, and Jeswin George, besides other officials, were present at the signing ceremony held at the **NIIST** campus.
Source: Edexlive

CSIR-NIIST in Pact with Kerala-based Firm to Make Vegan Leather

The **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** has inked a pact with Kerala-based Alter Wave Eco Innovations (AWEI) Pvt. Ltd. to transfer the technology it developed for manufacturing vegan leather. The new technology allows the company to manufacture environment friendly replacements for animal leather from plant sources like pineapple leaves, banana stems, rice straws, etc., without using plastic as a core ingredient. Dr C Anandharamakrishnan, Director of CSIR-NIIST, Thiruvananthapuram, and Jeswin George, Nidhin Sotter, Nigil Sotter, and Tigil Thomas, all directors of AWEI, exchanged the MoU at a function held on its campus at Pappanamcode, here. “This is CSIR-NIIST’s fifth technology transfer for manufacturing plant leather alternatives, and the first of its kind from Kerala,” CSIR-NIIST Director Dr Anandharamakrishnan said.
Source: Newsexperts

Tech transfer deal promotes biobased leathers in India

In a significant development, the **Council of Scientific and Industrial Research’s National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** has entered into a Memorandum of Understanding (MoU) with Alter Wave Eco Innovations (AWEI) to transfer the technology for manufacturing vegan leather in India. The partnership aims to develop sustainable biomaterial alternatives to animal leather, leveraging the abundant agricultural biomass available in Kerala, India. The technology, developed by a **CSIR-NIIST** team led by Dr. Anjineyulu Kothakota, uses plant-based materials such as pineapple leaves, banana stems, and rice straws to produce high-performing, biodegradable leather-like materials. The collaboration will enable AWEI to tap into the vast agricultural biomass available in Kerala, generating an additional income stream for farmers. Kerala has approximately 20,000 hectares of pineapple farms, producing around 720,000 metric tons of farm waste each year. This biomass can be upcycled into sustainable leather materials, providing a lucrative alternative to traditional leather production.

Source: Worldbiomarketinsights

CSIR-NIIST inks MoU with AIIMS Delhi

The **Council of Scientific and Industrial Research-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram, inked a memorandum of understanding (MoU) with All India Institute of Medical Sciences (AIIMS), New Delhi for validating the technology that offers a sustainable and energy-efficient alternative to current practices in disposing of pathogenic biomedical waste. The MoU was signed on the sidelines of the curtain raiser of **CSIR's** 'One Week One Theme' (OWOT) programme held at India Habitat Centre, here on Monday Director of **CSIR-NIIST** Dr C Anandharamakrishnan and AIIMS Delhi Director Dr M Srinivas exchanged the MoU in the presence of Union Minister of State for Science and Technology Jitendra Singh, a statement said. **The CSIR-NIIST** has developed a dual disinfection-solidification system that can spontaneously disinfect and immobilise degradable pathogenic biomedical waste such as blood, urine, saliva, sputum, and laboratory disposables, besides imparting a pleasant natural fragrance to otherwise foul-smelling biomedical waste, it said.

Source: Thestatesman

Kerala: MoU inked for validating alternative tech for biomedical waste disposal

CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), based in the capital, has inked a Memorandum of Understanding (MoU) with All India Institute of Medical Sciences (AIIMS), New Delhi, for validating the technology that offers a sustainable and energy-efficient alternative to current practices in disposing pathogenic biomedical waste. The MoU was signed recently on the sidelines of the curtain raiser of **CSIR's** 'One Week One Theme' (OWOT) programme held in New Delhi. **CSIR-NIIST** has developed a dual disinfection-solidification system that can spontaneously disinfect and immobilise degradable pathogenic biomedical waste such as blood, urine, saliva, sputum, and laboratory disposables, besides imparting a pleasant natural fragrance to otherwise foul-smelling biomedical waste.

Source: Newindianexpress

Sugarcane bagasse to vegan leather: Innovation to help increase income for sugarcane farmers

In a significant development for the sugar industry and sugarcane farmers, bagasse, a byproduct of sugar production, is now being utilized to produce vegan leather. This innovative approach not only addresses environmental concerns but also opens up new avenues for revenue generation. India's vast sugarcane production could effectively utilize sugarcane waste through technology developed by PA Footwear P Ltd, a company specializing in vegan leather alternatives. Emphasizing how sugarcane bagasse can be useful for the industry and farmers, Chinnasami Anbumalar, Vice Chairman of PA Footwear Ltd, said, "In sugar mills, it is occasionally used to generate electricity. Speaking about other products in the pipeline from sugarcane, he added, "The **National Institute**

for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, a constituent laboratory of **CSIR (CSIR-NIIST),** has already transferred technology for making disposable cutlery from sugarcane bagasse."
Source: Chinimandi

Free cereals can come

project led by the University of Debrecen, a collection of yeast strains was created and the anti-Fusarium and mycotoxin properties of these microbes were examined. The lactic acid bacteria strains of the Indian **CSIR-NIIST** research institute were also included in the research, the identification of which was partially carried out by the university. Among the lactic acid bacteria, many strains have been found that have good Fusarium antagonist properties and mycotoxin elimination ability. These strains were studied together with Indian colleagues and their technological applicability was proven at the TLR3 and TLR4 technological levels for corn silage and for different seeds – write the Agricultural sector. During the tests, different yeasts with good mycotoxin tolerance and neutralizing ability were also included, of which the genomes of two promising strains were sequenced and their gene sets were analyzed, focusing especially on potential mycotoxin neutralizing genes. The molecular background of mycotoxin tolerance and elimination in yeasts was revealed by transcriptomic studies.
Source: Trademagazin

CSIR launches national mission on sustainable packaging solutions

The **Council of Scientific and Industrial Research (CSIR)** on Saturday launched a National Mission on Sustainable Packaging Solutions. **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),** Thiruvananthapuram, is tasked with coordinating the project that involves a consortium of eight partnering **CSIR** labs and industry partners. N. Kalaiselvi, Secretary, Department of Scientific and Industrial Research and **CSIR** Director General, unveiled the programme at **NIIST** here on Saturday. Packaging plays a vital role in ensuring integrity and safety during the handling, transportation or storage of products. The mission, funded by **CSIR**, aims to develop solutions for sustainable packaging demands, including development of packaging materials, smart recycling and reuse methods to turn the packaging industry, smart, affordable and reliable with advanced testing and monitoring facilities, a statement said.
Source: The Hindu

Self-powered indoor air quality monitors from CSIR-NIIST installed at Thiruvananthapuram airport

Self-powered indoor air quality monitors developed by the **CSIR-National Institute for Interdisciplinary Sciences (NIIST)** have been installed at the Thiruvananthapuram international airport in Kerala to keep a close tab on air quality parameters at the airport. N. Kalaiselvi, Director General, **Council of Scientific and Industrial Research (CSIR**) and Secretary, Department of Scientific and Industrial Research, presented the monitors to Rahul Bhatkoti, chief airport officer of the Thiruvananthapuram international airport at

a function held at the airport on Saturday. The indigenous indoor solar cells were developed by scientists at **NIIST**. MoU signed The event also marked the exchange of a Memorandum of Understanding (MoU) between **CSIR-NIIST** and the airport, paving the way for further collaboration in the domain. Dr. Kalaiselvi emphasised that sustainable solutions, such as those powered by **NIIST's** indoor solar cells, not only reduce carbon footprints and operational costs, but also provide continuous, reliable data for timely interventions, thus promoting environmental stewardship and aligning with global sustainability goals.
Source: The Hindu

Kerala: MoU inked for validating alternative tech for biomedical waste disposal

CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), based in the capital, has inked a Memorandum of Understanding (MoU) with All India Institute of Medical Sciences (AIIMS), New Delhi, for validating the technology that offers a sustainable and energy-efficient alternative to current practices in disposing pathogenic biomedical waste. The MoU was signed recently on the sidelines of the curtain raiser of **CSIR's** 'One Week One Theme' (OWOT) programme held in New Delhi. **CSIR-NIIST** has developed a dual disinfection-solidification system that can spontaneously disinfect and immobilise degradable pathogenic biomedical waste such as blood, urine, saliva, sputum, and laboratory disposables, besides imparting a pleasant natural fragrance to otherwise foul-smelling biomedical waste.
Source: Newindianexpress

NIIST joins relief effort in Wayanad, prepares food for landslide victims

Joining the relief effort in landslide-hit Wayanad, the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** here has prepared a consignment containing 3,000 servings of food items. The staff and students of the **NIIST** contributed to disaster relief by preparing food products in the in-house food plant facility. "The consignment consists of nutritious food products and healthy snacks such as upma, poha, millet-based extruded snacks and rusks in ready-to-eat food pouches, specially formulated using high-quality ingredients without additives except for the rusk," the **NIIST** said on Thursday. Products' shelf life Prepared using state-of-the-art food processing equipment, the products are shelf-stable with a shelf life of two to four weeks and can be stored at room temperature without sophisticated storage equipment. The **NIIST** is coordinating with State government agencies, disaster management and search and rescue teams to supply the food products to the affected people. The institute said it plans to ramp up the food production based on requirements on the ground.
Source: The Hindu

CSIR-NIIST Develops Long Shelf-life Foods for Wayanad Landslide Survivors

In response to the Wayanad landslides, a scientific research institute has been tirelessly working to prepare long-lasting food items for survivors. The **Council of Scientific and Industrial Research (CSIR) - National Institute for Interdisciplinary Science and**

Technology (NIIST) has transformed its incubation cell for technology transfer into a food processing unit. Over 70 individuals, including research scholars, are participating in this endeavor to produce 1,000 packets of various food items. **CSIR-NIIST** is employing exclusive technology to extend the shelf life of these food items by at least one month. 'We increased the protein content of upma by 10 percent,' said C Anandharamakrishnan, director of **CSIR-NIIST**. 'We use retort processing and pouches to keep the food fresh for up to a month. Additionally, we have poha mixed with ground nuts and millet puffs for kids.' The goal is to send readily consumable food with a longer shelf life to the affected areas by Thursday evening. The Thiruvananthapuram district collector will receive the first batch of food packets. The institution, which typically does not house a full-fledged production line, has adapted its existing infrastructure for continuous production.
Source: **Devdiscourse**

आपदा पीड़ितों के लिए CSIR-NIIST ने एक किए दिन-रात, लंबे समय तक ताजा रहने वाले खाद्य पदार्थ तैयार

केरल के वायनाड जिले में भारी बारिश के बाद भूस्खलन से तबाही मची है। इस प्राकृतिक आपदा में सैकड़ों लोगों की मौत हो गई। आपदा के बीच हजारों लोगों को राहत शिविरों में विस्थापित किया गया है। इस बीच केंद्र सरकार के अंतर्गत आने वाले कुछ वैज्ञानिक शोध संस्थानों की टीमों द्वारा दिन-रात एक कर, बीते दो दिनों से प्राकृतिक आपदा पीड़ितों के लिए भोजन तैयार किया जा रहा है। उच्च प्रोटीन वाले खाद्य पदार्थों को तैयार किया गया **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर) और राष्ट्रीय अंतःविषय विज्ञान और प्रौद्योगिकी संस्थान (एनआईआईएसटी)** के वैज्ञानिकों की टीम ने अपने कार्यस्थल को खाद्य प्रसंस्करण एवं उत्पाद में तब्दील कर दिया। इस टीम में 70 से अधिक लोग मौजूद हैं। इनमें शोधार्धियों के एक दल द्वारा एक शिफ्ट में काम किया जा रहा है और अलग-अलग खाद्य पदार्थों के एक हजार पैकेट तैयार किए जा रहे हैं। इस टीम द्वारा लंबे समय तक चलने और उच्च प्रोटीन की मात्रा वाले खाद्य पदार्थों को तैयार किया जा रहा है।
Source: **Amarujala**

Vigyan Shri Award an Inspiration to Put up More Work: Dr. Anandharamakrishnan C

Expressing happiness for being selected for the nation's coveted science award Vigyan Shri. Dr. Anandharamakrishnan C, Director of **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),** said he took the prestigious honour as a motivation to work with greater dedication for the advancement of science in the country. "Let me accept this coveted honour with all humility. This comes as a moment that inspires me to work with greater dedication so that me and my team in **NIIST** could make more contributions for the further advancement science in India, and the benefit of the society at large" Dr. Anandharamakrishnan , chosen for the Vigyan Shri award for distinguished contribution in Agricultural Science category, said. "Modern science in India

has a great and inspiring tradition. Let me recall the outstanding contributions made by my illustrious predecessors as well at this moment. I am also deeply indebted to my colleagues here in **CSIR-NIIST** and earlier in **CSIR-CFTRI** and MoFPI-NIFTEM-T with whom I had been associated," he said.
Source: Newsexperts

CSIR-NIIST Director receives Rashtriya Vigyan Shri Award from President

C. Anandharamakrishnan, Director, **CSIR-National Institute for Interdsciplinary Science and Technology (NIIST),** Thiruvananthapuram, was bestowed the inaugural Rashtriya Vigyan Puraskar 2024, India's highest award in the fields of science, technology, and technology-led innovations, by President Droupadi Murmu for his contributions to the agricultural science sector. Dr. Anandharamakrishnan was among the 33 awardees comprising eminent and young scientists, who received the award from the President at a function held at the Rashtrapati Bhavan in New Delhi on Thursday. Dr. Anandharamakrishnan said the award would inspire him and his team in **NIIST** to make more meaningful contributions for the further advancement of science in India, and also for the benefit of society at large. "We will strive to ensure that our research efforts have industrial relevance and are relevant for farmers and entrepreneurs as well," he said. A scientist and academician with expertise in the fields of food and agro-processing, his areas of research include 3D food printing, spray drying and spray-freeze-drying of food products, and computational modelling of food-processing operations.
Source: The Hindu

Modern effluent treatment plant opened at Kanhangad

A cutting-edge sustainable bioenergy-based effluent treatment plant (ETP), designed to handle wastewater from the desiccated coconut industry, started functioning at Vittal Agro Industries at Kanhangad on September 2 (Monday). The installation of the plant coincides with World Coconut Day. It utilises technology developed by the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST),** based in Thiruvananthapuram, for the first time. Kerala State Pollution Control Board (KSPCB) Chairperson Sreekala S. inaugurated the ETP, with **CSIR-NIIST** Director Anandharamakrishnan C. presiding over the event. Ms. Sreekala said pollution issues caused by effluents from the desiccated coconut industry had been a concern for the KSPCB for years. She praised the **NIIST** for developing a sustainable ETP solution and expressed hope that other units in the sector would follow suit in implementing similar technologies. Dr. Anandharamakrishnan noted that the newly installed ETP would serve as a model, encouraging other industries to adopt the technology.
Source: The Hindu

CSIR-NIIST enters pact with Tata Steel to reduce carbon emission

The **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** here has entered into a technical collaboration with Tata Steel Limited (TSL) for the evaluation of ceramic sorbents that help reduce carbon emission. The project is part

of the Carbon Capture, Utilisation and Storage (CCUS) mission of the **CSIR**, which aims to reduce carbon emission by either storing or reusing it so that captured carbon dioxide does not enter the atmosphere. On its Foundation Day celebrations held on Monday, **NIIST** exchanged a memorandum of understanding (MoU) with TATA Steel Limited, Jamshedpur. **NIIST** also transferred its technology for converting groundnut shells and corn husk waste into sustainable leather alternatives to Leafy Leather Pvt Ltd, a start-up from Surat, Gujarat. Ashuthosh Sharma, president, Indian National Science Academy, was the chief guest at the function,. **CSIR-NIIST** Director C Anandharamakrishnan presided. Atanu Ranjan Pal, Chief Technology Officer-Process, TSL, was the guest of honour.

Source: The Hindu

Union Minister Jitendra Singh to inaugurate Golden Jubilee of CSIR-NIIST on October 17

The **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** here is all set to launch two projects on Thursday, marking the commencement of the year-long golden jubilee celebrations of the institute. Union Minister of State for Science and Technology Jitendra Singh will inaugurate the celebrations at the **CSIR-NIIST** campus at Pappanamcode. N. Kalaiselvi, Secretary, DSIR and Director General, **CSIR**, will be the Guest of Honour at the function. C. Anandharamakrishnan, Director, **CSIR-NIIST** will preside over the function. Dr. Singh will also lay the foundation stone for the Centre of Excellence in Ayurveda Research on the campus and inaugurate the Centre of Excellence in Performance Chemicals and Sustainable Polymers. As part of the celebrations, the Minister will release **CSIR-NIIST** Golden Jubilee Year Book along with the Golden Jubilee Stamp. He will also inaugurate the **CSIR-NIIST** startup expo to be held on the sidelines of the inaugural ceremony where MoUs for technology transfers will be exchanged. Established as the Industrial Testing and Research Laboratory under Government of Kerala, the institution became part of **CSIR** as Regional Research Laboratory (RRL) in 1975. It was renamed **CSIR-NIIST** in 2007.

Source: The Hindu

Centre of Excellence in Ayurveda to be set up on CSIR-NIIST campus in Thiruvananthapuram

Union Minister for Science and Technology Jitendra Singh will lay the foundation for the Centre of Excellence (CoE) in Ayurveda Research at **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** in Thiruvananthapuram on Thursday, as one of the milestone projects to mark the golden jubilee of the premier institute. Singh will also lay the foundation for the Centre of Excellence in Performance Chemicals and Sustainable Polymers for Industrial Application while inaugurating the year-long golden jubilee celebrations on the **CSIR-NIIST** campus at Pappanamcode at 3 pm. The CoE in Ayurveda Research is envisaged as a premier facility for scientific validation, standardisation and global promotion of Ayurvedic products, making them compliant with international quality, safety and efficacy standards. The facility will support

Ayush enterprises, including MSMEs, to strengthen their product portfolios, particularly in Ayurveda, at a time when the global wellness industry is projected to grow exponentially. The CoE in Performance Chemicals and Sustainable Polymers for Industrial Application aligns with India's goal of becoming world's third largest economy by 2030.
Source: **Newindianexpress**

जितेन्द्र सिंह CSIR-NIIST में राष्ट्रीय परियोजनाओं की आधारशिला रखेंगे

केंद्रीय विज्ञान एवं प्रौद्योगिकी मंत्री जितेन्द्र सिंह गुरुवार को यहां **सीएसआईआर-राष्ट्रीय अंतःविषय विज्ञान एवं प्रौद्योगिकी संस्थान (एनआईआईएसटी)** में आयुर्वेद अनुसंधान में उत्कृष्टता केंद्र की आधारशिला रखेंगे, जो इस प्रमुख संस्थान की स्वर्ण जयंती के उपलक्ष्य में मील का पत्थर साबित होगा। इस कदम को वैज्ञानिक मान्यता और मानकीकरण द्वारा समर्थित आयुर्वेद के वैश्विक प्रसार की दिशा में एक बड़ा कदम माना जा रहा है। केंद्रीय मंत्री सिंह **सीएसआईआर-एनआईआईएसटी** परिसर में साल भर चलने वाले स्वर्ण जयंती समारोह का उद्घाटन करते हुए औद्योगिक अनुप्रयोग के लिए प्रदर्शन रसायनों और संधारणीय पॉलिमर में उत्कृष्टता केंद्र की भी आधारशिला रखेंगे। आयुर्वेद अनुसंधान में उत्कृष्टता केंद्र की परिकल्पना आयुर्वेदिक उत्पादों के वैज्ञानिक सत्यापन, मानकीकरण और वैश्विक प्रचार के लिए एक प्रमुख सुविधा के रूप में की गई है, जो उन्हें समग्र भारतीय स्वास्थ्य प्रणाली की विश्वव्यापी स्वीकृति को ध्यान में रखते हुए अंतर्राष्ट्रीय गुणवत्ता, सुरक्षा और प्रभावकारिता मानकों के अनुरूप बनाता है। यह केंद्र उन्नत अनुसंधान एवं विकास विधियों और उपकरणों का लाभ उठाएगा ताकि यह सुनिश्चित किया जा सके कि आयुर्वेदिक फॉर्मूलेशन आधुनिक स्वास्थ्य प्रतिमानों और वैश्विक स्वास्थ्य सेवा प्रणालियों की आवश्यकताओं को पूरा करते हैं।
Source: **Jantaserishta**

Union Minister calls for collaborative innovation in science and technology

Union Minister of State for Science and Technology Jitendra Singh has called for a broader integration among academia, research, start-ups and industry. Urging the stakeholders to embrace public-private partnerships (PPP) to foster innovation, he also emphasised the government's commitment to supporting initiatives that transcended past scepticism towards collaboration, particularly in sectors like space that has witnessed remarkable growth in recent years. Dr. Singh was speaking at the inauguration of the year-long golden jubilee of the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** at Pappanamcode on Thursday. Highlighting the transformative shift in India's space sector, in which the number of start-ups has surged to over 300, the Union Minister showcased the government's policies that have opened up opportunities for private sector involvement. He expressed confidence that similar integrated approaches would benefit other fields, including healthcare and traditional practices like Ayurveda. He also stressed the importance of the newly established Anusandhan

National Research Foundation, which aims to enhance research viability both in India and globally.
Source: The Hindu

Dr Jitendra inaugurates India's first 'Airport Air Quality Monitor' at Thiruvananthapuram

Union Minister of State for Science and Technology (Independent Charge) Dr Jitendra Singh on Thursday unveiled "Pavana Chitra", India's first "Airport indoor Air Quality monitoring" facility at Thiruvananthapuram International Airport. The off-grid air quality monitor is self-powered by indigenous indoor solar cells developed by **CSIR-NIIST,** crafted from locally available materials. While addressing 300 SC/ST farmers and artisans meet who are beneficiaries of different projects spearheaded by Biotechnology Research and Innovation Council-Rajiv Gandhi Centre for Biotechnology (BRIC-RGCB) and Swadeshi Science Movement-Kerala (SSM-K) in an event later, at Rajiv Gandhi Centre for Biotechnology campus, Thiruvananthapuram, the Union Minister said that time has come for India to lead in the biotechnology sector. The Union Minister said that India is now preparing for the next industrial revolution, and initiatives like Bio E3 policy will help for that. It is time for India to rise globally with primary emphasis given to biotechnology, space, agriculture sectors. Dr. Jitendra Singh further said that it is time to creatively think how to add value for the products cultivated by our farmers. Union Minister also described Thiruvananthapuram as the science capital of India.
Source: Statetimes

Kerala becoming nation's science capital: Union MoS Jitendra Singh

Union Minister Jitendra Singh on Thursday said that Kerala was becoming the nation's science capital as it has become a favourite destination for scientists. Singh, the Union Minister of State for Science and Technology, was of the view that the southern state has immense scientific and research potential due to the resources available here and its generations-old legacy of research and innovation, a release said. The minister was speaking after laying the foundation stone for a Centre for Excellence in Ayurveda Research at the **Council for Scientific and Industrial Research - National Institute of Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram. The minister said that Kerala, which was a centre for Ayurveda treatment and major tourism destination for those who seek Ayurvedic treatment, is going to benefit immensely through the new centre. "The centre will develop new scientific technologies to standardise the herbal constituents in Ayurvedic drugs, making them more effective and less harmful to the human body. "A scientific validation of Ayurvedic medicines through new technologies would also give greater acceptance to Ayurveda globally," he observed.
Source: Deccanherald

भारत को वैश्विक बायोमैन्युफैक्चरिंग हब में तब्दील किया जाएगा: केंद्रीय मंत्री डॉ. जितेंद्र सिंह

केंद्रीय विज्ञान डॉ. जितेंद्र सिंह ने कहा कि भारत को विज्ञान और टेक्नोलॉजी के वैश्विक बायोमैन्युफैक्चरिंग हब में तब्दील किया जाएगा. उन्होंने यह भी कहा कि देश को बायोकेमिकल मैन्युफैक्चरिंग के बारे में वैश्विक दृष्टिकोण रखना चाहिए और इसके लिए वैश्विक रणनीति तैयार की जानी चाहिए. डॉ. जितेन्द्र सिंह ने कहा कि केंद्र सरकार की सभी पहलों में स्थिरता और ई-कचरा प्रबंधन एक मजबूत नियम रहा है, उन्होंने स्वयं संचालित इनडोर वायु गुणवत्ता मॉनिटर का उदाहरण दिया. डॉ. सिंह ने आगे कहा कि केंद्र सरकार की सर्वोच्च प्राथमिकताओं में स्टार्टअप्स और इनक्यूबेटर्स के माध्यम से नवाचार और उद्यमिता की संस्कृति को बढ़ावा देना है. केंद्रीय मंत्री ने बताया कि केंद्र सरकार सार्वजनिक निजी भागीदारी को बढ़ावा दे रही है और उन्होंने **CSIR-NIIST** से इस कदम को अपनाने का आग्रह किया. केंद्रीय मंत्री ने संस्थान से ऐसे नए नवाचार लाने का भी आह्वान किया जो गैर-वैज्ञानिक समुदाय के लिए भी उपयोगी हों. **CSIR-NIIST** के निदेशक डॉ. सी. आनंदधर्मकृष्णन ने पिछले पचास वर्षों के दौरान **CSIR-NIIST** द्वारा हासिल की गई उपलब्धियों के बारे में केंद्रीय मंत्री के समक्ष एक प्रस्तुति दी. केंद्रीय मंत्री ने **NIIST** और देश भर के विभिन्न तकनीकी संस्थानों के बीच समझौता ज्ञापन और टेक्नोलॉजी हस्तांतरण के आदान-प्रदान की भी सुविधा प्रदान की. कार्यक्रम के दौरान डॉ. जितेंद्र सिंह ने **NIIST** परिसर में प्रदर्शनी क्षेत्र (**NIIST** शोकेस), स्वर्ण परीक्षण और हॉलमार्क सुविधा और स्टार्टअप एक्सपो का उद्घाटन किया.

Source: **Yourstory**

तिरुवनंतपुरम अंतरराष्ट्रीय हवाई अड्डे पर स्व-संचालित आंतरिक वायु-गुणवत्ता निगरानी सुविधा

केंद्रीय विज्ञान और प्रौद्योगिकी राज्य मंत्री डॉ. जितेंद्र सिंह ने तिरुवनंतपुरम अंतर्राष्ट्रीय हवाई अड्डे पर भारत की पहली आत्मनिर्भर इनडोर वायु गुणवत्ता निगरानी सुविधा "पवना चित्र" का उद्घाटन किया। यह अभिनव सुविधा **CSIR-NIIST** द्वारा विकसित स्वदेशी इनडोर सौर कोशिकाओं द्वारा संचालित है, जो स्थानीय रूप से उपलब्ध सामग्रियों का उपयोग करती है। डॉ. जितेंद्र सिंह ने तिरुवनंतपुरम अंतर्राष्ट्रीय हवाई अड्डे पर "पवना चित्र" का अनावरण किया, जो वायु गुणवत्ता निगरानी में एक महत्वपूर्ण मील का पत्थर है। यह सुविधा आत्मनिर्भर है और **CSIR-NIIST** द्वारा विकसित स्वदेशी सौर कोशिकाओं का उपयोग करती है। यह वायु गुणवत्ता मॉनिटर ग्रिड से बाहर संचालित होता है, जो स्थानीय स्रोतों का उपयोग कर भारत की सतत प्रौद्योगिकी में प्रगति को दर्शाता है। यह पहल पर्यावरणीय चुनौतियों के समाधान में स्वदेशी समाधानों का उपयोग करने के प्रति भारत की प्रतिबद्धता को दर्शाती है। राजीव गांधी जैव प्रौद्योगिकी केंद्र में एक अन्य कार्यक्रम के दौरान, मंत्री ने जैव प्रौद्योगिकी के महत्व को उजागर किया और इसे भारत के भविष्य के औद्योगिक क्रांति और वैश्विक नेतृत्व के लिए महत्वपूर्ण बताया।

Source: **Hindicurrentaffairs**

CSIR, IMD stalls win awards at science and technology expo

The three-day National Science and Technology Expo concluded at the G. Pulla Reddy Memorial School in Dilsukhnagar, Hyderabad, on Sunday (October 20, 2024). The event attracted over 50,000 visitors, including students and members of the public, who had the opportunity to interact with scientists and explore a wide range of exhibits. Among the many highlights of the event, the stalls by **CSIR** and IMD were particularly well-received. Both were awarded 'Best Stall' prizes. The expo featured 100 stalls from prominent scientific organisations such as ISRO, NRSC, **CSIR, NGRI, NAL, SERC, IMMT,** IMD, UIDAI's Aadhaar Card Division, the Visvesvaraya Industrial and Technological Museum, the National Council for Science Museums, **NIIST**, IITM Pune, NIOT, and MOES, among others. These stalls displayed science models and projects, offering a deep dive into various fields of scientific research and innovation.
Source: **The Hindu**

Dr. Hisham endowment award for CSIR-NIIST scholar

Sangeetha Mohan, research scholar, Chemical Science and Technology Division, **Council of Scientific & Industrial Research -National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram, has been selected for the Professor Dr. A. Hisham Endowment Award 2024. The award, instituted by the Kerala Academy of Science (KAS), commemorates the contributions of the late Prof. Abdulkhader Hisham, an internationally reputed phytochemist and an eminent academician from Kerala. The award will be presented during an international conference on 'Advancements and Innovations in Phytochemistry, Nutraceuticals and Functional Foods' to be held at the Mar Athanasius College for Advanced Studies Thiruvalla (MACFAST) on November 11 and 12.
Source: **The Hindu**

CSIR-NIIST transfers onsite wastewater treatment technology to more agencies

The **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** has transferred its onsite wastewater treatment technology to more agencies. A statement said **NIIST** signed memorandums of understanding (MoUs) on Wednesday with E-Nadu Youth Cooperative Society, Veliyanoor, Kottayam, and FOAB Solutions Pvt Ltd for transferring its NOWA technology, in the presence of Minister for Cooperation V.N. Vasavan. **NIIST** Director C. Anandharamakrishnan and representatives from the two agencies exchanged the MoUs. NOWA is an engineered biological treatment system capable of recovering reuse quality water, bioenergy and organic manure from wastewater, **NIIST** said. The technology developed by **NIIST** has several advantages such as less space requirement. It also does not require frequent sludge disposal, consumes less electricity and has a low operational and maintenance cost. The NOWA technology is designed for Indian conditions and it will be a replacement for imported technologies, according to **NIIST**.
Source: **The Hindu**

Marayur jaggery: new production and processing facilities to be set up under CSIR-NIIST, funded by Central government

In a move aimed at reducing production costs and enhancing quality, the jaggery hub of Marayur in Idukki will soon benefit from a centrally funded jaggery production project. Led by **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram, the project is funded by the Department of Science and Technology, Government of India. Under the project, a decentralised production facility will be established for the Marayur Hills Agricultural Development Society (MAHADS), a farmers' collective in Dhinducombu, Kanthalloor. With a planned production capacity of 5–7 tons of cane crushing per day, the project is designed to meet Food Safety and Standards Authority of India (FSSAI) regulations, while also achieving international standards. A new processing unit will feature a controlled firing process with constant stirring to produce jaggery in both lump and powder forms. "The main objective is to create a modern facility that meets FSSAI standards and significantly lowers production costs. The project also aims to increase demand and unique labelling of GI-tagged Marayur jaggery," explained sources with the science and technology department.

Source: **The Hindu**

4-day fest to bring together scientific minds in city

The city is all set to host the 10th edition of the Indian International Science Festival (IISF) from Nov 30 to Dec 3, marking the prestigious festival's debut in the northeast. The four-day-long festival will be held at IIT- Guwahati and will encompass an array of events and programmes for students and science enthusiasts. The event aims to introduce them to new-age technological advancements and penetrate scientific thoughts across every nook and corner of the state. The mission for this year's IISF is to make a prosperous Bharat in harmony with modern infrastructure and nature while giving opportunities to all citizens to reach their potential through science and technology. At the festival, experts from various scientific backgrounds will interact with science enthusiasts through seminars and other programmes. C Anandharamakrishnan, director of **CSIR-NIIST** and chief coordinator of IISF 2024, said, "The idea of IISF is to build the nation through practising science. The theme of this year's festival has been selected as how to transform India into a science and technology-driven global manufacturing hub."

Source: **Times of India**

Jaivam: Revolutionizing Waste Management with Speedy, Eco-friendly Composting

In a notable advancement in waste management technology, the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** has unveiled 'Jaivam,' a microbial consortium. This development is aimed at improving composting efficiency, offering a cleaner and swifter process suitable for agricultural uses. The institute has formalized this innovation through a memorandum of understanding with Agso Agrosoldier Pvt Ltd, granting the company a non-exclusive licence to manufacture and apply 'Jaivam' commercially. This move is pivotal for implementing sustainable waste

management practices widely. "Jaivam" promises to enhance both decentralized and centralized composting systems, addressing critical issues like greenhouse gas emissions and improving compost quality. Field trials have shown promising results, drastically cutting the composting time and aiding municipal and various organic waste processing units in functioning more effectively.
Source: Devdiscourse

CSIR-NIIST develops microbial solution for organic waste

In a breakthrough in bulk waste management, the **CSIR-National Institute for Interdisciplinary Science and Technology (NIIST)** developed a microbial consortium called 'Jaivam', which facilitates a clean and speedy composting process, besides producing high-quality compost for agricultural use. Jaivam is suited for both decentralised waste treatment units like household composting bins and bulk handling systems like the organic waste converters (OWCs) and centralised facilities like windrow composting. The development of Jaivam and R&D initiatives by **CSIR-NIIST** on similar lines will help address challenges such as greenhouse gas emissions (methane and nitrous oxide) from bulk composting facilities and improve the compost quality through bio-augmentation, said C Anandharamakrishnan, director **NIIST**. This can also complement state govt efforts in addressing urban waste management challenges effectively, he said. Jaivam was developed by a team of researchers led by Krishnakumar B in the environmental technology division at **NIIST**. The solid waste management rules mark aerobic composting and anaerobic digestion as two options for treating and managing organic waste. Corporations and municipalities lacking common organic waste treatment facilities often adopt decentralised approaches, including household-level aerobic composting units (bins).
Source: Times of India

CSIR-NIIST director Anandharamakrishnan to get Tata Transformation Prize

C Anandharamakrishnan, agricultural scientist and Director of the **Council for Scientific and Industrial Research (CSIR) National Institute for Interdisciplinary Science and Technology (NIIST),** has been selected for this year's Tata Transformation Prize, the institute said here on Monday. The award is jointly instituted by Tata Sons and the New York Academy of Sciences. The Tata Transformation Prize recognises outstanding scientists working on pioneering technologies in the fields of food security, sustainability, and healthcare, a release said. A pioneer in food engineering research, Anandharamakrishnan's work towards the development of fortified rice has the potential of making a far-reaching impact in addressing the dual challenges of providing a vital nutritional boost and a healthier diet to millions, the New York Academy of Sciences noted while announcing the award. Award winners are selected by a confidential jury, independently chosen by the New York Academy of Sciences, comprising experts from academia, industry and government, it stated. Anandharamakrishnan has also served as the Chairman and Convener of the Capacity Building and Research initiative for the Prime

Minister's Formalisation of Micro Food Processing Enterprises Scheme, a project under the Ministry of Food Processing Industries (MoFPI), the release said.
Source: **Business Standard**

Winners of the 2024 Tata Transformation Prize Celebrate Bold Innovation for India and Beyond

Tata Sons and The New York Academy of Sciences today announced the second cohort of Winners of the Tata Transformation Prize. The Prize recognizes and supports visionary scientists in India who are developing breakthrough technologies that address India's most significant societal challenges in Food Security, Sustainability, and Healthcare. The goal of the prize is to drive impactful innovation and scale-up implementation of high-reward research. Three scientists were selected from 169 entries from 18 Indian states by an international jury of leading experts. Each winner will receive INR 2 crores (approximately US$240,000) and will be honored at a ceremony in Mumbai in December 2024. The jury included distinguished scientists, clinicians, technologists, and engineers from a diverse array of industries, government, and academic institutions, including Apple, IBM Research, the Bill and Melinda Gates Foundation, the National Institute of Advanced Studies, and the Indian Institute of Management Bangalore. The 2024 Tata Transformation Prize Winners are: C. Anandharamakrishnan, PhD, **CSIR – National Institute for Interdisciplinary Science and Technology** (Food Security)
Source: **Nyas**

सीएसआईआर-एनआईआईएसटी के निदेशक आनंदरामकृष्णन को टाटा ट्रांसफॉर्मेशन पुरस्कार मिलेगा

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद **(सीएसआईआर)- राष्ट्रीय अंतरषयी विज्ञान एवं प्रौद्योगिकी संस्थान (एनआईआईएसटी)** के निदेशक और कृषि वैज्ञानिक सी आनंदरामकृष्णन को इस वर्ष के 'टाटा ट्रांसफॉर्मेशन पुरस्कार' के लिए चुना गया है। संस्थान ने सोमवार को यहां यह जानकारी दी। यह पुरस्कार टाटा संस और न्यूयॉर्क एकेडमी ऑफ साइंसेज द्वारा संयुक्त रूप से स्थापित किया गया है। एक विज्ञप्ति में कहा गया है कि 'टाटा ट्रांसफॉर्मेशन' पुरस्कार खाद्य सुरक्षा, स्थिरता और स्वास्थ्य सेवा के क्षेत्र में अग्रणी प्रौद्योगिकियों पर काम करने वाले उत्कृष्ट वैज्ञानिकों को दिया जाता है। 'न्यूयॉर्क एकेडमी ऑफ साइंसेज' ने पुरस्कार की घोषणा करते हुए कहा कि आनंदरामकृष्णन का फोर्टिफाइड चावल के विकास की दिशा में किया गया कार्य लाखों लोगों को महत्वपूर्ण पोषण प्रदान करने और स्वस्थ आहार प्रदान करने की दोहरी चुनौतियों का समाधान करने में दूरगामी प्रभाव डालने की क्षमता रखता है।
Source: **Ibc24**

IIT Guwahati is going to witness India's Largest Science Festival from November 30

India International Science Festival (IISF) is going to be celebrated at Indian Institute of Technology Guwahati during 30 Nov. to 3 Dec. 2024. The **Council of Scientific and**

Industrial Research (CSIR) is the nodal department for this year IISF and a constituent laboratory of **CSIR** namely **National Institute for Interdisciplinary Science and Technology (CSIR-NIIST,** Thiruvananthapuram) is coordinating the whole festival. IISF is a unique festival of science society engagement which was initiated in the year 2015 and the very first IISF was organised at IIT Delhi. Vijnana Bharati, a science movement of India conceptualized this science festival. North East India will witness this festival for the first time. To date, India International Science Festival has been the largest science event in the country with a participation of thousands of people who come together annually to foster scientific collaboration, inspire young minds and propel economic growth through scientific approaches. This year in 2024, IISF is being organized at IIT Guwahati, Assam from November 30th – December 4th, 2024. The theme of this 10th edition of IISF is "Transforming India into an S&T driven Global Manufacturing Hub". It reflects the government's aim to merge science and technology with industrial growth, making India global leader in manufacturing. "IISF is not only meant for the people who do science. The key philosophy of IISF is the celebration of science by all, and thus it also engages common people in a joyful and entertaining manner".
Source: Pib

Graphical Abstract

Vijay Nair, one of India's most prominent organic chemists, passed away on April 12, 2024 at the age of 82. After a distinguished research career in the U.S. pharmaceutical industry, he returned to India to lead what was to become the **National Institute for Interdisciplinary Science and Technology (NIIST).** During this second phase of his career, he made fundamentally important contributions to the art of organic synthesis and mentored a number of organic chemists. Vijay Nair (Figure 1), one of India's prominent organic chemists, passed away on 12th April 2024 at the age of 82 in Trivandrum, the capital of the south Indian state of Kerala. For the last three decades, he lived in the same city, working in **the Council of Scientific and Industrial Research (CSIR)** Institute originally known as the Regional Research Laboratory (RRL), which was later rechristened as the **National Institute for Interdisciplinary Science and Technology (NIIST).** He was fifty years old when he joined the up-and-coming and rather little-known RRL in 1990, after a distinguished research career in the pharmaceutical industry in the U.S. In the years to follow, Nair made fundamentally important contributions to the art of organic synthesis, led the institute, mentored a number of organic chemists and in the process transformed the landscape of organic chemistry in India.
Source: Onlinelibrary

आईआईटी गुवाहाटी देश के सबसे बड़े विज्ञान महोत्सव की मेजबानी करेगा

भारत का सबसे बड़ा विज्ञान महोत्सव 30 नवंबर से 3 दिसंबर 2024 तक आईआईटी गुवाहाटी, असम में आयोजित होगा। यह आयोजन **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (CSIR)** के तत्वावधान में आयोजित किया जा रहा है, जिसमें **CSIR-नेशनल इंस्टीट्यूट फॉर इंटरडिसिप्लिनरी साइंस एंड टेक्नोलॉजी**

(CSIR-NIIST), तिरुवनंतपुरम समन्वयक निकाय के रूप में कार्य कर रहा है। पहली बार, यह मेगा इवेंट उत्तर पूर्व भारत में आयोजित किया जा रहा है। इसका विषय, "भारत को विज्ञान एवं प्रौद्योगिकी द्वारा संचालित वैश्विक विनिर्माण केंद्र में बदलना", भारत को वैश्विक विनिर्माण नेता के रूप में स्थापित करने के लिए विज्ञान, प्रौद्योगिकी और औद्योगिक विकास को एकीकृत करने के सरकार के दृष्टिकोण के अनुरूप है। मुख्य विवरण और विशेषताएँ आयोजक और भागीदार नोडल एजेंसी: **सीएसआईआर।** समन्वयक निकाय: सीएसआईआर-एनआईआईएसटी, तिरुवनंतपुरम। मुख्य मंत्रालय आयोजक विज्ञान और प्रौद्योगिकी मंत्रालय (एमओएसएंडटी)। जैव प्रौद्योगिकी विभाग (डीबीटी)। विज्ञान और प्रौद्योगिकी विभाग (डीएसटी)। पृथ्वी विज्ञान मंत्रालय (एमओईएस)। मुख्य सहयोगी विज्ञान भारती (वीआईबीएचए), परमाणु ऊर्जा विभाग (डीएई), अंतरिक्ष (डीओएस), और रक्षा अनुसंधान (डीडीआरएंडडी)।

Source: **Hindicurrentaffairs**

Igniting Innovation: IISF 2024's Grand Unveiling at IIT Guwahati

The **Council of Scientific and Industrial Research (CSIR)** launched the 10th edition of the India International Science Festival (IISF 2024) at IIT Guwahati on Saturday, under the patronage of the Ministry of Science and Technology and Ministry of Earth Sciences. Hosted in collaboration with Vijnana Bharathi, the event's nodal institute is the **CSIR-National Institute for Interdisciplinary Science and Technology**, Thiruvananthapuram. Assam Chief Minister Himanta Biswa Sarma and Union Minister Jitendra Singh were among the esteemed guests celebrating India's scientific achievements and fostering innovation. Key figures in India's science ecosystem, such as DST Secretary Prof Abhay Karandikar and DBT Secretary Dr Rajesh Gokhale, attended the event. Highlighting India's scientific milestones and innovations, the festival showcased initiatives like the Young Scientists' Conclave, Nari Shakti, and Science Beyond Borders. "IISF 2024 stands as a grand celebration of scientific innovation," said CM Sarma. The event also marked significant addresses from Union Minister Jitendra Singh, emphasizing India's rapid growth in science and technology. The inauguration of the India Science, Technology & Innovation Portal intends to engage students and researchers while promoting collaboration. With over 8,000 delegates expected, IISF 2024 aims to strengthen India's position as a technological powerhouse.

Source: **Devdiscourse**

Empowering youth & fostering innovation crucial for Viksit Bharat: Jitendra Singh

Empowering the youth of the country with research and also fostering innovation is crucial for India in the run-up to Viksit Bharat in 2047, said Union Minister Dr Jitendra Singh on Saturday. He said this at the 10th edition of India International Science Festival 2024 (IISF 2024) in Guwahati, Assam, being held in association with Vijnana Bharathi, the nodal institute of the event being **CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram. The four-day festival aims to popularise science and technology across diverse communities. At the event, he also

launched a centralised platform that will act as a repository for content related to science, technology, and innovation. The India Science, Technology & Innovation (ISTI) portal will provide access to valuable information on fellowships, scholarships, funding opportunities, and startup initiatives, enabling students, scientists, researchers, youth, and the public to explore and leverage opportunities within the country. Launching the platform, Singh said that the country has in the last 10 years seen a significant transformation in startups, biotechnology, space technology, and quantum science.
Source: Socialnews

Indian scientists develop 40%-efficient dye sensitzed solar cell for indoor applications

A group of scientists led by India's **National Institute for Interdisciplinary Science and Technology (CSIR-NIIST)** claims to have boosted the stability and efficiency of dye-sensitized solar cells for indoor PV applications. This type of solar cell, which is also known as a Grätzel solar cell, named after its inventor, EPFL Professor Michael Grätzel, is used for powering electronic devices such as wireless sensors or Internet-of-things, with indoor light. “Our study introduces a significant advancement in dye-sensitized solar cells (DSCs) by utilizing starburst triphenylamine dye cocktails with a rigid, triple-bond conjugated π-backbone. This molecular design enhances light-harvesting capabilities in the visible region, providing an excellent overlap with indoor light spectra,” Suraj Soman, the research’s corresponding author, told pv magazine, noting that the design incorporated an asymmetric dual-species copper(II/I) electrolyte that had been introduced in earlier published research by the group. The team developed the cell with a novel starburst triphenylamine sensitizer (RJ-C6) that was combined with XY1b dye and its own asymmetric dual-species copper(II/I) electrolyte. “The precise structural design of the dyes fosters synergistic effects, allowing for efficient molecular packing, enhanced dye loading, and improved visible light absorption,” Soman went on to say. “Furthermore, this configuration creates a robust barrier against back electron transfer and recombination.”
Source: Pv-magazine

IISF 2024 Empowers Students, Teachers, and Policymakers to Shape a Knowledge-Driven Future

The second and third days of India International Science Festival 2024 (IISF 2024) were marked by vibrant industry-academia collaboration, knowledge sharing technical sessions, and initiatives to inspire students and teachers creative, knowledge-based learning. The event also brought policymakers and scientific leaders together under one roof to discuss sustainable practices across science, agriculture, manufacturing, and healthcare. Organised by the Council of Scientific and Industrial Research and managed by the **National Institute for Interdisciplinary Science and Technology (CSIR-NIIST),** Thiruvananthapuram, at IIT Guwahati, the event drew over 20,000 students, fostering innovation and interdisciplinary collaboration. Dr. S. Somanath, Chairperson, Indian Space Research Organisation (ISRO), attended the “Student Science Interactive Program – Face to Face with New Frontiers in S&T,” where he interacted with school

students, inspiring them to explore careers in science and technology and pursue innovation in the field of space research. Speaking during the session, Dr. S. Somanath remarked, “As students, you are the torchbearers of the future in science and technology. It is essential for you to grasp the remarkable innovations and advancements taking place in these fields today. By recognising their potential and the opportunities they present, you can draw inspiration to pursue similar paths and contribute to building a brighter tomorrow.

Source: **Neindiabroadcast**

Industry-led research and collaborations key to boosting India's innovation ecosystem

Promoting research collaborations among top-tier institutions such as CSIR and Higher Education Institutions (HEIs), increasing industry-led research can significantly boost research, says C Anandharamakrishnan, director, **CSIR National Institute for Interdisciplinary Science and Technology (NIIST),** Thiruvananthapuram, on the sidelines of the India International Science Festival (IISF) 2024, organised by the institute Will collaborations between top-tier institutions such as **CSIR** and HEIs, including state universities, help democratise R&D? We are partnering with AIIMS New Delhi to validate our products, as external validation is essential. While collaborations between research institutes and higher education institutions (HEIs) are improving, they remain limited. Greater visibility and integration are needed to foster impactful research outcomes; a gap needs to be bridged. India’s innovation ecosystem is changing. For instance, the number of unicorns has grown from 42 in 2017 to 111 in 2024. Many young entrepreneurs aim to turn their ideas into business models rather than just seeking jobs. This is evident in the rise of new coffee shop brands and startups. However, more support is needed for scientists to commercialise their inventions.

Source: **Educationtimes**

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements between **CSIR** and leading recyclers. These initiatives underscore MoEFCC’s pivotal role in driving India’s transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR’s** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative

waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: Pib

Transforming Indian Science: A conversation with Tata Transformation Prize winners

Two distinguished scientists, Professor Raghavan Varadarajan from the Indian Institute of Science (IISc), Bangalore, and Professor C Anandharamakrishnan, director of **CSIR-National Institute for Interdisciplinary Science and Technology**, were recently honoured with the prestigious Tata Transformation Prize. In these conversations with Niraj Pandit, they discuss their groundbreaking research, challenges, and visions for the future. How has winning the Tata Transformation Prize impacted your work? Varadarajan: I am very grateful for this recognition. The grant associated with the prize gives us a three-year window to focus intensely on advancing our RSV vaccine research. It also allows us to connect with industry partners to accelerate the transition from lab-scale research to real-world applications. This support will significantly expedite our work toward creating an affordable RSV vaccine. Could you each explain the focus of your research? Varadarajan: Our research at IISc focuses on designing vaccines for respiratory viruses, particularly RSV, which causes severe respiratory illnesses, especially in infants, young children, and the elderly. Over 97% of RSV-related deaths occur in developing countries, including India. Despite new RSV vaccines being developed in the U.S., they are currently unaffordable for populations here. We aim to create a similarly effective but cost-effective vaccine.

Source: Hindustantimes

Department of Science and Technology Year End Review 2024

- A demo plant is established at Sihphir Venghlun in Meghalaya for post-harvest processing of ginger/turmeric through technological interventions from **CSIR-CMERI** with direct benefit to 128 Tribals and indirect to all the tribals living in project area.
- **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Bhavnagar, Gujarat converted two running solar salt works into model units and developed high purity solar salt technologies for agarias community of Kutch, Gujarat (Halwad Region). A cluster of 50 small scale salt manufacturers (agarias) is formed and trained for best practices of salt manufacturing and value addition in their salt works by utilizing bittern (liquor remained after salt harvesting).
- DST has supported two Technology Deployment Test beds in PPP mode to be implemented by IIT Delhi – Thermax Ltd and **CSIR-IICT** Hyderabad – BHEL for setting up pilot-scale demonstrations in Coal Gasification plants for Methanol and DME production with industry partnering as solution provider along with a technology

designer (knowledge partner) to deploy CCU in hard-to-abate sector like thermal power.

- DST supported pilot plant project titled “Implementation of a Sustainable Bioenergy-Based Model Effluent Treatment Plant for Desiccated Coconut Industries” was inaugurated at the site of M/s. Vittal Agro Industries, Kasargod on September 02, 2024. The project was executed by **National Institute for Interdisciplinary Science & Technology (NIIST),** Thiruvananthapuram, Kerala in collaboration with M/s. Vittal Agro Industries, Kasargod, the Coconut Development Board (CDB).
  Source: Pib

ISRO chief Somanath urges youths to pursue careers in science & technology

Indian Space Research Organisation (ISRO) chairman S Somanath on Monday exhorted youths to engage themselves with scientific and technological advancements being made by the country so that India can emerge as a global leader in the years ahead. He urged them to pursue careers in science and technology and contribute to the growth in these fields. Somanath was speaking at a ‘Student Science Interactive Program – Face to Face with New Frontiers in S&T’, as part of the four-day India International Science Festival (IISF) at IIT-Guwahati, which will conclude on Tuesday. The ISRO chairman interacted with school students, inspiring them to explore careers in science and technology and pursue innovation in the field of space research, a release said. A key highlight of IISF 2024 was the lab-to-life initiative, where **Council of Scientific and Industrial Research (CSIR)** signed three technology transfer Memorandums of Understanding (MoUs) to promote sustainability and technological advancements. Speaking about technology transfer, C Anandharamakrishnan, director, **CSIR-NIIST,** Thiruvananthapuram said, “Young innovators like you have already begun building rockets and satellites in colleges, efforts that are nearing commercial success. By understanding these advancements and the opportunities in the field of space, science and technology, you can be inspired to pursue similar paths and shape a brighter future.” (PTI)
Source: Statetimes

IISF 2024: A Commitment to a Science-Led Future for India

The 10th India International Science Festival (IISF) held at IIT Guwahati was started from November 30th and culminated on December 4th, 2024. The 4-day mega science festival featured 24 different events in which 7000 delegates and 45000 people including large number of students participated. While Moon Replica hogged the limelight and pulled the crowd. It's a giant 10-metre high ‘real surface’ replica of #Moon erected at IIT Guwahati, showcasing India’s advancement in Space science. Through this event, IISF desires to raise public awareness on environmental issues. Two significant events in IISF 2024 discussed effective science communication S&T media strategies: first Vigyanika and second S&T Media Conclave. Vigyanika event played a pivotal role in disseminating science in simple language to the masses. Organized by **CSIR-National Institute of Science Communication and Policy Research (NIScPR),** these events aimed to bridge the gap between science communicators, scientists, journalists, and media professionals. IISF 2024 culminated with valedictory function in which Chief Coordinator of the event

and Director of **CSIR-NIIST,** Dr. C. Anandharama Krishnan proposed vote of thanks to all the conveners, coordinating labs, Vijnana Bharati, student volunteers and delegates. In her presidential address, DG **CSIR** and Chairperson, Steering Committee, IISF 2024, Dr. N. Kalaiselvi remarked, “We have developed an action plan focused on North East activities in this IISF2024,” and announced that the winners of the S&T Hackathon will receive support from **CSIR**.

Source: Pib

Go Back

CSIR-National Institute of Oceanography (CSIR-NIO)

To draw students' interest, CM directs education dept to tie up with NIO

Stating that there is a lack of awareness regarding **CSIR-National Institute of Oceanography (NIO)** among students in Goa, chief minister Pramod Sawant announced plans to enhance educational exposure by encouraging school visits to the institute

Source: **timesofindia**

CSIR-NIO Celebrates 59th Foundation Day with Public Engagement

CSIR-National Institute of Oceanography (NIO) commemorated its 59th Foundation Day with a day filled with educational opportunities and insightful discussions, culminating in an illuminating lecture by Chief Minister of Goa Dr. Pramod Sawant. The institute, located in Dona Paula, opened its doors to the public from 9.30 am to 11.30 am on January 1st, welcoming visitors to explore the wonders of oceanographic research. Guests were treated to an array of engaging exhibits, including a marine aquarium, models of research vessels, demonstrations of oceanographic research instruments, and displays featuring specimens of marine minerals abundant in metals such as iron, manganese, copper, nickel, and cobalt. Additionally, artifacts discovered by divers from ancient shipwrecks and marine archaeological sites were on view, captivating visitors with insights into maritime history.

Source: **Best Current Affairs**

One lakh litres of oily water removed from Ennore: TNPCB

More than one lakh litres of oily water and 393 tonnes of sludge were removed from Ennore and sent to Chennai Petroleum Corporation Limited's plant for treatment and disposal. CPCL is primarily responsible for the oil spill following cyclone Michaung, Six different studies, involving top government institutions including IIT Madras, are in progress to ascertain the damage caused by the oil spill, the Tamil Nadu Pollution Control Board (TNPCB) has told the National Green Tribunal (NGT). Earlier, the tribunal took suo motu cognizance of the pollution and asked the board to submit details pertaining to oil allegedly spreading all the way to the ecologically sensitive Pulicat lake. TNPCB during a recent hearing said there were no tar balls in the lake near the fish landing centre. However, it observed balls in adjoining beaches at Koraikuppam and Koonankuppam and they were cleared. CPCL in its report said that though mangroves were unaffected, oil traces were found along the outer line of the mangroves near the mount of the

Buckingham canal, which is being cleaned under the guidance of **National Institute of Oceanography,** Goa. It would take at least two months to finish this work.
Source: **Times of India**

Conclave on Autonomous Technology and Systems (CATS-2024) organized by Institute of Defence Scientists & Technologists and Research and Development Estt. (Engrs) DRDO

Institute of Defence Scientists & Technologists and Research and Development Estt. (Engrs), DRDO is conducting seminars and exhibitions on the latest technology and systems to promote scientific research, technology, and systems development and innovation. Various experts and manufacturing companies working in these fields are coming together on this occasion. This exhibition will be held at the DRDO's Dr. APJ Abdul Kalam Auditorium at Pashan and will be an invitees-only event. The utilization of autonomous systems by users in paramilitary, disaster management, etc. will be discussed extensively. Designers from national research institutes like DRDO, ISRO, BARC, CDAC, **CSIR, NIO**, NIOT, etc. will be present to showcase their needs and ambitions as well as discuss eminent academics doing research in this field. The exhibition is organized to depict India's capability to forge defense materials to become militarily self-reliant.
Source: **Punekarnews**

NGT flags violations in Cortalim creek

The joint committee constituted by the National Green Tribunal (NGT) has come down strongly on "unchecked violations" by seven ship repair companies in the Cortalim creek and has recommended that approximately `63.96 crore as compensation be recovered from the violators, while also mooting legal action against projects operating in defiance of its directives. In compliance with the order of the western bench of the NGT dated May 11, 2022, a joint committee comprising representatives from the Ministry of Environment, Forest and Climate Change (MoEFCC), National Coastal Zone Management Authority (NCZMA), Goa Coastal Zone Management Authority (GCZMA), Central Pollution Control Board (CPCB), State Pollution Control Board (SPCB), and **National Institute of Oceanography (NIO)** was formed to address concerns raised by Salu D›Souza in his application, which sought the removal of vessels, repair work compliance, and restoration of the Cortalim river area.
Source: **Navhindtimes**

CSIR - National Institute of Oceanography (NIO) Initiates Month-long Oceanographic Certificate Course for Colombo Security Conclave (CSC) Member Countries

In a significant step towards fostering collaboration and capacity building in the field of Oceanography, **CSIR - National Institute of Oceanography (NIO)** has commenced a month-long certificate course for the member countries of the Colombo Security Conclave (CSC). The inaugural session of this pioneering initiative took place on January 15, 2024.

This educational endeavor is a direct outcome of the maiden CSC Oceanographers and Hydrographers conference, which transpired in Goa and Hyderabad in November 2022. Following this conference, scientists from CSC nations jointly conducted two expeditions in the Indian Ocean Region from June to September 2023. Another joint expedition in the Antarctic, launched in December 2023, is currently underway.
Source: Pib

NIO in Goa launches underwater vehicle, C-bot, to monitor coral reefs

The Goa-headquartered **National Institute of Oceanography (NIO)** has launched a coral monitoring autonomous underwater vehicle, Coral Reef Monitoring and Surveillance Robot, or C-bot, for long-term monitoring of coral reefs. Dr N Kalaiselvi, director general of the **Council for Scientific and Industrial Research (CSIR**) said C-bot, which can reach depths of 200 metres, was their first step to building a capable underwater vehicle that can scan the depth of the Indian Ocean. "We have plans to develop it further by means of which we will be able to do deep diving. So from 200 metres, we will aim for thousands of metres in the sea," Dr Kalaiselvi told reporters at a briefing after the underwater vehicle's launch on Sunday.
Source: Hindustan Times

'Children must get hands-on with science'

N Kalaiselvi, director general of **CSIR**, New Delhi, emphasised the importance of staying connected with school children, addressing concerns raised by the prime minister. She was speaking at **National Institute of Oceanography (NIO)** on Monday. "The PM asked me, directly eye-to-eye, that scientists claim to be doing A to Z science (research). To what extent do we stay connected with school children who are the next generation scientific leaders, he asked. Thanks to CSIR, I had answers. I told him that through the Jigyasa programme, we are able to do so," she said. She said that through the Jigyasa program, students engage directly with scientific research at each of the 37 national laboratories under **CSIR**.
Source: Times of India

CSIR committed to make India 'Atmanirbhar' by developing indigenous technologies, says Director General Dr N Kalaiselvi

The **Council of Scientific and Industrial Research (CSIR**) is committed to make India 'Atmanirbhar' by developing indigenous technologies, said Dr N Kalaiselvi, the Director General of **CSIR**. She was speaking at a press conference held on the 'Role of **CSIR** in building an Atmanirbhar Bharat', at **CSIR-National Institute of Oceanography (NIO),** Dona Paula, Panaji, on Monday, January 29. "**CSIR**, through its 37 laboratories across the country, are involved in all aspects of their research and development to what extent they can bring in 'Atmanirbharta' for indigenization of technologies, through which we can ensure that the country will become self-sustainable in the coming years. Thanks to Mother Nature, India has all the raw material sources to achieve that mission," she said.
Source: Pib

Storm surges cause severe damage in coastal Kerala

Storm surges and high coastal waves caused heavy damage in various districts of Kerala on Sunday. The coastal areas of Alappuzha, Thrissur, Thiruvananthapuram, and Kollam districts were hit by sea. The **Council of Scientific and Industrial Research-National Institute of Oceanography (CSIR-NIO)** has warned that high and strong waves and storm surges are possible. Strong waves were seen in Thiruvananthapuram at Pulluvila, Adimalatura, Puthiyathura, Poonthura, and Thumpa beaches. The storm surges at Pozhiyur destroyed fishing equipment and vessels, swept away coastal roads, and flooded houses along the coast. Sea inundation continued in the Poowar Adimalatura sea-facing belt. The sea also hit the shores of Kovalam, a tourist destination. Authorities prohibited tourists from entering the sea. According to experts, such ocean invasions are seen in March and April and may last up to three days.
Source: **Hindupost**

Vizag shore's Olive Ridley creche turns turtle graveyard

On many balmy nights of Vizag, its pristine beaches turn into cosy cradles. With the slight nip in the air between January and March and the warmth of the moist sand from the day's sun, the coast becomes a perfect creche for hundreds of endangered Olive Ridley turtles to lay their eggs and leave them to hatch. However, this year, when these turtles crawl to the coast, little will they know that some stretches are watery graves for their species. A January 2021 survey by **CSIR- National Institute of Oceanography** in association with **Central Marine Fisheries Research Institute (CMFRI)** confirmed this. As part of the survey the research team led by GPS Murty, scientist-in-charge of **NIO**, surveyed a 12 km stretch from Gosthani river (near Bheemili) to Kancheru beach in Annaram panchayat (towards the Orissa coast) and found 62 carcasses.
Source: **Times of India**

CSIR - National Institute of Oceanography (NIO) concludes month long oceanographic certificate course for the Colombo Security Conclave (CSC) member countries

CSIR-NIO Goa has concluded its month-long certificate course in Oceanography, marking a significant milestone in fostering collaboration and knowledge exchange among oceanographers and hydrographers. The course, which commenced on 15th January 2024, saw enthusiastic participation from delegates representing Sri Lanka, Mauritius, and Seychelles. The course, a culmination of the maiden CSC Oceanographers and Hydrographers conference held in November 2022 in Goa and Hyderabad, aimed to deepen understanding and expertise in various facets of Oceanography. Under the expert guidance of 58 esteemed scientists from **CSIR-NIO**, participants delved into topics ranging from marine biology, ocean chemistry, and physics to seafloor geology, marine instrumentation, and archaeology.
Source: **Pib**

NIO scientists to help Odisha develop artificial reefs for sustainable fisheries

The **National Institute of Oceanography (NIO),** Dona Paula,will collaborate with the Odisha fisheries department to develop artificial reefs along the Odisha coast. This

innovative endeavour is part of the Prime Minister's Matsya Sampada Yojana (PMMSY) scheme and will cost approximately Rs 29 crore. Under the PMMSY scheme, the **NIO** scientists will create environments that mimic natural reefs, fostering marine biodiversity and promoting sustainable fisheries. One of the key aspects of this project is the translocation of the reef to ensure that it becomes a thriving habitat for diverse marine species. By recreating the conditions conducive to biodiversity, the project is expected to contribute significantly to the enhancement of marine ecosystems along the Odisha coast.
Source: Times of India

Giant magnets made by ancient microbes discovered in Bay of Bengal

Scientists have unearthed giant magnetofossils — large magnetic crystals left behind by microorganisms — buried in 50,000-year-old sediment in the Bay of Bengal1. They are the youngest giant magnetofossils reported till now. Magnetotactic bacteria create nanometre-sized crystals, composed of magnetite or greigite, to navigate changing redox conditions in the water column or saturated sediment. The crystals, known as magnetofossils, are left when the organisms die. These fossils contribute to sediments' magnetic signal, offering information about changes in past environments. Scientists led by **CSIR-National Institute of Oceanography**, Goa, extracted a sediment core almost 3 metres long from the southwestern Bay of Bengal, fed by the sediment-carrying Godavari, Krishna and Penner rivers.
Source: **Nature**

Polymers in microplastics may pose risk to Indo-Gangetic plain: Study

Polymers in microplastics may pose a risk to the Indo-Gangetic plain, a study on rivers Ganga and Yamuna by the Goa-based **CSIR-National Institute of Oceanography** has concluded. The study titled A comprehensive assessment of macro and microplastics from Rivers Ganga and Yamuna: Unveiling the seasonal, spatial and risk factors', has been published in the Journal of Hazardous Materials'. The researchers behind the study have said that their findings could serve as a starting point for the action plan required by municipal corporations to tackle plastic pollution and target the possible sources. As per the study, conducted by a team led by Dr Mahua Saha, Principal Scientist, **CSIR-National Institute of Oceanography (CSIR-NIO),** microplastics were detected in Ganga from Haridwar to Patna, with the concentration of the pollutant being higher during the wet (rainy) season than the dry season.
Source: Business Standard

Wastewater contributing to microplastics in Mandovi river: Goa-based CSIR-NIO's study

Wastewater from homes, commercial establishments, markets and vessels used for entertainment purposes like casinos contribute to the abundance of microplastics in Mandovi river and onward in the Arabian Sea, a study by the Goa-based **CSIR-National Institute of Oceanography (NIO)** has found. As part of the study titled 'Unraveling the land-based discharge of microplastics from sewers to oceans – A comprehensive study and risk assessment in wastewaters of Goa', researchers investigated the level of microplastics in wastewater and their potential risks to the ecosystem in Goa. In the study, which has been published in the Science of the Total Environment Journal, the

researchers have said the discharge of microplastics into the coastal waters assumes the role of a precursor for their presence in the coastal environment of Goa.
Source: Theprint

NIO seeks corporate funds for study on aquaculture, healthcare

Recognising the potential impact of corporate investment in research and development (R&D), Goa-based **CSIR-National Institute of Oceanography (NIO),** has welcomed corporations to utilise their corporate social responsibility (CSR) funds to advance research activities. The institute has proposed utilising these funds for publicising **CSIR-NIO** technologies to help society on critical aspects such as waste management in aquaculture, healthcare and livelihood. **CSIR-NIO** is also leading the study of toxicity in the ecology. It is also focusing on environmental testing, potency of biological products such as drilling fluids, muds, oil spill dispersants, and industrial effluents.
Source: Times of India

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Source: Times of India

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Source: Hindupost

Final phase of sample collection & health check-up camps underway at CSIR-NIO Goa under Nationwide Health Monitoring Project PI-CHeCK

In a significant move towards understanding and mitigating the rising incidence of cardiometabolic disorders in the Indian population, the **Council of Scientific and**

Industrial Research (CSIR) has launched the 'Phenome India-**CSIR** Health Cohort Knowledgebase' (PI-CHeCK). This landmark initiative aims to assess the risk factors and incidence of non-communicable diseases, particularly cardiometabolic disorders, through the establishment of a longitudinal health cohort. The final phase of sample collection and health check-up camps is currently underway at the CSIR-National Institute of Oceanography in Dona Paula, Goa, from 27th May to 2nd June 2024. This phase marks a crucial step in completing the initial data collection process. The PI-CHeCK programme, inaugurated on 7th December 2023, focuses on gathering comprehensive health data from **CSIR** employees, pensioners, and their spouses over an initial period of five years. By leveraging the widespread distribution of **CSIR** laboratories across the country, the programme ensures a representative sampling across various states, contributing to a robust and diverse health knowledge base.
Source: Pib

Joint Indo-China study traces history of weakening monsoon back to 12 million years

Even as India and China are slugging it out on the Himalayas and the Indian Ocean for regional supremacy, ocean scientists from Beijing and Goa have collaborated for an international study that examine the erratic rains caused by weak monsoon, which we have been witnessing in recent times due to climate change, traced back as far as 12 million years. This study titled, 'Weakening of the South Asian summer monsoon linked to inter-hemispheric ice-sheet growth since 12 Ma', gives insights into the changing pattern of the monsoon system, caused by climate warming. It has been published in the journal 'Nature Communications'. The study has been co-authored by Zhengquan Yao and Xuefa Shi, from the First Institute of Oceanography, Ministry of Natural Resources, Qingdao, China; Zhengtang Guo from Key Laboratory of Cenozoic Geology and Environment, Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, China along with B Nagender Nath from **CSIR-National Institute of Oceanography (NIO),** Goa and others.
Source: Heraldgoa

CSIR to Organize 'Phenome India Unboxing 1.0' to Mark the Conclusion of the First Phase of the Longitudinal Health Monitoring Project

The **Council of Scientific and Industrial Research (CSIR)** has announced the successful conclusion of the first phase of its groundbreaking longitudinal health monitoring project, the 'Phenome India-**CSIR** Health Cohort Knowledgebase' (PI-CHeCK). To mark this significant milestone, **CSIR** is organizing a special event, 'Phenome India Unboxing 1.0', at the **National Institute of Oceanography (NIO),** Goa, on 3rd June 2024. The event will be graced by Dr. N. Kalaiselvi, Director General of CSIR and Secretary, Department of Scientific and Industrial Research (DSIR), who will address the press and highlight the achievements of the project. Launched on 7th December 2023, the PI-CHeCK project aims to assess risk factors in non-communicable (cardio-metabolic) diseases within the Indian populace. This unique initiative has already enrolled nearly

10,000 participants, who have volunteered to provide comprehensive health data. These participants include **CSIR** employees, pensioners, and their spouses.
Source: Pib

CSIR's 'Phenome India' Project Hits Target with 10,000 Samples Collected, Aims for New Era in Precision Medicine

The **Council of Scientific and Industrial Research (CSIR)** announced the successful conclusion of the first phase of its groundbreaking longitudinal health monitoring project, the 'Phenome India-**CSIR** Health Cohort Knowledgebase' (PI-CheCK). To mark this significant milestone, **CSIR** organized a special event, 'Phenome India Unboxing 1.0', at the **National Institute of Oceanography (NIO),** Goa today, 3rd June. Dr. Souvik Maiti Director, **CSIR-Institute of Genomics and Integrative Biology (IGIB),** Dr. Sunil Kumar Singh, Director at **CSIR-National Institute of Oceanography (NIO),** Dr. Shantanu Sengupta, Senior Principal Scientist at **CSIR-IGIB,** Dr. Rajendra Prasad Singh, Senior Principal Scientist at CSIR and Dr. Viren Sardana, Senior Scientist at Centre of Excellence for Intelligent Sensors and Systems were among the dignitaries present.
Source: Pib

BITS Goa, NIO and NIT Calicut join hands to explore deep-sea plumes

Researchers from BITS Pilani Goa Campus, **CSIR-National Institute of Oceanography (NIO),** and NIT Calicut are collaborating on a project to explore deep-sea plumes using autonomous underwater vehicles (AUVs). Deep-sea plumes are areas of warm, cloudy water that can rise several hundred meters above the vent sites found at the ocean bottom. The project aims to better understand ocean phenomena and their impact on climate change, and will delve into aspects such as underwater communication, fleet control, and navigation techniques. Through advanced technologies, researchers hope to establish observatories and collect real-time data for improved ocean monitoring and prediction. The plumes could be salinity, turbidity, temperature gradient, particulate, or colour gradient. “Together the team will be preparing the acoustic algorithm using the AUV developed by **CSIR-NIO** to track the plumes. We will conduct a real-time test of the plumes in still waters first before venturing into deep sea,” said **CSIR-NIO** director, Sunil Kumar Singh.
Source: Times of India

CSIR की ‘फेनोम इंडिया’ परियोजना ने 10,000 नमूने एकत्र कर लक्ष्य हासिल किया, सटीक चिकित्सा में नए युग की शुरुआत का लक्ष्य

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद (CSIR) ने अपनी अभूतपूर्व अनुदैर्ध्य स्वास्थ्य निगरानी परियोजना, ‘फेनोम इंडिया-सीएसआईआर हेल्थ कोहोर्ट नॉलेजबेस’ (पीआई-चेक) के पहले चरण के सफल समापन की घोषणा की। इस महत्वपूर्ण उपलब्धि को यादगार बनाने के लिए, सीएसआईआर ने आज 3 जून को गोवा के राष्ट्रीय समुद्र विज्ञान संस्थान (एनआईओ) में एक विशेष कार्यक्रम ‘फेनोम इंडिया

अनबॉक्सिंग 1.0' का आयोजन किया। **सीएसआईआर-इंस्टीट्यूट ऑफ जीनोमिक्स एंड इंटीग्रेटिव बायोलॉजी (आईजीआईबी)** के निदेशक डॉ. सौविक मैती, **सीएसआईआर-नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी (एनआईओ)** के निदेशक डॉ. सुनील कुमार सिंह, **सीएसआईआर-आईजीआईबी** के वरिष्ठ प्रधान वैज्ञानिक डॉ. शांतनु सेनगुप्ता, **सीएसआईआर** के वरिष्ठ प्रधान वैज्ञानिक डॉ. राजेंद्र प्रसाद सिंह और सेंटर ऑफ एक्सीलेंस फॉर इंटेलिजेंट सेंसर्स एंड सिस्टम्स के वरिष्ठ वैज्ञानिक डॉ. वीरेन सरदाना उपस्थित गणमान्य व्यक्तियों में शामिल थे।

Source: Insamachar

NIO study finds substantial concentration of microplastics along Eastern Arabian Sea coast

Substantial presence of microplastics (MPs) have been found along the Eastern Arabian Sea, with maximum presence of these pollutants off Mumbai, Cape Comorin (Kanyakumari) and Goa coasts, shows a latest study by **CSIR-National Institute of Oceanography (NIO),** Goa. "In the Arabian Sea scenario, as plastic waste travels from offshore and land-based areas, it tends to accumulate in coastal regions, especially in the Indian Ocean's (IO) coastlines (west coast of India). Hence, this is our first comprehensive research on MPs accumulation in the IO, especially in the Eastern Arabian Sea (EAS)," said Mahua Saha, Principal Scientist at **CSIR-NIO** (Department of Chemical Oceanography). "This study deals with the mapping of these MPs, which was essential to understand their abundance and sources in the EAS shelf area. Ecologically, EAS is known for its rich and diverse marine ecosystems, supporting a wide variety of marine species and providing a substantial portion of the global fisheries industry," Saha said.
Source: Heraldgoa

NIO shares microbial technology with Cochin University

Goa-based **National Institute of Oceanography (NIO)** has transferred its advanced microbial consortia technology to MSortia LLP, a startup of Cochin University of Science and Technology, Kerala, on Tuesday. In aquaculture, where fish and shrimp are raised in ponds, keeping the water clean and safe is therefore crucial. But as more fish are grown in these ponds, managing wastewater becomes a challenge. Marine isolates were chosen from a pool of approximately 3,000 bacterial strains, isolated from various marine ecosystems and maintained at the Marine Microbial Reference Facility at **NIO's** regional centre in Kochi," the **NIO** stated. They can break down waste in aquaculture ponds and help keep the water clean – called the microbial consortia technology. This technology has been put to the test. "Extensive testing and validation were conducted in shrimp culture ponds across Kerala, Karnataka, and Gujarat, demonstrating the efficacy of the microbial consortia in improving water quality and promoting healthier aquatic ecosystems," the **NIO** stated.
Source: Times of India

CSIR-NIO's Cutting-Edge Microbial Technology Promises Healthier Aquaculture

The **Council of Scientific and Industrial Research - National Institute of Oceanography (CSIR-NIO)** has successfully transferred its groundbreaking microbial consortia technology to MSortia LLP, a faculty startup of Cochin University of Science and Technology, Kochi, Kerala. This strategic collaboration marks a significant advancement in sustainable aquaculture practices. The microbial consortia technology, developed by **CSIR-NIO,** addresses a critical challenge in aquaculture by providing an effective solution for wastewater treatment, thereby protecting the health of cultivated aquatic animals. This innovative technology leverages marine bacteria isolated from diverse ecosystems to revolutionize water quality management in aquaculture operations. Developed through **CSIR-NIO's** research programs, the technology aims to translate scientific findings into practical applications beneficial to society.
Source: Pib

NIO to study state's beach carrying capacity

With an objective of balancing tourism with conservation of environment, the state government has directed the **National Institute of Oceanography (NIO)** to prepare a comprehensive proposal for scientific study on the carrying capacity of the state's renowned beaches. The decision comes after almost an eight-year hiatus since the last assessment and is aimed at addressing the changes that have occurred in sea morphology and coastal areas over the past decade. The need for a fresh assessment stems from the evolving coastal landscape of Goa. Over the past years, the state's beaches have undergone significant alterations due to natural processes, tourism-related activities, and climate change impact. The existing study, carried out by National Centre for Sustainable Coastal Management (NCSCM), no longer accurately reflects the current coastal reality, necessitating a new evaluation to ensure sustainable development while preserving the fragile coastal ecosystem.
Source: Navhindtimes

NIO scientist gets prestigious Indo-German award for AI in oceanography

Sadaf Ansari, Senior Scientist at the Marine Instrumentation Division (MID) of **National Institute of Oceanography (NIO)** Goa, has been awarded the prestigious Indo-German WISER Award 2024 by the Indo-German Science & Technology Centre to undertake research in use of Artificial Intelligence (AI) in oceanography, in Germany. The project titled 'AI-Driven Advanced Plankton Analysis for Ocean Monitoring' will be conducted with Prof Rainer Kiko, Heisenberg, Professor and Group Leader of the Plankton Biogeochemistry and Dynamics Group at the GEOMAR Helmholtz Centre for Ocean Research in Kiel, Germany. Her project will span three years. The award is designed to fund innovative research in the STEM fields (Science, Technology, Engineering, and Mathematics). Reacting to the achievement, Ansarasi said, "Receiving such awards is very encouraging, as it shows that your research is being appreciated and funded. I am very passionate about Artificial Intelligence (AI). This award is a recognition of my hard

work, dedication, and contributions to the field of AI in oceanography. It acknowledges my efforts and motivates me to break new ground in my research."
Source: Heraldgoa

Innovate in energy fields to combat climate change, CSIR-NIO Chief Scientist urges IIPE students in Visakhapatnam

Council Of Scientific and Industrial **Research–National Institute Of Oceanography (CSIR-NIO)** Visakhapatnam Regional Centre Chief Scientist V.V.S.S. Sarma has urged the students of Indian Institute of Petroleum & Energy (IIPE) to innovate in energy fields to combat climate change. Otherwise, he cautioned that it will have a cascading effect on the future generations. He participated as the chief guest at the fourth convocation of the IIPE here on Saturday. Delivering the convocation address, Prof. Sarma stressed on adopting ethical practices in the energy sector as it can impact millions of lives and have a long-lasting consequences on environment. He urged the graduates to drive the digital transformation of the energy industry. As part of the 'Make in India,' promotion, Prof. Sarma urged for creation of trust on the Indian products in the global market. IIPE Director Shalivahan and Registrar Ram Phal Dwivedi, faculty, staff, students and their parents, and guests participated in the event.
Source: The Hindu

NIO to assess carrying capacity of beaches

Environment Minister Aleixo Sequeira told the Goa Legislative Assembly that the **National Institute of Oceanography (NIO)** has been asked to conduct a new assessment of the carrying capacity of Goa's beaches and that the government will decide whether to conduct a similar study for the entire State after receiving the report. According to Sequeira, the government has also chosen a Dutch business to restore the beaches that have been harmed by coastal erosion. "We have requested permission from the External Affairs Ministry in Delhi to proceed with signing the Memorandum of Understanding with this company," Sequeira stated in response to the debate concerning the requests for funding related to the departments he oversees, including Legislative Affairs, Environment and Climate Change, and Law. According to Sequeira, the government established the Climate Change Cell, which is in charge of creating a "State Action Plan for Climate Change," since it recognizes the ecological threat that the state faces.
Source: Goemkarponn

NIO celebrates Independence Day with patriotic enthusiasm

CSIR-National Institute of Oceanography (CSIR-NIO), Goa, marked the 78th Independence Day with various activities organised with vibrant patriotic enthusiasm, on Thursday, August 15. The festivities began at the **NIO** campus at Dona Paula, Panaji, with the institute's Director Prof. Sunil Kumar Singh reviewing the parade and then ceremoniously hoisting the Tricolour. This was followed by the National Anthem and a patriotic song, setting an uplifting and inspiring tone for the occasion. The highlight of the

events was the parade, conducted by the security staff and children. In his Independence Day address, Prof. Singh talked about the significance of the day and highlighted the NIO's notable achievements. He emphasized the institute's crucial role in addressing global warming and climate change and urged the scientists and researchers to intensify their research and development efforts to confront these pressing challenges.
Source: Pib

Microplastics found in internal organs of Penguins in Antarctica

Research by scientists from different organisations including the **CSIR-National Institute of Oceanography** here has confirmed the presence of microplastics in the gastrointestinal tracts of Adelie Penguin in Antarctica, hinting at the "impending emergence of microplastic hotspots" in Antarctic ecosystems. The study, published in the "Science of the Total Environment" journal last week, claimed to be the first comprehensive examination of microplastics across various tissue types, gastrointestinal tracts and scat samples obtained from Adelie Penguins inhabiting mainland Antarctica. The research was conducted by a team of scientists including Mahua Saha, Shrayan Bhattacharjee, Chayanika Rathore, Akshata Naik, Praveen Tudu, Prabir Ghosh Dastidar, Subarna Bhattacharyya, Jacob de Boer and Punarbasu Chaudhuri from research institutes including **CSIR-NIO,** University of Calcutta, Ramakrishna Mission Vivekananda Centenary College (Autonomous), Academy of Scientific and Innovative Research (AcSIR), SGT University, Polar Science Division of the Ministry of Earth Sciences (MoES), School of Environmental Studies of Jadavpur University, and Vrije University, Netherlands.
Source: Deccanherald

CSIR-NIO holds workshop on harnessing potential of marine venom in Mumbai

The Goa-based **CSIR-National Institute of Oceanography (CSIR-NIO)** in collaboration with Hindi Vidya Prachar Samiti's Ramniranjan Jhunjhunwala College at Ghatkopar in Mumbai held a comprehensive workshop exploring the possible therapeutic applications of marine venom. The workshop titled Harnessing the power of marine venom: Research and outreach was attended by experts from across the country. It marked a significant advancement in both scientific research and public safety, according to a press statement. The workshop focused on identifying venomous marine organisms and developing strategies to manage their venom risks while promoting conservation. This effort helps safeguard marine biodiversity and coastal communities, underscoring the growing importance of marine venom research. With its potential for breakthroughs in drug discovery, biotechnology, and environmental conservation, marine venom, which is found in creatures like jellyfish, sea anemones, and cone snails, offers a rich source of bioactive compounds for therapeutic applications.
Source: Deccanherald

Antibiotic-resistant bacteria present in Mandovi, Zuari estuaries: NIO

A recent study undertaken by the **National Institute of Oceanography (NIO)** has found worrying levels of antibiotic-resistant bacteria in the Mandovi and Zuari estuaries, raising serious concerns over risk to public health. Researchers from the **Council of Scientific and Industrial Research (CSIR)** and the NIO found that some bacterial isolates showed resistance to up to 15 out of 16 antibiotics tested, with Multiple Antibiotic Resistance (MAR) index values as high as 0.94. Bacteria with more than 0.2 MAR index value are considered to be highly harmful to individuals exposed to these microbes. The findings of the study call for a more integrated approach to urban planning, waste management and environmental conservation to mitigate the risks posed by the antibiotic-resistant bacteria and to maintain the ecological balance of these crucial estuarine systems. The study, titled 'Seasonal variations in water quality and antibiotic resistance of microbial pollution indicators in the Mandovi and Zuari estuaries, Goa, India,' was conducted by six NIO researchers led by principal scientist Durbar Ray.
Source: **Navhindtimes**

One innovation, three solutions: NIO devises new tech to convert plastic into biodiesel and protect environment

With the country grappling with plastic pollution, depleting petroleum reserves and global warming due to burning of fossil fuel, the **CSIR-National Institute of Oceanography (NIO)** has devised a new technology that can deal with the three problems in one go. It will convert plastics into biodiesel using marine bacteria, which will have low carbon emissions. This would be possible through a novel integrated bioreactor system, designed by Abhay B Fulke, Senior Scientist at the **NIO's** Microbiology Division. The study on the technology's efficacy has been published in the Elsevier journal 'Bioresource Technology'. "This study mainly focuses on biodegradation of various types of plastics and comprises two major parts - plastic remediation using highly efficient indigenous marine bacteria Pseudomonas mendocina ABF786 and conversion of the by-product carbon dioxide (CO2), obtained from bacterial degradation of plastics to microalgal biodiesel. We have also mapped the whole genome of marine bacteria Pseudomonas mendocina ABF786, representing the plastic-degrading enzyme and genes," Fulke said.
Source: **Heraldgoa**

तेजस एयरक्राफ्ट बनाने में अहम भूमिका निभाने वाले सीएसआईआर को 82 वर्ष हुए पूरे

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआईआर) की स्थापना को 26 सितंबर को 82 वर्ष पूरे हो चुके हैं. इसे 1942 में भारत में विज्ञान और तकनीकी क्षेत्र में अनुसंधान के लिए स्थापित किया गया था, जिससे कि घरेलू उद्योगों का समर्थन किया जा सके. वर्तमान में **सीएसआईआर** भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के तहत आता है. इसका नाम दुनिया के सबसे बड़े पब्लिक फंडेड अनुसंधान संस्थान में गिना जाता है. मौजूदा समय में **सीएसआईआर** के पास 37 नेशनल लैब, 39 आउटरीच सेंटर और एक इनोवेशन कॉम्प्लेक्स है. वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद की लैब में हजारों वैज्ञानिक,

शोधकर्ता और सहायक कर्मचारी कार्यरत हैं. प्रमुख लैब में **सेंटर फॉर सेल्युलर एंड मॉलिक्यूलर बायोलॉजी** (हैदराबाद), **सेंट्रल इलेक्ट्रॉनिक्स इंजीनियरिंग रिसर्च इंस्टीट्यूट** (पिलानी), **सेंट्रल इंस्टीट्यूट ऑफ माइनिंग एंड फ्यूल रिसर्च** (धनबाद), **नेशनल एयरोस्पेस लैबोरेट्रीज** (बेंगलुरु), **नेशनल इंस्टीट्यूट ऑफ ओशनोग्राफी** (गोवा) और **नेशनल बोटैनिकल रिसर्च इंस्टीट्यूट** (लखनऊ) शामिल हैं. **सीएसआईआर** की प्रमुख उपलब्धियों में हल्के लड़ाकू विमान (एलएसी) तेजस का विकास, सुपर कंप्यूटर फ्लाईसॉल्वर का विकास, एचआईवी संक्रमण के इलाज के लिए अपेक्षाकृत सस्ती एंटीरेट्रोवायरल दवा का निर्माण शामिल है, जिसने अन्य बड़ी कंपनियों को एचआईवी की दवाओं को सस्ता करने पर मजबूर कर दिया.

Source: Indias.news

CSIR-NIO Celebrates 83rd Foundation Day with Open Day Event

CSIR-NIO Celebrates 83rd Foundation Day with Open Day Event Dona Paula, Goa – The **Council of Scientific and Industrial Research-National Institute of Oceanography (CSIR-NIO)** celebrated the 83rd Foundation Day of **CSIR** by hosting an Open Day on its campus. Around 1000+ students and teachers from 32 schools attended the 83rd foundation day which included an Interactive sessions with scientists and laboratory visits the meeting also included the Screening of ocean science films to promote awareness the meeting also aimed at inspiring next-generation scientists “Engaging with young minds is crucial for fostering curiosity and innovation,” said Dr. S. W. A. Naqvi, Director, **CSIR-NIO.** Students interacting with **CSIR-NIO** scientists during the Open Day event.

Source: Aizgoanews

CSIR-NIO's study on microplastics reveals extent of pollution on Goa coast

The **CSIR-National Institute of Oceanography's** study on microplastics over the last decade has been instrumental in uncovering the extent of pollution on Goa's coast. The **CSIR-National Institute of Oceanography (NIO)** in Dona Paula began its research on microplastics in 2013-14 with the partial support of the state and Central governments. A team of researchers led by principal scientist Dr Mahua Saha has been collecting samples from beaches littered with plastic bottles and other waste to study the presence and impact of microplastics. Talking to PTI, **CSIR** director Dr Sunil Kumar Singh said the problem is that microplastics in water (rivers and sea) have started making their way into food and entering human bodies. He said plastic waste breaks down into microplastics, enters the water system, and subsequently into the food chain through fish and other marine life consumed by humans. The **NIO** has established the country's first laboratory dedicated to microplastic research.

Source: Business Standard

Plants grow better, produce more fruits in soil treated with fish waste: NIO study

The **National Institute of Oceanography’s (NIO)** new research revealed that the soil treated with fish waste helped plants grow better, producing more flowers and fruits. Marine ecologist Kirtani Palekar and her team treated fish waste with formic acid, which

turned it into a liquid. This liquid was then dried and tested on three types of soil— regular, soil mixed with vermicompost, and soil with dried fish silage. “We found that the plants in fish waste soil were healthier and fruits tastier than in the other two,” Palekar told TOI. Organoleptic tests showed that fruits from these plants also had more nutrients, such as carbohydrates and proteins. However, she said that the project is still being tested, and they need to find ways to reduce the fish smell that might attract rodents. “There is a possibility that rodents may be attracted to the crop due to fish smell. The next step in this study is to eliminate the odour of the fish,” she said.

Source: **Times of India**

NIO holds Open Day to celebrate 83rd Foundation Day of CSIR

The **Council of Scientific and Industrial Research-National Institute of Oceanography (CSIR-NIO)** celebrated the 83rd Foundation Day of the **CSIR** by organizing an Open Day on its campus at Dona Paula today, September 26, 2024. On the occasion, over 1000 students along with their teachers from 32 different schools visited the institute and interacted with staff and visited laboratories. The **NIO** also screened various films related to ocean sciences with the motto of creating awareness among the students about the topics. As part of the events, a talk on ‘Careers in Oceanography’ was delivered for the students of standards XI and XII in the **NIO** auditorium. The students also visited an exhibition on marine resources and instruments put up by the institute on its campus as part of the celebration with an aim to create awareness about the scientific endeavours in ocean research being carried out by the institute.

Source: **Goemkarponn**

माइक्रोप्लास्टिक पर सीएसआईआर-एनआईओ के अध्ययन से गोवा तट पर प्रदूषण का पता चला

सीएसआईआर-राष्ट्रीय समुद्र विज्ञान संस्थान द्वारा पिछले दशक में माइक्रोप्लास्टिक पर किए गए अध्ययन ने गोवा के तट पर किस हद तक प्रदूषण है, इसे उजागर करने में महत्वपूर्ण भूमिका निभाई है। डोना पाउला स्थित **सीएसआईआर-राष्ट्रीय समुद्र विज्ञान संस्थान (एनआईओ)** ने राज्य और केंद्र सरकारों के आंशिक सहयोग से 2013-14 में माइक्रोप्लास्टिक पर अपना शोध शुरू किया था। **सीएसआईआर** की प्रमुख वैज्ञानिक डॉ. महुआ साहा के नेतृत्व में शोधकर्ताओं की एक टीम प्लास्टिक की बोतलों और अन्य कचरे से अटे पड़े समुद्र तटों से नमूने एकत्र कर रही है, ताकि माइक्रोप्लास्टिक की मौजूदगी और प्रभाव का अध्ययन किया जा सके। **वैज्ञानिक और औद्योगिक अनुसंधान परिषद (सीएसआईआर)** के निदेशक डॉ. सुनील कुमार सिंह ने कहा कि समस्या यह है कि पानी (नदियों और समुद्र) में मौजूद माइक्रोप्लास्टिक भोजन में और मानव शरीर में प्रवेश करने लगे हैं। उन्होंने कहा कि प्लास्टिक कचरा माइक्रोप्लास्टिक में टूट जाता है, जल प्रणाली में प्रवेश करता है, तथा तत्पश्चात मछलियों और अन्य समुद्री जीवों के माध्यम से मनुष्यों द्वारा खाए जाने वाले खाद्य श्रृंखला में प्रवेश करता है।

Source: **Latestly**

Navika Sagar Parikrama voyage to help NIO to further research in marine microplastics: Navy chief

Chief of Naval Staff, Admiral Dinesh K Tripathi said on Wednesday the Navika Sagar Parikrama II expedition will contribute towards progressing national scientific research in collaboration with **National Institute of Oceanography (NIO)** for study on marine microplastics and ferrous content across the seas. “I am pleased to note that Navika Sagar Parikrama will contribute towards progressing national scientific research in collaboration with **NIO** for study on marine microplastics and ferrous content across the seas; Wildlife Institute of India for exploration on MegaFaunas or large sea mammals; Sagar Defence for their drones that promise us spectacular visuals of the voyage; and Defence Food Research Laboratory towards providing customised precooked Indian meals so that our valiant warriors always feel at home,” Adm Tripathi said. Speaking at the flagging off ceremony of the expedition, the Navy chief lauded the Navy women officers - Lieutenant Commander (Lt Cdr) Dilna K and Lt Cdr Roopa A, who will be circumnavigating the globe on the sailing boat INSV Tarini.

Source: **Heraldgoa**

Goa-based NIO finds microplastics in Antarctica’s Adelie penguins

Microplastics have infiltrated even the most remote regions of our planet, with alarming new evidence emerging from Antarctica. A recent study conducted by a team of researchers led by Mahua Saha, principal scientist, **CSIR-National Institute of Oceanography (NIO Goa),** on the Adelie penguin on Svenner Island, unveiled the presence of microplastics in its organs and gastrointestinal tissues. Microplastics are tiny bits of plastic that are less than 5mm in size—about the size of a grain of rice or smaller. They come from many sources, like discarded plastic bags, bottles, and even from clothes. As a result, despite its isolation from significant human activity, the Antarctic region is not immune to the pervasive threat of microplastic pollution. During the 39th Indian expedition to Antarctica, scientists of the **CSIR-NIO**, Goa, and the University of Calcutta, West Bengal, collected an adult Adelie penguin carcass, meticulously dissected it at the Bharti Research Station, Antarctica, and scientists at **CSIR-NIO** Goa examined its body samples to look for microplastics. They found that most of the plastic they discovered was in the form of fibres—long, thin pieces that are often found in clothing and fishing gear.

Source: **Times of India**

India to host 9th ocean science conference in Goa

The **CSIR-National Institute of Oceanography (NIO),** Goa, is hosting the international Surface Ocean-Lower Atmosphere Study (SOLAS) Open Science Conference from Nov 11 to 14. This ninth SOLAS conference is being conducted for the first time in India. SOLAS OSCs are conducted every two years and are governed by SOLAS, which has a collection of multidisciplinary scientists worldwide. Leading experts in the field of surface ocean and lower atmosphere discuss the latest scientific developments. The inaugural

session of the ninth SOLAS OSC is being held on Nov 11 at 8.30am at the **NIO** auditorium, Dona Paula, Goa. The inaugural will be followed by three discussion sessions intended to provide an informal opportunity for roundtable discussions of SOLAS-related topics with the aim of furthering collaborations and research. SOLAS also plans to launch a mentorship programme in mid-2025 to connect early career scientists (ECS) with established researchers across multiple disciplines. So, an open session at the OSC is designed to gather feedback to shape the programme's design and implementation.
Source: Times of India

Global experts convene in Goa for SOLAS-OSC 2024 to tackle climate change

Scientists and experts from 20 countries have come together to address the crucial issue of climate change and the way ahead. During the ongoing 9th International Surface Ocean-Lower Atmosphere Study (SOLAS) Open Science Conference (SOLAS-OSC 2024), held in Goa, experts are likely to come up with an updated Science Plan for 20 years to combat climate change. Held in India for the very first time, the Conference, presently underway at the **National Institute of Oceanography (NIO)** will focus on the critical interactions between the surface ocean and lower atmosphere, with a particular emphasis on climate change. Prof. Sunil Kumar Singh, Director **NIO** expressed his gratitude for the opportunity to host the event, emphasizing the importance of SOLAS in addressing global climate challenges. "SOLAS studies the interaction between the surface ocean and lower atmosphere, and in today's climate change context, these studies have become incredibly relevant," said Singh. The conference will provide a platform for international collaboration, with discussions centred on mitigating climate change and promoting sustainable solutions. This year's focus is on SOLAS 3.0, the updated science plan aimed at addressing global challenges such as ocean deoxygenation.
Source: Thegoan

River Godavari's contribution to the Oxygen Depletion in the Bay of Bengal

A new study, which appeared in Frontiers in Marine Science, section Marine Biogeochemistry on 4 Nov. 2024, sheds light on the complex interplay between riverine discharge and marine ecosystems in the coastal central Bay of Bengal, revealing that the Godavari River, India's third largest (largest monsoonal river in India), intensifies oxygen-depleted zones (ODZ) or dead zone near its river mouth in the Bay of Bengal. While the impact of major rivers like the Ganges and Brahmaputra on the Bay of Bengal has been extensively studied, this latest research underscores the importance of relatively smaller River Godavari, which can also have a significant impact on the intensification of ODZ. Dr. Sreejith, now a scientist at the **Council for Scientific and Industrial Research – National Institute of Oceanography (CSIR-NIO)** Goa, largely carried out this work at the Centre for Earth, Ocean and Atmospheric Sciences, University of Hyderabad (UoH) during his tenure as a Research Associate under the mentorship of Prof. K. Ashok and Prof. Sreenivas P This work was accomplished in collaboration with Dr. Feba Francis

from the UoH, Dr. V.V.S.S. Sarma of the **CSIR-NIO**, Visakhapatnam, and Prof. Ibrahim Hoteit of the King Abdulla University of Science and Technology, Saudi Arabia.
Source: UoH Herald

UoH study finds low oxygen levels in the water off the Godavari River mouth

Bay of Bengal, a vital fishing ground, is prone to seasonal hypoxia, a condition characterised by low oxygen levels in the water off the Godavari River mouth region immediately after the summer monsoon. This phenomenon may severely impact marine life, including fish kills, migration, and habitat degradation, says a new study led by researchers from the University of Hyderabad (UoH). The study found that during the monsoon season, when the Godavari experiences peak discharge, large amounts of organic matter from dead trees/plants or soil are carried into the sea. The river water also carries significant amounts of nutrients to the coast that enhance phytoplankton production, said an official release. It showed that Godavari river, country's third largest (largest monsoonal river in India), intensifies Oxygen-Depleted Zones (ODZ) or dead zone near its river mouth in the Bay of Bengal. The work involved an analysis of river discharge data from the river at the Dowlaiswaram barrage and high-resolution biogeochemistry recorded Array for Real-Time Geostrophic Oceanography (ARGO) buoys in Bay of Bengal. Sreejith, now a scientist at the **Council for Scientific and Industrial Research - National Institute of Oceanography (CSIR-NIO)** Goa, carried out this work at the Centre for Earth, Ocean and Atmospheric Sciences, UoH during his tenure as a research associate under the mentorship of Prof. K. Ashok and Prof. Sreenivas P.
Source: The Hindu

Tidal ocean surface wave height rises up to 13.5 m during cyclones in Indian waters: NIO

Tidal ocean surface waves generated by the tropical cyclones reach up to 8.1 to 13.5 m height, finds a study by **CSIR-National Institute of Oceanography (NIO),** which can hit the marine facilities of coastal States like Goa and also affect fishing activities since fishing vessels cannot operate during such high waves. "We undertook this study as understanding ocean wave characteristics is important, particularly to ensure the safety of marine activities and assess risk management and preparedness. The marine structures have to withstand extreme waves. Tropical cyclones cause bad weather and high waves that can cause problems to maritime activities and damage to marine facilities," Chief Scientist at **CSIR-NIO**, Department of Ocean Engineering division, V Sanil Kumar told O Heraldo. The study titled High waves measured during tropical cyclones in the coastal waters of India, has been published in the Ocean Engineering Journal and co-authored by A Anusree. Waves generated due to the cyclone also affect fishing activities since fishing vessels cannot operate during high waves. Hence, it is important to know how many days the high waves generated by the cyclone will be present at a location, Sanil Kumar said.
Source: Heraldgoa

NIO hosts conclave on ecology, environment, earth, ocean sciences and water

The **CSIR-National Institute of Oceanography (CSIR-NIO)**, in collaboration with **CSIR-NEERI,** Nagpur; **CSIR-NGRI**, Hyderabad; and **CSIR-CSMCRI,** Bhavnagar, hosted a stakeholder conclave on Ecology, Environment, Earth, Ocean Sciences and Water (E3OW). The event, organised in a hybrid mode, was held at the **CSIR-NIO,** Dona Paula, as a part of the 'One Week One Theme' campaign of the **CSIR**, which aims to showcase and strengthen research and technological advancements aligned with national priorities. The event brought together industry representatives, academic partners, and research scientists to foster collaborations and advance research and development (R&D) initiatives. The inaugural session was chaired by Dr. Atul Vaidya, Director, **CSIR-NEERI** and Prof Sunil Kumar Singh, Director of **CSIR-NIO**, alongside Dr Prakash Kumar, Director, **CSIR-NGRI,** and Dr Kannan Srinivasan, Director, **CSIR-CSMCRI.** The leaders emphasised the critical role of stakeholder engagement in developing impactful technologies and achieving the Government of India's Vikasit Bharat 2047 vision. A significant highlight of the conclave was the signing of a Non-Disclosure Agreement between **CSIR-NIO** and The Kelp Agro and Minerals, Raigad, to develop Type II collagen from jellyfish. This pioneering technology, developed by Dr Supriya Tilvi and her team at **CSIR-NIO**, offers promising applications in biomedicine and nutraceuticals.
Source: **Heraldgoa**

NIO finds large cobalt reserves in Indian Ocean, boosts India's renewable energy hopes

The **CSIR-National Institute of Oceanography (NIO)** has found large deposits of dissolved cobalt, an important micro-nutrient for ocean productivity, in the northern Indian Ocean off the coast of India. If properly harnessed, this discovery can help in realising the country's ambitious target of meeting 50% of its primary energy needs from renewable energy by 2030 to combat climate change. Incidentally, the two adjacent oceans, the Pacific and the Atlantic, do not have such high cobalt content. Cobalt is a key component in batteries for electric vehicles and magnets used in wind turbines and other green technology. Small deposits are known to exist in Odisha and Jharkhand, but India's reserves remain relatively modest. Currently, there are no active mining leases for cobalt, nickel, lithium, and neodymium in the country for production purposes. The lack of sufficient reserves of this precious metal poses a major obstacle to the country's clean energy transition plans. "Presently, there is no production of cobalt in the country from primary cobalt resources. The demand for cobalt is usually met through imports. In the climate change scenario, when we are going to decrease or eliminate the usage of power generated by coal or petroleum products, we have to go for renewable energy. We need to have energy storage devices like batteries, for which cobalt will be necessary," **NIO** Director Sunil Kumar Singh told O Heraldo.
Source: **Heraldgoa**

India's two leading ocean research institutions are in Goa

Being a destination for spice trade during the olden days, Goa has had a rich maritime history spanning centuries. So, it is but natural that the State has a long-standing seafarers' tradition and is also home to two noteworthy oceanographic institutions where scientists are at the forefront of conducting scientific research on marine life and ocean dynamics. First Indian Ocean Expedition The First International Indian Ocean Expedition (IIOE-1) was carried out between 1959 to 1965 from Kochi (Kerala). A total of 46 research vessels, both Indian and foreign, and researchers from 13 countries participated in the expeditions and collected various marine samples. This was the initiation of large-scale oceanographic investigations in India. **NATIONAL INSTITUTE OF OCEANOGRAPHY** Subsequently, on January 1, 1966, the **National Institute of Oceanography (NIO)** was founded in Goa. It is located at Dona Paula, North Goa, where the Mandovi and Zuari rivers meet the Arabian Sea. The **NIO** is one of the 39 constituent institutions, governed by the **Council of Scientific & Industrial Research (CSIR,** New Delhi), that study an array of scientific issues such as pharma products, leather, food, metallurgy, mining, natural products, instrumentation and many more.
Source: **Gomantaktimes**

'Industry engagement needed in environmental solutions'

Ajit Kumar Saxena, CMD of Moil, highlighted the critical need for expertise in addressing environmental challenges and stressed the importance of industry involvement in environmental problem-solving. He called for practical solutions and emphasised the necessity of societal engagement in tackling these complex issues. Saxena was the chief guest at the Green Horizon Summit-2024 hosted by **CSIR-NEERI** at its auditorium on Tuesday. **NEERI** collaborated with CII to launch the 'One Week One Theme' campaign focusing on E3OW (Ecology, Environment, Earth and Ocean Sciences and Water). The event featured prominent leaders including JNARDDC director Anupam Agnihotri, CII Vidarbha Zone chairman Shailesh Awale, **CSIR-NEERI** director Atul Vaidya, **CSIR-NIO** director Sunil Singh, **CSIR-CSMCRI** director Kannan Srinivasan, CII Vidarbha Zone vice chairman Shree Jamdar, and **CSIR-NEERI** senior principal scientist Amit Bansiwal. Saxena emphasised that while there are many environmental issues, there is a lack of adequate expertise, making events like this essential to bridge the gap. He commended the participation of the Confederation of Indian Industry (CII), highlighting the importance of direct engagement with industry to tackle environmental challenges effectively. Saxena expressed hope that pragmatic and implementable solutions would emerge from such events to address issues related to ecology, environment, and water. He also underscored the need to involve society, as environmental problems are both pervasive and complex.
Source: **Times of India**

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CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)

CSIR- NIScPR, UBA, VIBHA, DSIR and Jawaharlal Nehru Rajkeeya Mahavidyalaya, Port Blairjointly organized Two day Workshop cum Training on "Making Value Added Products Using CSIR Technologies in Andaman Region"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with Unnat Bharat Abhiyan (UBA), Vijnana Bharati (VIBHA), Department of Scientific and Industrial Research (DSIR), and Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM) jointly organized a two-day Workshop cum Training on "Making Value Added Products Using **CSIR** Technologies in Andaman Region" at Jawaharlal Nehru Rajkeeya Mahavidyalaya (JNRM), Port Blair, Andaman & Nicobar Islands from 11-12 January 2024. The workshop aimed towards providing training and exposure to farmers and women self-help groups (SHGs) and aspiring entrepreneurs on **CSIR** Technologies like making value added products from Pandanusfruitusing technology developed by **CSIR-Institute of Himalayan Bioresource Technology (IHBT);** Decentralized Solar Thermal Dryer for Hygienic Drying of Food Products developed by **CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI),** Dehumidified Dryer Technology by **CSIR-NIIST** Trivandrum and Managing Fungus Problems in Betel Nuts technology developed by CSIR-Institute of Himalayan Bioresource Technology (IHBT).

Source: Pib

IISF 2023 presents Vigyanika, the science literature festival

The India International Science Festival, IISF 2023 presents Vigyanika- science literature festival with the primary objective of showcasing India's scientific prowess and charting a comprehensive roadmap for effective communication of S&T achievements. The event is going to be held at the Regional Centre for Biotechnology (RCB) – Translational Health Science and Technology Institute (THSTI) campus, Faridabad, Haryana, on 18thand 19th January, 2024. **CSIR-National Institute of Science Communication and Policy Research (NIScPR**), National Innovation Foundation-India (NIF), and Vijnana Bharati (VIBHA) are the coordinating organisations. The planned sessions on 18th January 2024 include a scientific session on the theme "Science and Technology Public Outreach in India." Prof B N Jagatap, Senior Professor, IIT Bombay will chair the session. The experts include Dr. Dinakar M. Salunke, Former Director, International Centre for Genetic Engineering and Biotechnology (ICGEB), Prof KC Bansal, Former Director, National Bureau of Plant Genetic Resources (NBPGR); and Prof (Dr) Uma Kumar, All India Institute of Medical Science (AIIMS), New Delhi.

Source: Pib

CSIR-NIScPR shows its commitment for Science Communication in Indian Languages

Vigyanika : Science Literature Festival is being held as a part of India International Science Festival 2023. The inaugural ceremony on 18th January 2024 began with the Welcome address by Prof. Ranjana Aggarwal, Director, **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR),** New Delhi. Prof. Aggarwal highlighted the importance of scientific temper and **CSIR-NIScPR's** commitment to foster scientific awareness. Emphasising the importance of science communication in Indian languages through diverse mediums like puppetry and poems, she underscored Vigyanika's role as a platform for networking among scientists and science enthusiasts. Dr. Dinakar M. Salunke, Former Director, ICGEB and DBT-RCB, Dr. Subhra Chakraborty, Director, National Institute for Plant Genome Research, New Delhi, and Shri. A Jayakumar, Vijnana Bharati, were the distinguished guests of the inaugural ceremony. Prof. Salunke emphasised the importance of increasing scientific temper and acknowledged that the gap between common masses and scientists should be bridged through various inclusive efforts such as Vigyanika.

Source: **Pib**

KAMP Students Shine at the Indian International Science Festival 2023 - Vigyanika Event by CSIR-NIScPR

In a remarkable display of scientific prowess and artistic flair, more than 100 students from Knowledge & Awareness Mapping Platform (KAMP) participated in the Indian International Science Festival (IISF) 2023 - Vigyanika Event, organized by **CSIR-National Institute of Science Communication & Policy Research (NIScPR).** The event unfolded on January 19th, 2024, at the prestigious DBT THSTI - RCB Campus, situated within the NCR Biotech Science Cluster in Faridabad, Haryana. In an exciting convergence of knowledge and creativity, students from distinguished institutions including Jain Bharati Mrigavati Vidyalaya, Universal Public School, Delhi Public School, R.K. Puram and S.D. Public Secondary School passionately showcased their extraordinary talents at the Vigyanika Event. These budding talents engaged in intellectually stimulating Quiz and Drawing competitions, providing a glimpse into the diverse and exceptional skills fostered by these institutions.

Source: **Pib**

CSIR-NPL Marks its 78th Foundation Day

CSIR-National Physical Laboratory (CSIR-NPL) commemorated its 78th Foundation Day with a grand celebration held on Thursday, January 4th, 2024. The event was graced by esteemed dignitaries and luminaries from the scientific community, witnessed a series of impactful sessions and significant announcements. The National Physical Laboratory is one of the earliest national laboratories set up under the Council of Scientific and Industrial Research, the foundation stone of which was laid on the 4th January 1947. The celebration kicked off with the ceremonial lamp lighting, symbolizing the illumination of knowledge and innovation. Prof. Venu Gopal Achanta, Director, **CSIR-NPL,** extended a

warm welcome, setting the tone for an insightful day. He also shed light on the recent developments and activities of **CSIR NPL.** The event featured distinguished guest addresses by Dr. Ranjana Aggarwal, Director, **CSIR-NIScPR,** New Delhi, and Dr. Viswajanani J Sattigeri, Head, **CSIR-TKDL**, New Delhi.
Source: Pib

Manipur's Kombirei flower: A new addition to Indian Flora

Kombirei, a religiously associated flower of Manipur which had been misidentified for a long time, has been finally identified as Japanese iris (Iris laevigata) and has become a newly added flower to the Indian flora, according to the latest edition of the Indian Journal of Traditional Knowledge. The January 2024 edition of the journal, published under the Council of Science and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR), said Iris laevigata Fisch has not been reported earlier, from India and this being the first record from Manipur, it is a new addition to the flora of India.
Source: Assam Tribune

CSIR-NIScPR organised events on the Open Day as part of its Foundation Day Celebrations

CSIR-National Institute of Science Communication and Policy Research (NIScPR) was established on January 14, 2021. To mark its third anniversary, CSIR-NIScPR is hosting the third foundation day on February 8-9, 2024 at Pusa, New Delhi. On February 8, 2024, the Open Day, as part of the Foundation Day Celebrations, the institute organised two events simultaneously, namely, Interaction with PhD scholars, Student-Scientist Connect Program and Poster Presentation Competition for PhD scholars of **CSIR-NIScPR.** The Chief Guest of the Day was Prof. Deepak Kumar, Member, Research Council of CSIR-NIScPR and formerly Prof. of JNU and Senior Scientist **with CSIR-National Institute of Science, Technology and Development Studies (NISTADS).** He motivated the PhD students of CSIR-NIScPR through his speech. He shed light on the importance of teaching and research. He said "Research and teaching must go together. And to be a good researcher, one must be a good teacher as well.
Source: Pib

CSIR-NIScPR Celebrates the Foundation Day

The **Council of Scientific and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** celebrated its Foundation Day with a dynamic event showcasing a commitment to advancing science communication, STI policy research, innovation, and research. The institute, under the directorship of Prof. Ranjana Aggarwal, marked the occasion with significant events and collaborative endeavours. Prof. Yogesh Singh, Vice Chancellor of the University of Delhi and Member of **CSIR** Society, was the Chief Guest of the Foundation Day Programme. Prof. Singh delivered an inspiring Foundation Day Lecture on "Rising India: Future of India." He appreciated **CSIR-NIScPR's** vision to become a globally respected think tank and resource center for policy research, innovation, and science communication. Prof. Singh

emphasized the integral role of science communication in India's journey towards becoming a Vikasit Bharat.
Source: Pib

INYAS organised 9th Annual General Body Meeting

Indian National Young Academy of Science (INYAS) has organised its ninth Annual general Body Meeting on February 17th. Prof. Ranjana Aggarwal, Director of **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** joined this program as the Guest of Honour. On the occasion, Prof. Aggarwal delivered an insightful talk and discussed the key objectives and activities of **CSIR-NIScPR.** She spoke how the science communication is important to inculcate scientific temperament in society. She also release the annual newsletter of INYAS. INYAS is the only recognised academy of young scientists in India which was established in 2014 with a vision to promote Science education and networking among Young Scientists. After successfully completing an incubation period of five years, INYAS entered a new phase, since 2020.
Source: Pib

CSIR-NIScPR organizes Workshop on Effective Science Communication Strategies

The **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** hosted an Orientation Workshop in New Delhi today, empowering its Science Media Communication Cell (SMCC) with valuable insights from renowned experts. The workshop aimed to equip the SMCC with effective strategies to communicate science and technology (S&T) related information of Indian science to the public. Dr. Dipendra Mazumder, Faculty, National Academy of Broadcasting and Multimedia (NABM), Prasar Bharati shared his experiences on "Communicating S&T information effectively via radio," highlighting the power of this medium to reach diverse audiences across the nation. He elaborated on the activities of All India Radio to effectively communicate science to the public.
Source: Pib

CSIR-NIScPR Organizes Workshop on “How to Spread Science-based Stories though Radio

The **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** hosted an Orientation Workshop today, empowering its Science Media Communication Cell (SMCC) with valuable insights from renowned expert. The workshop, held at Vivekananda Hall, **CSIR-NIScPR,** Pusa, New Delhi, aimed to train the SMCC staff as well as the Ph.D. students with effective strategies to communicate S&T stories to the public through radio. Shri Manoj Mainkar, Program Executive at All India Radio, New Delhi Station shared his valuable insights on crafting compelling science narratives for the audio format. He delved into the essential elements of vocal delivery, including voice quality (VQ), Voice emotional quotient (VEQ), and texture. He addressed the importance of clear pronunciation, engaging delivery, and effective use of modern spoken language both English and Hindi to connect with diverse audiences and make science stories come alive for radio listeners.
Source: Pib

CSIR-NIScPR Organizes Workshop on how to Communicate Science in Print and Electronic Media

The **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** hosted an Orientation Workshop in New Delhi today, empowering its Science Media Communication Cell (SMCC) with valuable insights from renowned experts. The workshop aimed to nurture the SMCC with effective strategies to communicate science and technology (S&T) information of Indian science to society and public at large. Director of CSIR-NIScPR Prof. Ranjana Aggarwal underscored the significance of leveraging electronic media for science communication, emphasizing its role in bridging the gap between scientific research and the public.
Source: Pib

National Science Day celebrations at CSIR-NIScPR

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) organised a lecture in New Delhi today to celebrate the National Science Day 2024. The chief guest for the occasion was Dr. Shiv Kumar Sharma, National Organising Secretary, VIBHA. Dr. Rajni Kant, Former and Founder Director, ICMR-Regional Medical Research Centre, Gorakhpur delivered the keynote address. The welcome address was given by Prof. Ranjana Aggarwal, Director **CSIR-NIScPR.** Prof Aggarwal spoke about the importance of harnessing indigenous knowledge and technology for achieving scientific progress in India. She also talked about the importance of health communication for disease management such as during the COVID-19 pandemic and also highlighted the importance of science communication for health campaigns. Dr. Sharma spoke about the importance of indigenous technology for Indian society and the need to identify indigenous knowledge and technology and integrate this knowledge into current science practices.
Source: Pib

CSIR-NIScPR hosted Expert Review Meeting on 'Millets for Sustainable Health in India'

CSIR-National Institute of Science Communication and Policy Research (NIScPR) organised a landmark Expert Review Meeting in New Delhi yesterday under the project titled "Enhancing Nutritional Security and Sustainable Health through Millets in India: A Policy Perspective". The event brought together key experts from the millet industry, researchers, and policy domains to discuss the development of the millets value chain in India. The session commenced with a warm welcome address by Dr. Naresh Kumar, Chief Scientist of **CSIR-NIScPR,** followed by a thought-provoking keynote speech on the "Development of Millets Value Chain in India: Perspectives and Way Forward" by Dr. Dayakar Rao B, Principal Scientist at ICAR-Indian Institute of Millets Research, Hyderabad.
Source: **Pib**

CSIR-NIScPR Organized Workshops on how to communicate Science by using right S&T Terminology through Electronic and social media

The **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** hosted an Orientation Workshops on 6 March 2024, empowering its Science Media Communication Cell (SMCC) with valuable insights from renowned experts. The workshops, held at **CSIR-NIScPR,** Pusa, New Delhi, aimed to nurture the SMCC with effective strategies to communicate science and technology (S&T) information of Indian science to society and public at large. Dr. Ashok Selwatkar, Assistant Director at the Commission of Scientific and Technical Terminology (CSTT), shared his knowledge on the role of technical terminology in S&T dissemination. He also trained the workshop participants in the usage of the latest scientific and technical terminology of various scientific domains. Attendees gained an in-depth understanding of the importance of using technical terms in S&T communication to enhance the public awareness about the complex scientific concepts.
Source: **Pib**

CSIR-NIScPR organised "Phenome India" - A Unique Health Check-up Camp

The **Council of Scientific and Industrial Research (CSIR)** has initiated a unique health check –up camp called 'Phenome India' (PI-CHeCK) for the **CSIR** family. The key objectives of this initiative of **CSIR** are to ensure "Swasthya Bharat Viksir Bharat" through health and wellness check. **CSIR** is one of the largest research and development organisations of India and this is a network of 37 laboratories situated across the whole country. **National Institute of Science Communication and Policy Research (NIScPR)** is one of the constituent laboratories of **CSIR** which organized the PI-CHeCK health check-up camp from 3 to 5 March 2024 at its Pusa Campus, New Delhi.
Source: **Pib**

Breaking barriers: CSIR-NIScPR conducts a workshop to promote Science Communication in Assamese

CSIR-National Institute of Science Communication and Policy Research (NIScPR) organised today a virtual workshop on "Interactive and New Approaches to Communicate Science in Assamese" covering popular science writing, video, podcast and social media. The workshop sought to connect aspiring and experienced science communicators in Assamese to establish a network within the field. Leading and budding science communicators, teachers and researchers representing various universities, institutions and colleges from Assam attended the workshop. The workshop commenced with an introduction by Dr. Paramananda Barman, Scientist, CSIR-NIScPR and coordinator of the workshop. Prof. Ranjana Aggarwal, Director, CSIR-NIScPR delivered the welcome address.
Source: **Pib**

DG CSIR visited CSIR-NIScPR, inaugurated newly constructed Main Gate of Institute and Chaired SVASTIK Monitoring Committee Meeting

The **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** celebrated a significant milestone with the inauguration of its Main Gate at its Pusa Campus on March 21st, 2024. Dr. N. Kalaiselvi, Director General of CSIR and Secretary of DSIR inaugurated the ceremony. Prof. Ranjana Aggarwal, Director of **CSIR-NIScPR,** delivered a welcome address, and said, "The **CSIR-NIScPR** has been taken up

a number of initiatives in the recent times. The establishment of the Science Media Communication Cell (SMCC) was a pivotal step towards streamlining the dissemination of R&D breakthroughs across Indian labs. Creating a single window for this purpose was crucial, and SMCC has excelled in fulfilling this role. National Knowledge Resource Consortium and SVASTIK are other very promising initiatives of the institute."
Source: Pib

Council of Scientific & Industrial Research (CSIR)- National Institute of Science Communication and Policy Research (NIScPR) organizes a national workshop to celebrate World Intellectual Property Day

The **Council of Scientific & Industrial Research - National Institute of Science Communication and Policy Research (CSIR-NIScPR)** organized a national workshop and celebrated World Intellectual Property Day. The theme of the workshop was "IP and SDGs: Innovating for a Shared Future." The event, held at the seminar hall of **CSIR-NIScPR** S.V. Marg campus, New Delhi, was attended by over 250 school students and featured presentations from five outstanding innovators who were also felicitated for their contributions to technology and entrepreneurship. Coordinator of the workshop Dr. Kanika Malik (Senior Principal Scientist at **CSIR-NISCPR)**, provided an insightful introduction to Intellectual Property Rights, emphasizing the importance of protecting innovations for national development. She explained how school students can venture into this field and take it as a career option.
Source: Pib

A lecture titled "Health and Sanitation: Both are linked together" held at the National Institute of Science Communication and Policy Research (NIScPR) of the Council for Scientific and Industrial Research (CSIR)

Prof. Shridhar Dwivedi, Senior Consultant Cardiologist & Head of Academics at National Heart Institute delivered a lecture titled "Health and Sanitation: Both are linked together" at the **National Institute of Science Communication and Policy Research (NIScPR)** of the **Council for Scientific and Industrial Research (CSIR),** New Delhi today during the Swachhata Pakhwada. The lecture was held on the second day of the 15 days programme of Swachhata Pakhwada organized by **CSIR-NIScPR** at the institute's Vivekananda Hall and drew attention to the intrinsic connection between cleanliness and overall well-being. In his address, Prof. Shridhar Dwivedi emphasized the importance of not only physical health but also mental and spiritual well-being. He pointed out that all religions encourage cleanliness and urged the audience to continue the healthy habits adopted during the COVID-19 pandemic. Prof. Dwivedi's message resonated with the attendees, highlighting the need for a holistic approach to health that includes proper sanitation practices and a balanced lifestyle.
Source: Pib

Council of Scientific and Industrial Research (CSIR) - Jigyasa Hosts Student-Science Connect program on Climate Change

Jigyasa Division of the **Council of Scientific and Industrial Research (CSIR)-National Institute of Science Communication and Policy Research (NISCPR)** hosted a Student-Science Connect program titled "Impact of Climate Change: Food and Water Sustainability" today at the Vivekananda Hall, **CSIR-NISCPR** campus, New Delhi. The program aimed to engage school students and inspire action towards sustainability through science education. A total of 55 students participated in the program from two schools: Kendriya Vidyalaya BSF Camp Chawla and Cambridge School, Srinivaspuri, New Delhi. Prof. Ranjana Aggarwal, Director, **CSIR-NISCPR** said, "In response to the pressing issue of climate change, we have launched the 'Wrinkle Achche Hain' campaign in which staff will wear non-ironed clothes to encourage energy conservation. Our goal is to raise awareness about climate change and inspire students to actively participate in environmental conservation and energy-saving practices. Through this student-science connect program, we are dedicated to nurturing a generation that is aware of their environmental impact and equipped to make a positive difference."
Source: Pib

WAH! CSIR scientists say 'Wrinkles Achhe Hain' to fight climate change

Do you wear an un-ironed shirt or saree to work, by design? What if that's the memo? Scientists of **Council of Scientific and Industrial Research (CSIR),** India's largest civilian network of research labs, are turning up in wrinkled clothes on Mondays, wearing their green consciousness on their crumpled sleeves. "In a step towards energy saving, **CSIR** introduced 'Wrinkles Achhe Hain (WAH) campaign wherein **CSIR** workforce can wear un-ironed clothes on Mondays. The council and its constituent laboratories...have joined the campaign to remind everyone about saving energy, protecting the environment and spreading awareness about climate change," **CSIR** said. "Let's iron out climate change, not our clothes!" **CSIR's National Institute of Science Communication and Policy Research (NIScPR)** posted on X.
Source: Times of India

The Council of Scientific and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR) organizes a workshop on 'Science and Technology Communication' in collaboration with Global Health Strategies (GHS)

The **Council of Scientific and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** organized a workshop on 'Science and Technology Communication' in collaboration with Global Health Strategies (GHS) on 11th June 2024 at Pusa campus, New Delhi. The **CSIR-NIScPR** is a constituent laboratory under the Council of Scientific and Industrial Research, Ministry of Science and Technology, Government of India. The organized workshop is a one-of-a-kind initiative that brought together science communicators, scientists and educators from various backgrounds to discuss how scientists and researchers can interact with the media and use social media platforms to communicate technical evidence and research in simpler terms. Prof. Ranjana Aggarwal, Director, **CSIR-NIScPR**, while addressing the workshop

emphasized the need for such collaborative efforts to promote scientific understanding. She also highlighted the need to continue such initiatives in the future to ensure continued growth.

Source: Pib

CSIR-NISCPR ने ग्लोबल हेल्थ स्ट्रैटेजीज (GHS) के सहयोग से 'विज्ञान एवं प्रौद्योगिकी संचार' पर कार्यशाला आयोजित किया

वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद-राष्ट्रीय विज्ञान संचार एवं नीति अनुसंधान संस्थान (सीएसआईआर-एनआईएससीपीआर) ने ग्लोबल हेल्थ स्ट्रैटेजीज (जीएचएस) के सहयोग से 11 जून 2024 को पूसा परिसर, नई दिल्ली में 'विज्ञान एवं प्रौद्योगिकी संचार' पर एक कार्यशाला आयोजित किया। सीएसआईआर-एनआईएससीपीआर भारत सरकार के विज्ञान और प्रौद्योगिकी मंत्रालय के वैज्ञानिक और औद्योगिक अनुसंधान परिषद के अंतर्गत एक घटक प्रयोगशाला है। आयोजित कार्यशाला एक अनूठी पहल है, जिसमें विभिन्न पृष्ठभूमियों से विज्ञान संचारकों, वैज्ञानिकों और शिक्षकों को एक साथ लाया गया, ताकि इस बात पर चर्चा की जा सके कि वैज्ञानिक और शोधकर्ता मीडिया के साथ कैसे बातचीत करें और तकनीकी साक्ष्य और शोध को सरल शब्दों में संप्रेषित करने के लिए सोशल मीडिया प्लेटफॉर्म का कैसे उपयोग कर सकते हैं।

Source: Insamachar

Council of Scientific and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR) celebrates Yog Mahotsav with Focus on 'Yoga for Self and Society'

Council of Scientific and Industrial Research-National Institute of Science Communication and Policy Research (CSIR-NIScPR) under Department of Science and Technology (DST) inaugurated its 'Yog Mahotsav', today at NIScPR campus in New Delhi. 'Yog Mahotsav' is a four-day festival from 18th to 21st June celebrating the essence of Yoga in enhancing personal and societal well-being. This event aligns with the International Yoga Day 2024 celebrations and emphasizes the theme 'Yog for Self and Society'. The **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** is a constituent laboratory under the Council of Scientific & Industrial Research, Ministry of Science and Technology, Government of India. It is dedicated to science communication, policy research, and the promotion of scientific awareness among the public.

Source: Pib

The Council of Scientific and Industrial Research -National Institute of Science Communication and Policy Research (CSIR-NIScPR) and National Chemical Laboratory (NCL) jointly organised OWOT campaign on 'TRL Assessment and Patent Landscaping of Energy Technologies'

The **Council of Scientific and Industrial Research (CSIR),** under the Department of Science and Technology has organised 'One Week One Theme (OWOT)' campaign from 24 June 2024, across its 37 labs in India. Union Minister of State (independent Charge) for Science & Technology, Earth Sciences, MoS PMO, Ministry of Personnel public grievances and pensions, department of atomic energy and space Dr. Jitendra Singh inaugurated One Week One Theme (OWOT) Campaign in the presence of DG **CSIR** Dr. N. Kalaiselvi at India habitat Centre, New Delhi. Dr. Jitendra Singh also unveiled the OWOT logo along with launch of **CSIR** products, signing of MoUs and 12 Thematic Technology Transfers. OWOT is an initiative aimed at showcasing the wide-ranging thematic research and innovations across its numerous laboratories. This program serves as a platform to highlight **CSIR's** diverse contributions to scientific and industrial advancements in India and to engage with various societal sectors.
Source: Pib

Teacher-Training Program at CLRI- CHENNAI

CSIR-Central Leather Research Institute, Chennai organized a 5-day teacher-training program "Cultivating Scientific Temperament through Innovative Leather Technology and Sustainable Practices" from June 24-28, 2024 in association with Knowledge and Awareness Mapping Platform (KAMP) an alliance partner of the **CSIR- National Institute of Science Communication and Policy Research (CSIR-NIScPR),** with Industrial Partner M/S Nysa Communications Pvt. Ltd. (NCPL), Noida. During the training period, various lectures were organised on (1) Significance of leather and its impact on national growth in terms of revenue and employment generation, (2) Need of new footwear sizing system for India and its advantages, (3) Management of liquid and solid waste of the industries as well as domestic using circularity model, (4) Usages of leather-like materials derived from agricultural waste and (5) Healthcare research activities and products by the Scientist of the Institute.
Source: Pib

CSIR recognises DPS Bokaro as Centre of Excellence in Jharkhand

The **Council of Scientific and Industrial Research (CSIR)** has recognized Delhi Public School (DPS) Bokaro as the 'Centre of Excellence' in Jharkhand for Scientific Innovation. A school official said the Bokaro institution has been recognized as a Centre of Excellence for the exceptional performance of the students in the Knowledge and Awareness Mapping Platform (KAMP) exam. DPS Bokaro has consistently secured top positions in the state for the past two years. KAMP is one of the major initiatives of **CSIR** and **NIScPR** KAMP is one of the major initiatives of **CSIR** and the **National Institute of Science Communication Policy Research (NIScPR),** Department of Scientific and Industrial Research, Government of India. Impressed by the outstanding excellence of the students and their innovative capabilities, KAMP has set up an Exclusive Artificial Intelligence (AI) and Robotics Laboratory on the campus.
Source: Thejharkhandstory

Rashtriya Hindi Vigyan Sammelan 2024: Promoting Scientific research in Hindi Language

The **Council of Scientific and industrial Research-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal, in collaboration with Vijnana Bharati Madhya Bharat Province, the Madhya Pradesh Council of Science and Technology, Bhopal, Madhya Pradesh Bhoj (Open) University, Bhopal; **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR),** New Delhi, and Atal Bihari Vajpayee Hindi University, Bhopal, organized the "Rashtriya Hindi Vigyan Sammelan 2024," continuing the tradition of previous years. This was the fourth edition of the conference, held on July 30-31. The conference's primary aim was to offer a platform for researchers to present and discuss their work in Hindi, fostering the popularisation of science and technology through this language. The event was inaugurated by Dr. Mohan Yadav, Chief Minister of Madhya Pradesh, who emphasised the importance of advancing knowledge and science in our own language. "We can become a VishwaGuru only through knowledge and science in our own language," stated Dr. Yadav, expressing his hope for the conference to evolve into an international event.
Source: Pib

CSIR, APCTT-UN ESCAP and WAITRO jointly organized Conclave on Policy Deliberations for Strengthening South-South Cooperation

CSIR in partnership with APCTT-UN ESCAP (Asian and Pacific Centre for Transfer of Technology), and WAITRO (World Association of Industrial & Technological Research) organized a Conclave on Policy Deliberations for Strengthening South-South Cooperation on 11th September 2024 in online mode. The programme was designed and coordinated by **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** with **CSIR-International International S&T Affairs Directorate (CSIR-ISTAD)** and hosted by **NIScPR**. The Conclave brought together several global institutions and eminent scholars from South countries. Head/Senior experts of major global institutions focusing on South countries: APCTT, WAITRO, ISTIC-UNESCO International Science– Framework for Ethical and Responsible Governance, West Asia North Africa Institute Jorden, UN Technology Bank for Least Developed Countries gave presentation in this conclave. Experts from various research institutions included National Research and Innovation Agency Indonesia, **CSIR-NIScPR, CSIR-ISTAD, CSIR-IMD** (Innovation Management Directorate), Wits Business School South Africa, National Research and Innovation Agency Indonesia, Computer Science Department-Delhi University, Indian Institute of Technology-Delhi, University of Nebraska –Lincoln USA, Institute for Studies in Industrial Development, Indian Institute of Science, Department of Science and Technology, Tshwanae Univ of Technology South Africa.
Source: Pib

CSIR-NIScPR, CSIR-CFTRI, UBA, and VIBHA organised Two day "Technology Showcasing and Networking Meet"

CSIR-National Institute of Science Communication and Policy Research (NIScPR), in collaboration with **CSIR-Central Food Technological Research Institute (CFTRI),** Unnat Bharat Abhiyan (UBA), and Vijnana Bharati (VIBHA), jointly organized a two-day "Technology Showcasing and Networking Meet of **CFTRI** Food and Millet Technologies" at **CSIR-CFTRI,** Mysuru from 19-20 September 2024. This event showcased **CSIR-CFTRI's** innovative food technologies aimed at enhancing rural livelihoods. As a pioneer in food science research, **CSIR-CFTRI** focuses on food processing, post-harvest technology, food safety, and nutraceuticals. Their technological advancements encompass a wide range of food products, including cereals, pulses, fruits, vegetables, dairy, meat, and fish. The primary objective of the event was to showcase and demonstrate the food technologies developed by **CSIR-CFTRI** for the benefit of stakeholders from rural areas of the country and how these technologies can be utilized to create livelihood opportunities in rural areas and promote sustainable development; to identify key challenges in food processing and agricultural productivity, and strategies to foster economic growth and food security in rural areas.
Source: Pib

CSIR-NIScPR signs MoU with Gurugram University to serve society through science

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) has signed an MoU with the Gurugram University at the **NIScPR's** Vigyan Sanchar Bhawan, Pusa Campus here. This MoU will open up new windows for both the institutions in the service of society. The key areas of this memorandum of understanding are science communication, STI policy research, traditional knowledge and many more. On the occasion of this MoU signing yesterday, the Director of **CSIR-NIScPR** and Vice Chancellor of Gurugram University shared their views about the significance and need of this MoU. Rajesh Kumar Singh Roushan, Controller of Administration, **CSIR-NIScPR** and Dr. Rajiv Kumar, Registrar, Gurugram University signed and exchanged the MoU. Dr. Sarala Balachandran, Chairperson, Department of Chemistry; Dr. Dwivedi, Head, Nursing; and Dr. Rakesh Yogi, Chairperson, Media Studies, Gurugram University also joined the programme.
Source: The Statesman

CSIR-NIScPR Commemorates 83 Years of Scientific Excellence of CSIR

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) celebrated the 83rd Foundation Day of **Council of Scientific and Industrial Research (CSIR)** today at National Agricultural Science Complex, Pusa, New Delhi. The event commenced with a welcome address by Prof. Ranjana Aggarwal, Director, **CSIR-NIScPR.** She said, "**CSIR** labs are actively engaged in all the areas of science and technology. At NIScPR, our focus is on bridging the gap between science and society. We publish 15 research journals and three popular science magazines, and we are striving to make our content accessible in all Indian languages. Notably, we've recently participated in the UN Assembly Science Summit." Distinguished guest Prof. (Dr.)

Sushma Yadav, Pro Vice-Chancellor, Central University of Haryana, in her address said, "**CSIR** strives to bridge the gap between science and industry. Historically, there has been a misconception that India lacks scientific temper, and **CSIR** has been working to dispel this notion. By promoting a scientific tradition that coexists with spiritual temper, we aim to create a harmonious blend of rational inquiry and cultural values."
Source: Pib

CSIR-NIScPR Celebrates 9thAyurveda Day with Emphasis on Integrating Traditional Wisdom and Modern Science

CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) today celebrated the 9thAyurveda Day, highlighting the importance of Ayurveda in modern healthcare.The event, held at **CSIR-NIScPR,** S.V. Marg Campus, began with a plantation program “Ek Ped Maa ke Naam,” followed by an inaugural address by Prof Ranjana Aggarwal, Director, **CSIR-NIScPR.** Prof Ranjana Aggarwal highlighted the significance of Indian knowledge system available in our country in the past especially Vedic Era. She spoke about Nalanda and Takshashila, the great ancient knowledge centres of India. Prof Aggarwal said that **CSIR-NIScPR** is coordinating a national initiative called SVASTIK (Scientifically validated societal traditional knowledge) and in this initiative, we bring out case studies and stories of Indian Traditional Knowledge and share those with society. Dr Monika Jaggi, Principal Scientist, **CSIR-NIScPR,** introduced the guest speaker, Dr. Bhavana Prasher, Senior Principal Scientist, **CSIR-IGIB,** New Delhi. Dr. Prasher delivered a special lecture on "Ayurgenomics and Prakriti: Innovative Integration of Traditional Wisdom and Modern Science for Personalized Healthcare."Dr. Suman Ray, Principal Scientist, proposed the vote of thanks.
Source: Pib

CSIR-NIScPR organizes Curtain Raiser of India International Science Festival (IISF) 2024

The India International Science Festival (IISF) 2024 Curtain Raiser organized by **CSIR-National Institute of Science Communication and Policy Research (NIScPR)** at Vivekanand Hall, Pusa Campus, marking the beginning of this mega science festival. Prof.Ranjana Aggarwal, Director, **CSIR-NIScPR,** delivered the welcome address, setting the tone for the festival, "Welcome to the 10th edition of the India International Science Festival. This curtain raiser program aims to inform all science students about this pivotal event. Notably, India's Constitution uniquely embodies scientific temper in Article 51A (h), fostering scientific temper, observation, and spirit of inquiry beyond scientific boundaries. We term it a festival because we celebrate science. IISF 2024 will showcase innovative exhibits, such as a moon replica at IISF that will be an attraction for all the participants especially students." The Chief Guest, Prof. A.C. Pandey, Director, UGC-Inter University Accelerator Centre, New Delhi, addressed the gathering, emphasizing the importance of science and technology in nation-building. Prof. Pandey said, “Celebrating festivals is deeply rooted in Indian culture. Science also has its compelling narrative. Bio-inspiration influences daily life and also Artificial Intelligence.

Source: Pib

International Conference on Communication and Dissemination of Traditional Knowledge begins

The International Conference on Communication and Dissemination of Traditional Knowledge began at Gurugram University today. The conference was jointly inaugurated by the Council of Scientific and Industrial Research **(CSIR)-National Institute of Science Communication and Policy Research (NIScPR)** and Gurugram University. Addressing the gathering at the conference, Director of **CSIR-NIScPR,** Professor Ranjana Aggarwal, provided an overview of SVASTIK (Scientifically Validated Traditional Knowledge), highlighting its significance in promoting scientifically validated Indian traditional knowledge. She added that **NIScPR** has disseminated socially engaging SVASTIK stories in 17 Indian languages through social media. The President of South Asian University, Professor K. K. Aggarwal, emphasized the need for interdisciplinary research and collaboration, where traditional knowledge is applied effectively. The inaugural session of the International Conference (CDTK-2024) also saw the release of the Souvenir and Abstract Book, along with two digital flipbooks: “Treasure of Indian Traditions: A Journey through Scientifically Validated Indian Traditional Knowledge” in Hindi and Punjabi languages.

Source: Newsonair

Gurugram University and CSIR-NIScPR Launch International Conference on Traditional Knowledge

The **CSIR-National Institute of Science Communication and Policy Research (NIScPR),** in collaboration with Gurugram University, inaugurated the International Conference on Communication and Dissemination of Traditional Knowledge (CDTK-2024) on November 13, 2024, at Gurugram University. The event attracted researchers, students, and global dignitaries focused on leveraging India’s rich cultural knowledge for modern scientific advancement. In his welcoming remarks, Prof. Dinesh Kumar, Vice Chancellor of Gurugram University, acknowledged the importance of CDTK-2024 as a platform to highlight Indian cultural legacies and adapt them to meet contemporary global needs. The conference emphasizes integrating traditional wisdom with modern science to solve today’s challenges. Prof. Ranjana Aggarwal, Director of **CSIR-NIScPR,** presented an introduction to SVASTIK (Scientifically Validated Traditional Knowledge), a national initiative led by **CSIR-NIScPR** to communicate validated Indian traditional knowledge to the public. She emphasized how SVASTIK has published engaging traditional knowledge stories in 17 Indian languages across social media and in two curated SVASTIK publications, aiming to inspire young minds to explore scientific perspectives embedded in cultural heritage.

Source: Devdiscourse

CSIR-NIScPR Takes Traditional Knowledge Global with CDTK 2024

CSIR-National Institute of Science Communication and Policy Research (NIScPR) and Gurugram University jointly hosted the International Conference on Communication and Dissemination of Traditional Knowledge (CDTK-2024) at Gurugram University, Gurugram on 13-14 November 2024. The conference's first day featured diverse sessions, including discussions on integrating traditional pedagogies into modern education, ethics in traditional knowledge research, and the science behind traditional agriculture and cuisine. Additional sessions explored sustainable traditional architecture, integrating ancient sciences into modern disciplines, and effective communication of traditional knowledge through the "Paramparik Gyan Sanchar: SVASTIK workshop. Following a successful inaugural day at CDTK 2024, the second day has featured remaining compelling sessions that delve deep into the realms of traditional knowledge research and communication. The Arogya Vidya session was chaired Prof. Bhushan Patwardhan, National Research Professor-AYUSH, SBPPU, Pune, who urged healthcare professionals to prioritize patient welfare above personal egos and adopt the best practices for humanity's benefit.

Source: Pib

CSIR-NIScPR Celebrated Janjatiya Gaurav Divas and Janjatiya Gaurav Varsh

The **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** celebrated Janjatiya Gaurav Divas and Janjatiya Gaurav Varsh on November 26, 2024 marking the 150th birth anniversary of Birsa Munda. Birsa Munda, a young freedom fighter and a tribal leader from the Munda tribe was born in 1875 at the village of Ulihatu in Ranchi district of Bengal Presidency – now in Khunti district of Jharkhand and died in 1900 in prison. During his lifetime, he actively raised his voices against British rule and fought for the liberation of the tribal groups. The Janjatiya Gaurav Divas is meant to observe the role of the tribal population in preserving India's heritage and advancing its progress, and ultimately integrating them into the mainstream society. The event was kick started after having brief introduction of Birsa Munda and its contribution in India's struggle for freedom by Dr. Yogesh Suman, Chief Scientist at **CSIR-NIScPR**. He also highlighted the role of Government in raising the livelihood standards of tribal population around the country by bringing into light the missions of Indian government like **CSIR** Aroma Mission, Unnat Bharat Abhiyaan and Heeng Cultivation Project. Dr. Suman Ray, Principal Scientist of **CSIR-NIScPR** discussed about **CSIR's** Aroma Mission and shared glimpses of study she and her team did to study socio-economic impact of this mission on tribal population.

Source: Pib

Media Portfolio Exhibition" provided platform to media students to showcase their creative work

The Department of Communication and Media Technology, in collaboration with the Training and Employment Cell of the University, organized "Media Portfolio Exhibition." This event showcased the creative and experimental endeavors of final-year undergraduate and postgraduate students from the Journalism and Mass Communication

program. The exhibition featured a diverse array of student work, including documentation, audio, and video projects, all of which highlighted the students' innovative spirit and technical prowess. Held at the Shakuntalam Hall, the exhibition attracted over 2,000 students from various educational institutions, colleges, and schools. The event was a vibrant celebration of media arts, leaving attendees in awe of the students' talent and creativity. The chief guest, Prof. K.G. Suresh, former Vice Chancellor of Makhanlal Chaturvedi National University Bhopal, inaugurated the exhibition by lighting the lamp. Dr. Ranjana Agarwal, Director of **CSIR-NIScPR,** also addressed the gathering, highlighting the exhibition's role in bridging traditional knowledge with scientific advancements. She expressed her admiration for the students' work, seeing in them the potential for future journalism.
Source: Impressivetimes

Two events 'S&T Media Conclave' and 'Vigyanika' being ready to discuss effective science communication strategies in IISF 2024, Guwahati

IISF 2024 has total 25 events that are planned to discuss Science and technology among every section of society but two of them play an important role because without them it is not possible to reach out to masses. These two events are S&T Media Conclave and Vigyanika which are being organized by **CSIR- National Institute of Science Communication and Policy Research (NIScPR),** a constituent organization of **CSIR** which is promoting science and technology activities of India. The Science and Technology Media Conclave 2024 and Vigyanika are inevitable events of IISF 2024 that aims to bring together scientists, journalists, and media professionals to discuss the importance of science communication and literacy in India. Scheduled to take place on December 1-2, 2024, the Media conclave promises to be a thought-provoking platform for science communicators which will feature a range of exciting sessions, including panel discussions, interactions, and a science mentalism show during two day scheduled program. The event is spread into 6 sessions, 3 on each day having various themes to cover every aspect of science communication and dissemination.
Source: Pib

Media works like a bridge between Science and Society

Science & Technology and Communicators Conclave inaugurated by Dr. Shri Shiv Kumar Sharma, National Organising Secretary, Vijnana Bharati in presence of Dr. Manoj Kumar Patairiya, former Director, **CSIR-NISCAIR** and Dr. K. Ramesha, Director, **CSIR-CECRI.** Issues of the Employment News periodical and Science India magazine released by these guestsin the S&T Media Conclave, an event of India International Science Festival 2024. This largest science festival of India is being organized at IIT Guwahati during 30th Nov to 3rd Dec 2024. Introduction of Media conclave was given by Debobrat Ghose and a Brief on the 2 day event was presented by Dr. Rajeev Singh. Dr. K. Ramesha, Director, **CSIR-Central Electro-Chemical Research Institute**, in his address said "IISF is a science festival is celebrated with people of the country. Media helps to take research into the people. Research done by scientists is mostly understood by research people

IISF request media to take the research into the public in the creative ways possible such that public understand the research work. Media is the key to communicate the research to the public. I request every media person to take these things into the public. Dr. Manoj Kumar Patairiya, former Director, **CSIR-NISCAIR** said, “Science Works as Method (methods of science) which includes curiosity, analysis, experimentation and verification. Same applies to Media, and in this way, the process of Media and science is same.
Source: Pib

IISF 2024: A Commitment to a Science-Led Future for India

The 10th India International Science Festival (IISF) held at IIT Guwahati was started from November 30th and culminated on December 4th, 2024. The 4-day mega science festival featured 24 different events in which 7000 delegates and 45000 people including large number of students participated. While Moon Replica hogged the limelight and pulled the crowd. It's a giant 10-metre high ‘real surface’ replica of #Moon erected at IIT Guwahati, showcasing India’s advancement in Space science. Through this event, IISF desires to raise public awareness on environmental issues. Two significant events in IISF 2024 discussed effective science communication S&T media strategies: first Vigyanika and second S&T Media Conclave. Vigyanika event played a pivotal role in disseminating science in simple language to the masses. Organized by **CSIR-National Institute of Science Communication and Policy Research (NIScPR),** these events aimed to bridge the gap between science communicators, scientists, journalists, and media professionals. IISF 2024 culminated with valedictory function in which Chief Coordinator of the event and Director of **CSIR-NIIST,** Dr. C. Anandharama Krishnan proposed vote of thanks to all the conveners, coordinating labs, Vijnana Bharati, student volunteers and delegates. In her presidential address, DG **CSIR** and Chairperson, Steering Committee, IISF 2024, Dr. N. Kalaiselvi remarked, “We have developed an action plan focused on North East activities in this IISF2024,” and announced that the winners of the S&T Hackathon will receive support from **CSIR**.
Source: Pib

Vigyanika: A Celebration of Science Literature and Communication Concludes at IISF 2024

The Vigyanika: Science Literature Festival one of the most prominent events of the IISF 2024, commenced on 1stDecember with an inspiring inaugural ceremony. This two day event was specifically focused on the theme “From Folklore to Future: An Indian Literary Exploration”. The session began with introductory remarks by Dr. Paramananda Barman, Scientist, **CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR)** and Coordinator, Vigyanika. Prof. Ranjana Aggarwal, Director, **CSIR-NIScPR**, delivered the welcome address, underlining the importance of Indian languages in science communication and the role of literature in shaping the Indian Science Narrative. Distinguished guests, including Dr. Dinesh Ch. Goswami, Dr. Jaideep Baruah, Director, Assam Science Technology & Environment Council, Dr. R. Vijay, Director, ARCI Hyderabad shared their valuable insights.Dr. Goswami discussed the journey of science

communication in Assam, by drawing support from historical texts, books, and science fiction. Dr. Vijay commented that science communication is must needed in Indian languages and should be interactive. The first scientific session of the festival, “Shaping Indian Science Narrative with Literature”, was chaired by Prof. Shekhar C. Mande, former DG **CSIR**.
Source: Pib

DG CSIR Dr. N. Kalaiselvi inaugurated newly renovated floor of CSIR-NIScPR and interacted with Scientists and Research scholars

CSIR-National Institute of Science Communication and Policy Research (NIScPR) inaugurated its newly renovated second floor at its premises in New Delhi on 13 December 2024. The inauguration was done by Dr. (Mrs.) N. Kalaiselvi, Director General, **CSIR** & Secretary, DSIR, Govt. of India. The renovated facilities at **CSIR-NIScPR** will further enhance the institute's capabilities in science communication and policy research. On this occasion, a tree plantation drive, “Ek Ped Maa Ke Naam” (A Tree in the Name of Mother), was also done. The drive aims to promote environmental conservation and sustainability. Prof. Ranjana Aggarwal, Director, **CSIR-NIScPR,** welcomed Dr. Kalaiselvi and other dignitaries. The Director emphasized the significance of **NIScPR's** programs, noting that this was the third visit of DG **CSIR** this year. She highlighted the institute's achievements, including awarding PhD degrees to 16 students and training 50 students in science communication and Science Technology Innovation Policy. **NIScPR** is the only institution in India that offers the PhD in science communication and science policy. Dr. N. Kalaiselvi, Director General, **CSIR** interacted with the scientists and research scholars of **CSIR-NIScPR** during an interactive session held at the Vivekananda Conference Hall. Dr. Kalaiselvi pointed out that **NIScPR** is the nodal institution of India to have been assigned an ISSN number for Indian journals.
Source: Pib

Go Back

CSIR-National Metallurgical Laboratory (CSIR-NML)

Lithium Battery Recycling Plant inaugurated at NML Jamshedpur

In a significant stride towards sustainable technology and resource management, Dr. V.K. Saraswat, Member of NITI Aayog, marked his maiden visit to **CSIR-NML** by inaugurating the Lithium Battery Recycling Plant. The ceremony took place at the Critical Metal Processing Pilot Scale Facility located at the Nildih Campus. R. Saravanabhavan (NITI Aayog), Dr. N.C. Murmu (Director, **CSIR-NML),** Dr. Sanjay Kumar, Dr. S. Sivaprasad, Dr. Pratima Meshram, and other key members involved in the battery recycling project graced the event. Dr. Saraswat commended the efforts put forth by the team and underscored the importance of transforming the plant into a larger capacity facility. He emphasized that such initiatives align with the Atmanirbhar vision, contributing to self-reliance in battery manufacturing, a critical component for the future of sustainable energy solutions.
Source: **Avenuemail**

CKP Kendriya Vidyalaya students visit CSIR-NML Jamshedpur

CSIR-National Metallurgical Laboratory (NML), Jamshedpur organized a laboratory visit of 139 Chakradharpur Kendriya Vidyalaya students accompanied by seven teachers with the objective to promote scientific awareness and Energy literacy among school students and by exposing them to the world of scientific research and innovation. This program was organized under the CSIR-Jigyasa Virtual Laboratory project. The welcome address was delivered by Dr. Sandip Ghosh Chowdhury, Chief Scientist & Head of MTE Division, **CSIR-NML.** He welcomed all present in the program and briefly mentioned the contribution of CSIR to the development of the nation through various technological developments and pioneering work.
Source: **Avenuemail**

CSIR-NML and KAMP Empower 150+ Teachers Nationwide with Cutting-Edge Experiential Learning Techniques in Science Education

On the 27th of February, a specialized online teacher training program took place, accommodating over 150 teachers from diverse schools, all across the nation. The program focused on the theme 'Fostering Experiential Learning in Science Education, Beyond the Textbook'. This event marked KAMP's fifth Continuous Professional Development program tailored for teachers in collaboration with the **CSIR-NML.** Participating educators engaged in comprehensive training sessions conducted by subject matter experts, covering various dimensions of science education. Through this program, the teachers received the opportunity to interact and learn from prestigious scientists, Dr. Sandip Ghosh Chowdhury (Chief Scientist and Head of Materials

Engineering Division at **CSIR-NML),** Dr. K. Gopala Krishna (Chief Scientist of Materials Engineering Division at **CSIR-NML)** and Dr. Animesh Jana (Senior Scientist and PI of Jigyasa, **CSIR-NML).**
Source: **Press Information Bureau**

CSIR NML: छोटे-छोटे प्रयास निश्चित रूप से महिलाओं के जीवन में बड़े बदलाव लाएंगे: रूपा महंती

सीएसआईआर-एनएमएल की महिलाओं की ओर से **सीएसआईआर-एनएमएल** में 'अंतरराष्ट्रीय महिला दिवस समारोह' का आयोजन किया गया. यह कार्यक्रम **एनएमएल** स्टाफ क्लब की मदद से सीएसआईआर-एनएमएल के एग्रिको आवासीय परिसर में महिला क्रिकेट टूर्नामेंट के आयोजन के साथ शुरू हुआ. अंतरराष्ट्रीय महिला दिवस समारोह के हिस्से के रूप में **सीएसआईआर-एनएमएल**, बर्मामाइंस स्थित कार्यालय परिसर में कई कार्यक्रम आयोजित किए गए. कार्यक्रम का मुख्य विषय अंतरराष्ट्रीय महिला दिवस **2024** का मुख्य विषय 'समावेश को प्रेरित करें था. सभागार में मुख्य समारोह **सीएसआईआर-एनएमएल** की महिला कर्मचारियों द्वारा आयोजित किया गया था और पूरे **सीएसआईआर-एनएमएल** परिवार और आमंत्रित लोगों ने हिस्सा लिया. स्वागत भाषण में **सीएसआईआर-एनएमएल** के वरिष्ठतम मुख्य वैज्ञानिक डॉ संदीप घोष चौधरी ने प्रयोगशाला में काम करने वाली महिला कर्मचारियों की सराहना की उन्होंने कहा 'कई मंचों पर अवचेतन लैंगिक पक्षपात है लेकिन हमें इस पक्षपात से बाहर आने की जरूरत है.'
Source: Lagatar

Dr. Sandip Ghosh Chowdhury New Director of National Metallurgical Laboratory

Dr. Sandip Ghosh Chowdhury, a distinguished metallurgical engineer with an illustrious career, has been appointed as the new Director of the **National Metallurgical Laboratory (NML)** in Jamshedpur, marking a significant milestone for the prestigious institution. Jamshedpur – Dr. Sandip Ghosh Chowdhury would now be heading **NML** Jamshedpur. He has just been appointed the new director of **NML** Jamshedpur. Dr. Ghosh' ascension to the Director's post in NML has been hailed by his peers. Born on July 4, 1968, Dr. Chowdhury's academic journey began with a B.E. in Metallurgical Engineering from Bengal Engineering College in 1989, followed by an M.Tech from IIT Bombay in 1991 and a Ph.D. from IIT Kanpur in 1996.
Source: Townpost

CSIR-NML concludes valedictory function for Pi-Check Programme

The **CSIR-National Metallurgical Laboratory,** Jamshedpur, marked the culmination of its esteemed "Phenome India: **CSIR** Health Cohort Knowledge Base (PI-CHeCK)" study program on March 18, 2024. Spanning seven days from March 12th to March 18th, 2024, the program aimed at capturing longitudinal molecular, biochemical, and organ scanning data. It was devised to develop targeted diagnostic and prognostic technologies through the integration of this data with state-of-the-art AI/ML models, thereby advancing Precision Medicine both in India and globally. Dr. Ansu J Kailath, Senior Principal Scientist at **CSIR-NML,** served as the Coordinator of this groundbreaking project. Alongside her, a dedicated team comprising Dr. Priyanka Singh, Dr. Krishna Kumar, Mr. Kogapu Sudhakara Rao, Dr. Navneet Singh Randhawa, and Mr. Roshan Kumar, contributed their expertise throughout the program. They not only shared their invaluable

experiences but also outlined the future trajectory of **CSIR-NML's** endeavors for the next season of the PI-CHeCK Program.
Source: Dailypioneer

Srinath University Students Explore CSIR-NML Burmines for Educational Insight

The educational visit provided the students with a comprehensive overview of various specialized fields including Recycling of Waste, Krupp Lab, Non Destructive Testing, and the History of Metallurgical Testing. **NML** scientists such as Dr. K Sahu, Head of Forge and Foundry, Dr. Animesh Jaina, a senior scientist, and Dr. S Shiva Prasad, Head of HRG, were present to guide the students. They imparted valuable information that could significantly influence the students' future academic and professional endeavors. Faculty members from Srinath University, including Head of the Diploma and Engineering Department Shashikant Singh, Assistant Professor Abhishek Kumar, and several other professors, accompanied the students. This initiative by Srinath University and CSIR-NML Burmines underscores the value of practical learning experiences in engineering education, preparing students for future challenges in the field.
Source: Townpost

NML Jamshedpur commemorates National Technology Day 2024

CSIR-National Metallurgical Laboratory (CSIR-NML) celebrated National Technology Day 2024 with great fervor, honoring the successful nuclear test at Pokhran in 1998 and acknowledging significant achievements in science and technology. The event featured an invited lecture by Dr. Debashish Bhattacharjee, VP Technology & R&D, Tata Steel Ltd, who delivered a thought-provoking address on igniting young minds to innovate, under the theme "From Schools to Start-ups." The event commenced with a warm welcome address by Dr. Sandip Ghosh Chowdhury, Director of **CSIR-NML,** who underscored the pivotal role of science and technology in national development and reiterated the importance of commemorating National Technology Day. Dr. SK Pal, Chief Scientist & Head-RPBD Division, **CSIR-NML,** presented insights into ongoing technology development programs and highlighted the laboratory's contributions towards societal benefits.
Source: Avenuemail

CSIR-NML : ग्लोबल वार्मिंग से बचने के लिए स्वच्छता, सुरक्षा और हरित पर्यावरण जरूरी : राजीव मंगल

भारत सरकार के "स्वच्छ भारत" मिशन के अनुरूप बर्मामाइंस स्थित सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला **(एनएमएल)** में आयोजित स्वच्छता पखवाड़ा-2024 बुधवार को संपन्न हुआ. सीएसआईआर-एनएमएल के निदेशक डॉ संदीप घोष चौधरी के मार्गदर्शन और कार्यक्रम समन्वयक मुख्य वैज्ञानिक डॉ शर्मिष्ठा सागर एवं सदस्यों द्वारा 1 से 15 मई, 2024 के दौरान औपचारिक रूप से 15 दिनों तक स्वच्छता अभियान चलाया गया. सदस्यों में आदित्य मैनक, अनिल दास चौधरी, चंद्रेश कुमार, उदय भास्कर राव

शामिल थे. स्वच्छता पखवाड़ा-2024 के अनुसरण में 1 से 15 मई के दौरान **सीएसआईआर-एनएमएल के** सभी कार्यालय और आवासीय परिसरों में विभिन्न कार्यक्रम आयोजित किये गये. इनमें कर्मचारियों द्वारा स्वच्छता-शपथ ग्रहण समारोह, स्वच्छता अभियान, वृक्षारोपण कार्यक्रम, स्टाफ के बच्चों के लिए सिट एंड ड्रॉ प्रतियोगितायें शामिल थीं. स्टाफ के बच्चों के लिए प्रतियोगिताएं और स्टाफ के लिए निबंध, क्विज़ और एक्सटेम्पोर प्रतियोगिताएं भी आयोजित की गई.

Source: Lagatar

सीएसआईआर-एनएमएल में रक्तदान शिविर का आयोजन

जमशेदपुर के वर्मा माइंस स्तिथ सी एस आई आर -एनएमएल में रक्तदान शिविर का आयोजन किया गया। इस रक्तदान शिविर में **एनएमएल** के वैज्ञानिकों, तकनीकी शोधकर्ताओं, प्रशासनिक स्तर कार्मिकों, विद्यार्थियों, अस्थाई कार्मिकों एवं उनके परिजनों ने रक्तदान किया। शिविर में कुल 90 यूनिट रक्तदान संगृहीत किया गया । इस अवसर पर **सीएसआईआर-एनएमएल** के निदेशक डॉ संदीप घोष चौधरी के कुशल निर्देशन एवं श्री अदित्य मैनाक, वरिष्ठ प्रशासनिक अधिकारी एवं श्री विप्लव विशाल, प्रशासनिक अधिकारी के मार्गदर्शन से आयोजित इस रक्तदान शिविर को सफल बनाने में एनएमएल स्टाफ क्लब के डॉ एमएम हुमने, डॉ कृष्ण कुमार, परमार्थ सुमन, नईम अंसारी के साथ-साथ अभिषेक कुमार सिंह, डॉ अंजनी कुमार साहू एवं वेद प्रकाश ने उल्लेखनीय योगदान दिया।रक्तदान शिविर के संचालन में जमशेदपुर ब्लड बैंक तथा वीबीडीए के पदाधिकारियों का भी महत्वपूर्ण योगदान रहा।

Source: Livehindustan

Future Metallurgists Converge at CSIR-NML for BTTD-2024

The national level Student Seminar on Materials and Metallurgical Engineering, “Behind the Teacher’s Desk” (BTTD-2024), commenced at the **CSIR-National Metallurgical Laboratory (**NML) in Jamshedpur. Organized by the Indian Institute of Metals (IIM) Jamshedpur Chapter in association with CSIR-NML, Tata Steel Limited, National Institute of Technology (NIT) Jamshedpur, and the Academy of Scientific & Innovative Research (AcSIR), the seminar runs from June 19-21, 2024. The seminar was inaugurated by the Chief Guest, Dr. N.C. Murmu, Director of CSIR-CMERI, Durgapur. He was joined by Dr. Sandip Ghosh Chowdhury, Director of CSIR-NML Jamshedpur; Prof. Ashok Kumar, Chairman of IIM Jamshedpur; Dr. Chiradeep Ghosh, Chairman of the BTTD programme; and Dr. Ammasi A., Convenor of BTTD-2024. The dignitaries formally opened the event with the release of the seminar souvenir.

Source: Avenuemail

NML Jamshedpur: Enhancing industry skills through Mineral Processing Training

The Mineral Processing Department at **CSIR – National Metallurgical Laboratory (NML)** inaugurated a four-day corporate training program on Mineral Characterization,

Beneficiation, and Agglomeration (MCBA-2024). The event brought together executive trainees from various plants of the Steel Authority of India Limited (SAIL). In his welcome address, Sandip Ghosh Chowdhury, Director of **CSIR-NML,** emphasized the significance of such training programs in fostering innovation and enhancing quality in both the industry and environmental sectors. He highlighted the critical role of mineral processing in India's industrial landscape and the importance of adopting new technologies for improved recovery and sustainability in the mineral sector. S. Sivaprasad, Head of Human Resources, also welcomed the participants and underscored the potential for new technical collaborations and industrial partnerships to drive technological advancements in mineral processing. He expressed optimism about the future direction of technological development through such cooperative efforts.

Source: Avenuemail

सीएसआईआर एनएमएल में चार दिवसीय कॉर्पोरेट प्रशिक्षण का शुभारंभ

सीएसआईआर एनएमएल में खनिज प्रसंस्करण विभाग की ओर से चार दिवसीय कॉर्पोरेट प्रशिक्षण (एम.सी.बी.ए.-**2024)** मिनरल कैरैक्टाईजेशन बेनिफिसियेशन एवं एग्लोमोरेशन विषय पर प्रशिक्षण कार्यक्रम का शुभारंभ किया गया। मौके पर संस्थान के निदेशक डॉ. संदीप घोष चौधुरी ने स्टील अथॉरिटी ऑफ़ इंडिया लिमिटेड के विभिन्न संयंत्रों से आए एक्सक्यूटिव ट्रेनी का स्वागत किया और कहा कि ऐसे प्रशिक्षण कार्यक्रमों से उद्योग जगत में नई सृजनात्मक एवं गुणवत्ता को बढ़ाने में सहयोग मिलेगा तथा साथ साथ पर्यावरण क्षेत्र में खनिज प्रसंस्करण का अहम् योगदान रहा है जिसमे मिनरल क्षेत्र में रिकवरी एवं रेप्रोडूस्ड करने में नई तकनिकी का उपयोग अहम् सिद्ध होगी।मानव संसाधन, प्रमुख डॉ शिवा प्रसाद ने प्रशिक्षण में आये सभी का अभिवादन व्यक्त किया एवं कहा कि खनिज प्रसंस्करण क्षेत्र में नई तकनिकी सहयोग एवं आपसी औद्योगिक साझेदारी से तकनिकी विकास में नई दिशा मिलेगी, यह सम्भावना व्यक्त किया गया।

Source: Livehindustan

CSIR-NML Hosts Xavier English School Students in Jamshedpur

Xavier English School Kitadih students visited **CSIR-NML** in Jamshedpur, where they were introduced to scientific innovations and research methodologies. The Chief Scientist at **CSIR-NML** provided detailed information about the institution's inventions. Students were given demonstrations of various machines, along with explanations of their uses. A team of 100 students participated in the educational tour. The group was accompanied by Vice Principal Suman Sharma, Kamal Kant Sharma, Pritika Roy, and Alka Kumari. As part of the program, children were encouraged to pursue careers in research. The visit aimed to spark interest in scientific exploration among the young learners. Students had the opportunity to witness cutting-edge technology firsthand. The educational excursion provided practical exposure to complement theoretical knowledge. **CSIR-NML's** initiative

aligns with efforts to nurture future scientists and innovators. The interactive session allowed students to engage directly with scientific professionals.
Source: Townpost

Vigyan Yuva Shanti Swarup Bhatnagar awards: Abhilash for Engineering Sciences

Dr Abhilash, senior Principal scientist with the Council of Scientific and Industrial Research's **National Metallurgical Laboratory (CSIR-NML)** in Jamshedpur, is one of the winners of this year's Vigyan Yuva Shanti Swarup Bhatnagar award in the Engineering Sciences category. In this interview, he discusses his innovative work in the extraction of metals. I work in the area of metal extraction, specifically metals that are not abundantly available in the earth's crust in India, and yet have high demand and technological applications. These include rare earths such as uranium, scandium, neodymium and cerium, and rare metals such as lithium, vanadium, cobalt and nickel. India doesn't have any mine reserves of these elements except for uranium and rare earths (which are of either nil or poor grade) and recently discovered lithium deposits. I have used microorganisms for extracting uranium. These microorganisms are present in the uranium mine itself, and we culture them and use them to extract uranium from the ore. The process I developed was scaled to 2 tonnes at the Uranium Corporation of India in Jharkhand.
Source: Hindustantimes

जेवियर इंग्लिश स्कूल के विद्यार्थियों ने किया एनएमएल का भ्रमण

जेवियर इंग्लिश स्कूल कीताडीह के विद्यार्थियों ने मंगलवार को **सीएसआईआर एनएमएल** का भ्रमण किया। चीफ साइंटिस्ट ने एनएमएल के अविष्कारों की जानकारी दी। वहीं, विभिन्न मशीनों को संचालित कर उसके उपयोग के बारे में बताया। कुल 100 बच्चों की टीम उप प्राचार्या सुमन शर्मा, कमल कांत शर्मा, प्रितिका रॉय, अलका कुमारी के साथ एनएमएल पहुंचे। बच्चों को रिसर्च की ओर अग्रसर होने के लिए प्रोत्साहित किया गया।
Source: Livehindustan

एनएमएल की मदद से कंप्यूटर दक्षता का प्रशिक्षण लेंगे एलबीएसएम के विद्यार्थी

एलबीएसएम कॉलेज में **सीएसआईआर एमएमएल** जमशेदपुर की मदद से कंप्यूटर दक्षता कार्यक्रम संचालित किया जाएगा। इसके लिए मंगलवार को इंटर, स्नातक और स्नातकोत्तर के 42 विद्यार्थियों का रजिस्ट्रेशन रसायन विज्ञान विभाग में एनएमएल से पहुंचे शानू कुमार, चन्दन कुमार एवं मौसमी कुमारी की मदद से किया गया। इस रजिस्ट्रेशन में शामिल विद्यार्थियों को कंप्यूटर आधारित एनीमेशन एवं थ्रीडी प्रिंटिंग का निः शुल्क प्रशिक्षण भारत सरकार के सौजन्य से दिया जाएगा। ट्रेनिंग की अवधि दो महीने की होगी। ट्रैनिंग प्राप्त विद्यार्थियों को सर्टिफिकेट भी दिया जाएगा। इस अवसर पर कॉलेज प्रिंसिपल डॉ. बीएन प्रसाद ने सभी विद्यार्थियों को अनुशासित ढंग से ट्रेनिंग लेने कि बात कही। कॉलेज के विज्ञान

संयोजक अरविन्द प्रसाद पंडित ने इस सर्टिफिकेट के आधार पर नौकरी मिलने की संभावना की जानकारी दी।

Source: Livehindustan

हिन्दी पूरे विश्व में बोली और समझी जाती है : डॉ. परमार

सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला में हिन्दी सप्ताह समारोह 2024 का आयोजन किया जा रहा है। यह सोमवार से 9 सितंबर तक चलेगा। इस दौरान विभिन्न कार्यक्रमों एवं प्रतियोगिताओं का आयोजन होगा। इस अवसर पर **सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला** जमशेदपुर के निदेशक डॉ. संदीप घोष चैधुरी ने कहा कि हिन्दी संसार की सबसे सरल भाषा है। इसका मुख्य कारण यह है कि वह जैसी बोली जाती है, वैसे ही लिखी जाती है। देश की स्वतंत्रता के बाद हिन्दी को भारत की राजभाषा होने का गौरव प्राप्त हुआ। हिन्दी आदिकाल से ही अपनी आन्तरिक ऊर्जा से सरलता, सहजता, बोधगम्यता और समन्वय की भावना से निरंतर प्रगति करती रही है। इस अवसर पर गृह मंत्रालय, राजभाषा विभाग के पूर्व उपनिदेशक डॉ. वीरेंद्र परमार ने मुख्य अतिथि के रूप में श्रोताओं को सम्बोधित करते हुए कहा कि हिन्दी पूरे विश्व में बोली और समझी जाती है। एक अरब से ज्यादा लोग हिन्दी से पूरी तरह परिचित हैं। यह खुशी की बात है कि **एनएमएल** जैसी वैज्ञानिक प्रयोगशाला में भी शोध पत्रों का प्रकाशन हिन्दी में होता है।

Source: Livehindustan

XITE Gamharia Boosts Tribal Farming with Aromatic Crop Training

A specialized training program focused on the cultivation and processing of aromatic crops, particularly lemongrass, was successfully held in Gamharia, West Singhbhum. The program, a joint effort by XITE Gamharia, **CSIR-NML** Jamshedpur, and **CSIR-IIIM** Jammu, aims to uplift tribal communities by introducing sustainable agricultural practices. The training program was part of the Department of Science and Technology's (DST) Science, Technology, Innovation (STI) Hub project. It provided local farmers with the tools and knowledge needed to improve their farming methods and economic prospects. During the program, farmers were introduced to nine different varieties of lemongrass, with more than 30 saplings planted in each category. The hands-on demonstration allowed participants to directly apply the techniques they learned in cultivating these aromatic plants. Dr. Sanchita Chakravarty, Chief Scientist at **CSIR-NML**, and the project's Principal Investigator, highlighted the initiative's focus on enhancing the living standards of tribal farmers.

Source: Townpost

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field

of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.
Source: Pib

83rd CSIR Foundation Day at NML Jamshedpur: Experts focus on future of mobility

Council of Scientific and Industrial Research (CSIR) – National Metallurgical Laboratory (NML) marked its 83rd Foundation Day with a grand celebration at the **NML** Auditorium. The event was graced by distinguished guests, including Chief Guest Dr. Shankar Venugopal, Vice President of Mahindra Research Valley, Chennai; Dr. Sandip Ghosh Chowdhury, Director of **CSIR-NML**; and Aditya Mainak, Administrative Officer of **CSIR-NML**. The ceremony commenced with the lighting of the ceremonial lamp, followed by a welcome address from Dr. Chowdhury, who greeted the dignitaries, **NML** retirees, scientists, and other invitees. The highlight of the event was the **CSIR** Foundation Day lecture delivered by Dr. Shankar Venugopal, who spoke on “The New Materials that are Shaping the Future of Mobility.” In his insightful talk, Dr. Venugopal emphasized the importance of introducing cutting-edge technologies that are accessible to Indian farmers, aligning with Mahindra’s mission to make technology affordable and impactful. He also discussed the exciting potential of Deep Sea Mining, which contains critical materials like manganese (Mn), cobalt (Co), nickel (Ni), and neodymium (Nd), essential for the electric vehicle (EV) industry.
Source: Avenuemail

CSIR Foundation Day Celebrations held in Chennai

The foundation day of **Council of Scientific & Industrial Research (CSIR),** New Delhi, an autonomous organization under Ministry of Science & Technology, Govt. of India, was celebrated with great enthusiasm on 26 September 2024, at the **CSIR** Campus in Taramani, Chennai by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). As a part of the foundation day celebrations Open Day was observed at **CSIR** Campus, Taramani, Chennai, and at TTRS (Tower Testing and Research Station) Campus, Tirusulam, Chennai, **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and Regional Units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML**. All laboratories in the **CSIR** Campus and TTRS were kept open for the general public between 9.30 am and 3:00 pm. Elaborate

arrangements were made to receive the visitors. State-of-the-art facilities, Technologies and products were showcased and demonstrated for the benefit of the visitors. More than 9200 people including school and college students, teachers, professionals from the industry, entrepreneurs and the general public visited the campus with great enthusiasm.
Source: Pib

Cleaning and Plantation drive undertaken by CSIR-NML at Tatanagar Railway station

In alignment with the "Swachhta Hi Seva 2024 campaign, **CSIR-National Metallurgical Laboratory (CSIR-NML),** Jamshedpur, in association with the Railway authority, organized a cleanliness drive and plantation program at the Tatanagar Railway Station. This was started today (30th September 2024) under the guidance of Dr. Sandip Ghosh Chowdhury, Director, **CSIR-NML,** Mr. Abhishek Singhal, Area Manager, Tatanagar and Dr. Sarmistha Sagar, Chief Scientist, **CSIR-NML.** An **NML** team comprising Dr. S. Sivaprasad, Dr. Raghuvir Singh, Dr. B Ravi Kumar, Dr. Manoj Kr Humane, Mr. Byomkesh Dash, Mr. Viplave Vishal, Mr. Bhola Azad, Shri Chandresh Kumar, Shri Uday Bhaskar Rao, Ms Y Usha and many others joined this program along with a team from Railway authorities. Besides cleaning the Railway station premises, 10 trees were planted in the designated areas. Two plants along with Pots had been handed over to the Area Manager, Tatanagar by the Director, **CSIR-NML**.
Source: Jharkhandstatenews

National Conference on Circular Economy organised in Jamshedpur

A two-day National Conference on "Circular Economy Conference-Industrial By-Product Utilisation and Value Creation" was organised on October 3 and 4 at SNTI auditorium. The focus area of the conference was geopolymer technology, steel slag usage, fly ash valorisation, red mud utilisation, refractory waste recycling, critical metal recovery from by-products, and uses of by-products in cement and concrete. The event was organised by Tata Steel, Indian Ceramic Society, Jamshedpur Chapter and **CSIR-National Metallurgical Laboratory**. The focus area of the conference was Iron & steel slag usage, fly ash valorisation, red mud utilization, geopolymer technology, refractory waste recycling, critical metal recovery from by-products, and uses of by-products in cement and concrete. Dr. L. P. Singh, Director General NCCBM Haryana, Dr. Sandip Ghosh Chowdhary, Director **CSIR-NML,** Jamshedpur, Dipankar Das Gupta, EIC IBMD Tata Steel and Chairman CIRCON-2024 Dr. Sanjay Kumar, Chief Scientist, **CSIR-NML,** Jamshedpur inaugurated the Conference.
Source: Avenuemail

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the

occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.
Source: Pib

India International Science Festival held in Jamshedpur

It appeared to be a Curtain Raiser Event of IISF, 2024. Organised by **CSIR-NML,** Jamshedpur, Ministry of Science & Technology and the Ministry of Earth Sciences, in association with Vigyan Bharati (VIBHA) it is the 10th India International Science Festival (IISF-2024). As per the directions from Dr. Jitendra Singh, Minister of Science & Technology, a Curtain Raiser Event of IISF 2024 was organised at **CSIR-National Metallurgical Laboratory**, Jamshedpur, as a part of 10th India International Science Festival (IISF-2024) Celebrations on November 11, 2024. The thematic choice of this exhibition rests on 'Transforming India into a Science and Technology Driven Global Manufacturing Hub'. The contributions of **CSIR-NML** in the context of Nation building were showcased in this exhibition under the broad headings of 'Mining, Minerals & Materials', 'Engineering & Infrastructure', 'Ecology & Environment'. During this programme, **CSIR-NML** open their lab & facilities to students, public and local media. Dr. Sandip Ghosh Chowdhury, Director **NML** has welcomed the Chief Guest Shri Ranjot Singh, Chairman, CII Jharkhand State Council & Managing Director, Emdet Jamshedpur Pvt. Ltd., Prof. Ranjit Prasad, Former Professor, NIT Jamshedpur, Prof. Fr. Kuruvilla J. Pandikattu, XLRI Jamshedpur, Students, Teachers of local Schools and Colleges of Jamshedpur, Scientists and Team **CSIR-NML**.
Source: Jharkhandstatenews

CSIR-NML Jamshedpur transfers PCB recycling technology to Novasensa

CSIR-National Metallurgical Laboratory (CSIR-NML), Jamshedpur, has transferred its advanced technology for recycling waste printed circuit boards (PCBs) to Novasensa Pvt. Ltd., New Delhi, on Thursday. This marks a significant step in addressing the growing e-waste crisis with an eco-friendly approach. The technology enables the recovery of valuable metals like gold, copper, and aluminum from PCBs while adhering to zero-waste principles, contributing to sustainable development and environmental conservation. The process involves mechanical pre-treatment of waste PCBs followed by hydrometallurgical

and electro-metallurgical techniques to extract high-purity metals and salts, with purity levels exceeding 99.99% for metals and 98.5% for salts. Developed by **CSIR-NML's** research team, the technology is cost-effective, environmentally friendly, and aligns with the principles of a circular economy. The event was attended by **CSIR-NML's** Director, Dr. Sandip Ghosh Chowdhury, and a team of leading scientists, including Dr. Manis Kumar Jha, Dr. Sanjay Kumar, and Dr. Jhumki Hait, among others. Aseem Trivedi, Founder and CEO of Novasensa Pvt. Ltd., expressed enthusiasm for implementing this groundbreaking technology, emphasizing its potential to revolutionize e-waste management in India while conserving natural resources for future generations.
Source: **Avenuemail**

सीएसआईआर-एनएमएल ने नोवासेंसा प्राइवेट लिमिटेड को वेस्ट प्रिंटेड सर्किट बोर्ड संबन्धित टेक्नोलोजी डेमोन्स्ट्रेसन दी

इस करार (**MoU)** में वेस्ट प्रिंटेड सर्किट बोर्ड (**PCBs)** से कॉपर**,** अल्यूमिनियम और गोल्ड का पुनर्चक्रण करने के लिए तकनीकी का हस्तांतरण हुआ था। इस दिशा में आज गुरुवार**,** दिनांक 21 नवम्बर 2024 को करार (MoU**)** के अनुरूप **राष्ट्रीय धातुकर्म प्रयोगशाला** में तकनीक को प्रयोगशाला स्तर पर करके दिखाया गया। तकनीकी पर्यावरण अनुकूल हैं एवं इसके सही निस्पादन से पर्यावरण स्वच्छ होगा**,** बेरोजगार युवकों को नौकरी मिलेगी एवं असंगठित इकाई संगठित होकर कचड़ा उठाव एवं निस्पादन इस प्लान्ट के द्वारा कर सकेंगे। मुनिसिपल इकाई भी इस कंपनी से संपर्क कर कचड़ा निस्पादन कर पाएंगे। नोवासेंसा प्राइवेट लिमिटेड खराब हो चुके प्रिंटेड सर्किट बोर्ड (PCBs**)** का प्रोसेसिंग करके कीमती एवं बहुमूल्य धातुओं कॉपर**,** अल्यूमिनियम और गोल्ड इत्यादि का निष्कर्षण करेगा। जो पूर्ण रूप से ई-कचड़ा के लिए बहुमूल्य तोहफा हैं**,** कारण रिसाइक्लिंग ज़ीरो वेस्ट कोंसेप्ट पर कार्य करेगा। "प्रिंटेड सर्किट बोर्ड से गोल्ड**,** कॉपर और अल्यूमिनियम निष्कर्षण का नया तरीका" ज्ञात हो की एनएमएल पहले भी राष्ट्रीय और अन्तर्राष्ट्रीय स्तर पर ई-कचड़ा निष्पादन हेतु तकनीकी हस्तांतरण कर चुका है। सर्वप्रथम प्रिंटेड सर्किट बोर्ड को प्री-ट्रीटमेंट और फिजिकल बेनीफिसिएसन पद्धति के द्वारा इपोक्सी रेसिन (प्लास्टीक) एवं धातु मिश्रण को अलग कर लिया जाता है**,** फिर हैड्रोमेटलर्जी पद्धति का प्रयोग कर गोल्ड**,** कॉपर और अल्यूमिनियम को निकाल लिया जाता है।
Source: **Jharkhandstatenews**

NML Scientist, known for research advancing passenger safety and reducing vehicle weight and emissions, honored with Young Metallurgist Award by Ministry of Steel

Dr. Biraj Kumar Sahoo, a Senior Scientist at the **National Metallurgical Laboratory (NML),** Jamshedpur, has been awarded with the prestigious 'Young Metallurgist (Metal Science) Award – 2023' under National Metallurgist Awards (NMA)-2023 by the Ministry of Steel, Government of India. The award was presented by the Union Minister of Heavy

Industries and Steel H. D. Kumaraswamy, in presence of Sajjan Jindal, Chairman JSW group of companies, Amarendu Prakash, Chairman SAIL, Prof. B. S. Murty, Director IIT-Hyderable and other dignitaries. The award was presented in IIM-ATM 2024 and NMA function at Bengaluru on 21st November 2024. This recognition underscores his outstanding contributions to the field of metallurgy, particularly in steel development, materials processing, characterization, and metallurgical failure analysis. Over the course of his illustrious career, Dr. Sahoo has contributed to over 40 R&D projects. His work has led to significant scientific advancements and the successful implementation across various industries, including steel, oil and gas, power plants, and manufacturing. He has actively collaborated with esteemed organizations such as ISRO, NMRL-DRDO, RDCIS-SAIL, the Indian Navy, and the Indian Air Force for various R&D projects.
Source: **Uditvani**

CSIR-NML Celebrates 75 Years of Scientific Excellence in Jamshedpur

CSIR-National Metallurgical Laboratory commemorated 75 years of scientific innovation with new facility announcement. Dr. N. Kalaiselvi initiated the ceremonial lamp lighting. Moreover, she laid the foundation for a magnesium metal plant. Meanwhile, Tata Steel VP Chaitanya Bhanu graced the occasion. "Innovation drives our global competitiveness," remarked a senior scientist. Furthermore, **CSIR-NML** has completed 200 major research projects since inception. On the other hand, the lab holds 150 active patents. Besides, it has established partnerships with 50 industrial organizations. The laboratory presented several prestigious awards. Moreover, Ms. Nisha Gupta received the Dr. B.R. Nijhawan Award. Meanwhile, Dr. Krishna Kumar's team won the Banerjee Award. In addition, the lab recognized outstanding student achievements. Furthermore, **CSIR-NML** collaborates with 30 international research institutions. Besides, it has trained 5000 researchers in advanced metallurgy.
Source: **Townpost**

Rs 10 Crore Magnesium Plant Launched in Jamshedpur

A top official of the state-run **CSIR-National Metallurgical Laboratory** on Tuesday laid the foundation of a pilot plant for production of magnesium at Nildih area here. The proposed plant will be set up at a cost of Rs 10 crore and is scheduled to be completed by January 2026. The foundation of the facility was laid by **CSIR-NML** Director General Dr Sandip Ghosh Chowdhury. The project is entirely based on indigenous technology, an official said. In the initial phase, the plant will produce 120 kg of magnesium daily, with plans to expand its capacity to 150-200 kg per day in future. Magnesium is widely used in defence research, nuclear technology, space applications and various commercial purposes.
Source: **Money.rediff**

CSIR-NML जमशेदपुर की 75वीं वर्षगांठ आज, मैग्नीशियम उत्पादन से विश्व में बढ़ेगी देश की धाक

नेशनल मेटलर्जिकल लेबोरेटरी (एनएमएल) जमशेदपुर की आज 75वीं वर्षगांठ है. इसने अपने अनुसंधानों से विश्व में अपनी अलग पहचान बनायी है और कई बार देश को गौरवान्वित कराया है. देश के विकास में भी इसका अहम योगदान रहा है. उसने विज्ञान और टेक्नोलॉजी के क्षेत्र में एक और अहम अनुसंधान किया है. यह अनुसंधान भारत को स्पेस टेक्नोलॉजी के क्षेत्र में विश्व के अग्रणी देशों में स्थापित कर देगा. **सीएनआइआर-एनएमएल** जमशेदपुर अब मैग्नीशियम का उत्पादन शुरू करेगा. इसके लिए संस्थान पायलट प्लांट शुरू कर रहा है. विश्व में अभी मैग्नीशियम के उत्पादन में चीन का एकाधिकार है. **एनएमएल** के इस प्रोजेक्ट से चीन का एकाधिकार टूटेगा और विश्व में भारत की धाक बढ़ेगी. यह प्लांट मैग्नीशियम प्रौद्योगिकी के क्षेत्र में मील का पत्थर साबित होगा और आत्मनिर्भर भारत, मेक इन इंडिया और विकसित भारत को लेकर सरकार की पहल में मददगार बनेगा. रोजाना 120 से 200 किलोग्राम मैग्नीशियम होगा तैयार **सीएसआईआर-एनएमएल** के इस पायलट प्लांट में प्रतिदिन 120 से 200 किलोग्राम मैग्नीशियम तैयार होगा.

Source: Prabhatkhabar

CSIR-NML welcomes students at the Platinum Jubilee Expo in Jamshedpur

On 28th November 2024, **CSIR-National Metallurgical Laboratory (NML),** Jamshedpur organized a visit for the students to the Platinum Jubilee Expo visit on the occasion 75th year of **CSIR-NML.** Students and teachers from different schools and colleges teachers witnessed the expo to enhance their knowledge of scientific research and innovation. In all, 180 students from PM SHRI Kendriya Vidyalaya, Tatanagar,27 students from Bhawanipur Education Society College, Kolkata, 6 students from NIT Jamshedpur and 21 students of Srinath University, Jamshedpur visited **CSIR-NML.** They were accompanied by faculties. In the morning inaugural programme was arranged. The inaugural programme started with a welcome address delivered by Director of **CSIR-NML** Dr. Sandip Ghosh Chowdhury. He welcomed all attendees who joined the programme and briefly mentioned the contribution of **CSIR-NML** to the development of the nation in the past 75 years through various technological developments and pioneering works. After the welcome address, they interacted and discussed the importance of **CSIR-NML**, research and development activities in the **CSIR** Laboratory with the scientists.

Source: Jharkhandstatenews

NML Hosts Three- day Corporate Training Programme on Mineral Characterization for SAIL

The Burmamines – based **National Metallurgical Laboratory (NML),** a leading **CSIR** laboratory is hosting a three- day corporate training programme for the officials of Steel Authority of India Ltd. (SAIL). The inaugural function took place today with the lamp-lighting ceremony by the dignitaries Sandip Ghosh Chowdhury, director, **CSIR-NML**, Devabrata Mishra, Head, Mineral Processing Division, **CSIR-NML,** S. Sivaprasad, Chief Scientist & Head Human Resource Group and Sital Kr. Pal, Head, RPBD Division. Sandip

Ghosh Chowdhury, Director, **CSIR-NML** welcomed all the executives of Steel Authority of India Ltd. (SAIL) and introduced them to different aspects of mineral characterization to agglomeration from Laboratories to pilot scale. He insisted on the utilization of low grade and fine ores / minerals towards sustainable development. Devabrata Mishra, Head, Mineral Processing Division welcomed SAIL executives of MCBA-2024 and introduced them to legacy of Mineral Processing Division. Mishra also requested the participants to take maximum benefits of the lab R&D facilities and expertise. S. Sivaprasad, Chief Scientist & HRG said, Mineral processing division is one of the pioneer in mineral characterisation to beneficiation of ores / minerals since its inception. Sivaprasad informed that **CSIR-NML** has been organising different set of training programme towards Skill development for executives of corporate sectors.
Source: Uditvani

CSIR-NML : ई-वेस्ट रिसाइक्लिंग के क्षेत्र में होगा रोजगार का सृजन

बर्मामाइंस स्थित **सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला (एनएमएल)** और मुंबई के मेसर्स मैकानी मेटल्स के बीच बुधवार को एक महत्वपूर्ण करार हुआ। इसका उद्देश्य ई-वेस्ट रिसाइक्लिंग के क्षेत्र में नए अवसरों का निर्माण करना है। इस करार के तहत, मैकानी मेटल्स कीमती और बहुमूल्य धातु निकालने में सक्षम होगी और यह पूरी परियोजना शून्य कचरा (Zero Waste) कंसेप्ट पर आधारित होगी। यह पर्यावरण अनुकूल है और इसके सही निष्पादन से न केवल पर्यावरण की सफाई होगी, बल्कि बेरोजगारी कम करने और असंगठित इकाइयों को संगठित करने में भी मदद मिलेगी। परियोजना का उद्देश्य और इसके लाभ इस करार का मुख्य उद्देश्य ई-कचरा रिसाइक्लिंग के माध्यम से प्राकृतिक संसाधनों का संरक्षण करना है। इस तकनीकी के उपयोग के माध्यम से न केवल प्रदूषण में कमी आएगी, बल्कि भावी पीढ़ियों के लिए संसाधनों की सुरक्षा भी होगी। इस परियोजना के तहत कचरा उठाव और निष्पादन के लिए म्युनिसिपल इकाइयां भी इस प्लांट से संपर्क कर सकती हैं, जिससे स्थानीय स्तर पर रोजगार सृजन होगा और कचरे की सही तरीके से पुन: उपयोग की प्रक्रिया शुरू हो सकेगी। **एनएमएल** और मैकानी मेटल्स के बीच सहयोग इस मौके पर **एनएमएल** के निदेशक डॉ. संदीप घोष चौधरी ने इस साझेदारी की महत्वता पर चर्चा की। उन्होंने कहा कि **एनएमएल** ने हाल के दिनों में कई स्वदेशी तकनीकियों को भारतीय कंपनियों को हस्तांतरित किया है और अब उम्मीद जताई जा रही है कि इस करार से भारत को ई-कचरा मुक्त समाज बनाने में भी मदद मिलेगी।
Source: Thephotonnews

CSIR to Partner with Government of Telangana and Recyclers to Advance Sustainable Recycling and Skill Development

The Ministry of Environment, Forest and Climate Change has facilitated the signing of a significant Memorandum of Understanding (MoU) between the Government of Telangana and the Council of Scientific and Industrial Research, New Delhi, alongside agreements

between **CSIR** and leading recyclers. These initiatives underscore MoEFCC's pivotal role in driving India's transition to a circular economy while fostering sustainable waste management practices. The MoU between the Government of Telangana and **CSIR** aims to develop a skilled workforce in the recycling and waste management sectors. Under this partnership, **CSIR's** laboratories and institutions will provide technical support for training programs in Telangana, equipping individuals with expertise in **CSIR**-developed waste management technologies. This collaboration will promote the adoption of circular economy principles and create new opportunities for green employment. Simultaneously, Ministry of Environment, Forest and Climate Change enabled the signing of agreements between eight **CSIR** national laboratories and recyclers, focusing on fifteen innovative waste management and recycling technologies. The **CSIR** labs include, **CSIR-NIIST, CSIR-IICT, CSIR-NML, CSIR-IMMT, CSIR-CEERI, CSIR-IIP** and **CSIR-CECRI**. Thetechnologies are designed to establish state-of-the-art recycling infrastructure, support domestic waste recycling, and secure critical mineral supplies through advanced recycling processes. These agreements also foster innovation, encouraging the development of new recycling technologies and offering technical assistance for recyclers' existing operations.

Source: Pib

राष्ट्रीय धातुकर्म प्रयोगशाला में एक दिवसीय एक्सपोज़र प्रशिक्षण का आयोजन

सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला (एनएमएल) जमशेदपुर ने कॉलेज के छात्रों और श्रीनाथ विश्वविद्यालय जमशेदपुर के फैकल्टी के लिए सामग्री और धातुकर्म प्रक्रिया पर एक दिवसीय एक्सपोजर प्रशिक्षण का आयोजन किया। इसका उद्देश्य कॉलेज के छात्रों के बीच वैज्ञानिक जागरूकता को बढ़ावा देना और उन्हें वैज्ञानिक अनुसंधान और नवाचार की दुनिया से परिचित कराना था। यह कार्यक्रम **सीएसआईआर**-एकीकृत कौशल पहल कार्यक्रम के तहत आयोजित किया गया था। श्रीनाथ विश्वविद्यालय के 30 छात्र और 17 छात्राओं ने **सीएसआईआर-एनएमएल** का दौरा किया। उनके साथ कुल 3 फैकल्टी भी थे। उद्घाटन कार्यक्रम की शुरुआत **सीएसआईआर-एनएमएल** के निदेशक डॉ. संदीप घोष चौधरी द्वारा दिए गए स्वागत भाषण से हुई। उन्होंने कार्यक्रम में शामिल होने वाले सभी उपस्थित लोगों का स्वागत किया और विभिन्न तकनीकी विकास और अग्रणी कार्यों के माध्यम से पिछले 82 वर्षों के गौरव में हमारे राष्ट्र के विकास में सीएसआईआर के योगदान के बारे में संक्षेप में उल्लेख किया। कार्यक्रम में छात्रों में शहरी अयस्क पुनर्चक्रण और कार्यशाला जैसी

Source: Hindustan

CSIR-NML Hosts 52nd Shanti Swarup Bhatnagar Memorial Tournament

The 52nd Shanti Swarup Bhatnagar Memorial Tournament commenced at **CSIR-National Metallurgical Laboratory** with an impressive opening ceremony. The three-day sporting event brings together teams from across India. The tournament celebrates **CSIR's** sporting spirit. Distinguished Presence Padma Shri Premlata Agrawal graced the

occasion as chief guest. She emphasized sports' role in personality development. Meanwhile, Dr. Anuradha Madhukar, **CSIR** Sports Promotion Board Secretary, shared insights. She highlighted team spirit and leadership skills through sports. Tournament Details eight laboratories will compete in cricket and volleyball. The participating teams represent premier **CSIR** institutions. Moreover, **CSIR-NPL** received recognition for best flag march. The competition continues through December 20. Legacy and Leadership **NML** Director Dr. Sandeep Ghosh Chowdhury welcomed participants. He remembered Dr. Bhatnagar's scientific contributions. Furthermore, the event aims to promote camaraderie. It strengthens bonds between **CSIR** employees through sports.
Source: Townpost

CSIR-NML Jamshedpur ने प्लैटिनम जुबली पर किया प्रदर्शनी का आयोजन

CSIR-NML ने अपनी 75 वर्षों की यात्रा को समर्पित एक प्रदर्शनी का आयोजन किया, जो **CSIR-NML** एग्रिको कॉलोनी में आयोजित हुई. इस प्रदर्शनी का उद्घाटन 17 दिसंबर को एनएमएल के निदेशक डॉ. संदीप घोष चौधरी द्वारा किया गया. शैक्षिक यात्रा: छात्रों का **सीएसआईआर-एनएमएल** का दौरा 18 दिसंबर को, **NML** केरल पब्लिक स्कूल, जमशेदपुर के 36 छात्रों और 4 शिक्षकों ने इस प्रदर्शनी का दौरा किया. इस यात्रा ने छात्रों को वैज्ञानिक अनुसंधान और नवाचार की दुनिया से जोड़ा और उनके अनुभव को समृद्ध किया, जिससे उनके वैज्ञानिक जागरूकता में वृद्धि हुई. प्रदर्शनी की विशेषताएँ: इंटरएक्टिव अनुभव और विशेषज्ञों से संवाद प्रदर्शनी में छात्रों को इंटरएक्टिव प्रदर्शनों, विशेषज्ञों से संवाद और विभिन्न तकनीकी विकास एवं अग्रणी कार्यों को समझने का अवसर मिला. शिक्षकों ने इस यात्रा के शैक्षिक महत्व को रेखांकित करते हुए प्रदर्शनी से प्राप्त जानकारी और प्रेरणा के लिए आभार व्यक्त किया. आयोजकों का स्वागत: युवा दिमागों में जिज्ञासा को प्रोत्साहित करना प्रदर्शनी के आयोजकों ने छात्रों और शिक्षकों का गर्मजोशी से स्वागत किया. उन्होंने युवा दिमागों में जिज्ञासा और सीखने की महत्वता को बताया और इसे प्रोत्साहित करने की आवश्यकता पर बल दिया. संतुष्ट छात्र-शिक्षक: ज्ञानवर्धक अनुभव कुल मिलाकर, छात्रों और शिक्षकों ने प्रदर्शनी के दौरान प्राप्त ज्ञानवर्धक अनुभव से अपनी गहरी संतुष्टि व्यक्त की. यह दौरा न केवल वैज्ञानिक ज्ञान में वृद्धि का अवसर था, बल्कि यह छात्रों के लिए अनुसंधान और नवाचार के प्रति प्रेरणा का भी एक महत्वपूर्ण स्रोत बन गया.
Source: Uditvani

एनएमएल : जोनल टूर्नामेंट में भाग लेने पहुंचे देश भर के वैज्ञानिक

शांति स्वरूप भटनागर मेमोरियल टूर्नामेंट (एसएसबीएमटी) 2024 का मंगलवार को **सीएसआईआर-राष्ट्रीय धातुकर्म प्रयोगशाला (एनएमएल)** जमशेदपुर में उद्घाटन किया गया। सीएसआईआर के प्रथम महानिदेशक डॉ. शांति स्वरूप भटनागर की स्मृति में आयोजित कार्यक्रम में देश भर की विभिन्न

सीएसआईआर प्रयोगशालाओं के प्रतिभागी एक साथ भाग ले रहे हैं। **सीएसआईआर-एनएमएल** को **सीएसआईआर** के 52वें एसएसबीएमटी आउटडोर चौथे जोनल टूर्नामेंट की मेजबानी का मौका प्राप्त हुआ है। यह टूर्नामेंट 18-20 दिसंबर तक आयोजित किया जाएगा। उद्घाटन समारोह में मुख्य अतिथि पद्मश्री प्रेमलता अग्रवाल, डॉ. अनुराधा मधुकर (सचिव, खेल संवर्धन बोर्ड-सीएसआईआर), डॉ. संदीप घोष चौधरी (निदेशक, **सीएसआईआर-एनएमएल)** और वैज्ञानिक और खेल समुदाय की अन्य हस्तियों सहित प्रतिष्ठित गणमान्य व्यक्तियों ने भाग लिया। कार्यक्रम की शुरुआत **सीएसआईआर** की आठ प्रतिभागी टीमों द्वारा भव्य फ्लैग मार्च के साथ हुई। मुख्य अतिथि प्रेमलता अग्रवाल ने अपने उद्घाटन भाषण में कहा कि खेल जीवन जीने का एक तरीका है। यह स्वास्थ्य और समग्र व्यक्तित्व विकास के लिए जरूरी है। डॉ. अनुराधा मधुकर ने बताया कि कैसे खेल टीम भावना, नेतृत्व और व्यक्ति के समग्र स्वास्थ्य को बढ़ावा देते हैं। **सीएसआईआर-एनएमएल** के निदेशक डॉ. संदीप घोष चौधरी ने सभी प्रतिभागी टीमों का स्वागत किया और डॉ. शांति स्वरूप भटनागर की विरासत और भारत में विज्ञान और प्रौद्योगिकी के क्षेत्र में उनके योगदान पर प्रकाश डाला।

Source: **Livehindustan**

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CSIR-National Physical Laboratory (CSIR-NPL)

CSIR-NPL Marks its 78th Foundation Day

CSIR-National Physical Laboratory (CSIR-NPL) commemorated its 78th Foundation Day with a grand celebration held on Thursday, January 4th, 2024. The event was graced by esteemed dignitaries and luminaries from the scientific community, witnessed a series of impactful sessions and significant announcements. The National Physical Laboratory is one of the earliest national laboratories set up under the Council of Scientific and Industrial Research, the foundation stone of which was laid on the 4th January 1947. The celebration kicked off with the ceremonial lamp lighting, symbolizing the illumination of knowledge and innovation. Prof. Venu Gopal Achanta, Director, **CSIR-NPL,** extended a warm welcome, setting the tone for an insightful day. He also shed light on the recent developments and activities of **CSIR NPL.** The event featured distinguished guest addresses by Dr. Ranjana Aggarwal, Director, **CSIR-NIScPR,** New Delhi, and Dr. Viswajanani J Sattigeri, Head, **CSIR-TKDL**, New Delhi.
Source: Pib

Union Minister Dr. Jitendra Singh to be Chief Guest at Department of Scientific and Industrial Research Foundation Day Celebration

Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space and Vice President **CSIR** Dr. Jitendra Singh will be Chief guest at the Foundation Day Celebration of Department of Scientific and Industrial Research to be held at **CSIR-National Physical Laboratory,** New Delhi on 5th January, 2024. Dr. Vijay Kumar Saraswat, Member (S&T), NITI Aayog and Prof. Ajay Kumar Sood, PSA to the Government of India will be guests of honour at the celebration. With a mandate to promote indigenous industrial research, focusing on technology development, utilization and transfer, Department of Scientific and Industrial Research (DSIR) was established under the Ministry of Science and Technology vide Presidential Notification on January 4, 1985. The primary goal is to stimulate research and development (R&D) within industries, assisting them in creating globally competitive, commercially viable technologies.
Source: Pib

How they made sure India's Constitution lasts for ages

Republic Day marks the occasion when the Constitution of India came into force. This year, we commemorated the 75th anniversary of the day on which the arduous efforts of the founding fathers of a newly independent India reached a momentous conclusion. The

Constitution though was adopted by the Constituent Assembly, the body that drafted it, on November 26, 1949. The outcome of over two years' labour was presented in the form of two carefully calligraphed copies bearing the signatures of the doyens of the freedom movement. But where are those volumes? These receptacles, created by **CSIR's** New Delhi-based **National Physical Laboratory (NPL)** in collaboration with the Getty Conservation Institute (GCI) of US, are housed since 1994 in a strong room in Parliament Library.
Source: MSM

50% of rural population in Assam, Arunachal, Meghalaya uses traditional fuels for cooking: IIT study

More than 50 per cent of the rural population in northeastern states - Assam, Arunachal Pradesh and Meghalaya - continues to use traditional solid fuels such as firewood and mixed biomass for cooking, leading to the release of pollutants, a study by Indian Institute of Technology (IIT) Mandi has found. The study conducted in collaboration with Institut National de Recherche et de Securite (INRS), France and the **National Physical Laboratory (CSIR-NPL),** India, was aimed at gauging the severity and disease burden associated with the use of biomass cooking fuel compared to LPG-based cooking.
Source: Economic Times

Union Minister Piyush Goyal Inaugurates National Time Protocol for Dissemination of IST in Mumbai

Union Minister of Consumer Affairs Piyush Goyal on Friday (15th March 2024) inaugurated National Time Protocol (NTP) for dissemination of Indian Standard Time in Mumbai. This will provide Uniform and precise time information with milliseconds accuracy and will also increase the cyber security. Public can access it via time.nplindia.org or time.nplindia.in. Mr. Goyal also virtually inaugurated timing infrastructure at Regional Reference Standard Laboratory (RRSL) at Faridabad and Ahmedabad. Talking exclusively to Akashvani, **CSIR National Physical Laboratory's** Head of Indian Standard Time division Dr. Ashish Agarwal said, India is the first country to implement time distribution system. By the end of year, atomic clock will be installed in the RRSL at Bengaluru, Bhubaneswar, Guwahati and Delhi. Mr. Agarwal said, earlier time was sourced from the Global Positioning System (GPS) but now onwards we will have our own system with the help of Navigation with Indian Constellation (NavIC). All the mobile operators across the country will have to sync the time using this system, he added.
Source: Newsonair

Atomic clocks to ring in one-nation, one time

India is deploying atomic clocks across the country to ensure the time shown on your digital watch, smartphone and laptop is truly based on Indian Standard Time—an effort launched more than two decades ago after the Kargil war. Currently, most software operating modules in India rely on US-based Network Time Protocol servers. The government wants all software to instead be synchronised with indigenous atomic clocks, both for uniformity in time and as a defence mechanism, especially in times of war. The

atomic clocks are being installed by the consumer affairs ministry's Legal Metrology Department and the **National Physical Laboratory,** or **NPL**—the nation's timekeeper.
Source: Livemint

Indelible mark of democracy: The story of India's election ink

Our eighteenth general election is almost here, with 97 crore eligible voters helming the world's largest democratic exercise. It is a matter of prodigious pride and, in parallel, a colossal logistical nightmare. Every possible news angle will be explored by ink slingers and reporters. Who will win? By how much? Or who will lose? Will there be pre-poll chicanery? Or post-poll violence? The TV channels are already in thrall, but have most voters turned a deaf ear to the abundance of noise, having made up their minds already? Voters' ink hasn't really been around for all that long. It might have been developed by a Colombian chemist, José Vicente Azcuénaga Chacón, and used in a local election there in 1957. The Indian connection is older, and a patent for the ink was filed in 1950 by the National Research and Development Corporation (NRDC). The first ink was developed by the **National Physical Laboratory (NPL**), a constituent of the **Council of Scientific and Industrial Research (CSIR),** which licenced the production to a small company in Mysore called Mysore Paints and Varnish Limited (MPVL).
Source: Firstpost

'Painting with light' illuminates photo evidence of air pollution

Researchers and artists have joined forces to 'paint with light' – making invisible air pollution visible and demonstrating the health risks posed to people living and working in Ethiopia, India, and the UK. 'Light painting photography makes particulate matter air pollution visible' - Francis D. Pope, Robin Price, Katherine E. Woolley, Carlo Luiu, Mohammed S. Alam, William R. Avis, Suzanne E. Bartington, Dawit Debebe, Zerihun Getaneh, Sheila M. Greenfield, Rachel Howells, Mukesh Khare, Abel Kidane, Chloe Lawson, Sumit K. Mishra, Ben Neal, Karen Newman, Ajit Singh, Bikila Teklu, G. Neil Thomas, and Faye Wilder is published in Nature Communications Earth & Environment. Participating institutions include: University of Birmingham, United Kingdom Vault Artist Studios, Belfast, United Kingdom University of Nottingham, United Kingdom Addis Ababa University, Ethiopia National Union of Journalists Wales, United Kingdom Indian Institute of Technology Delhi, New Delhi, India Ethiopian Public Health Institute, Addis Ababa, Ethiopia Birmingham Open Media, Birmingham, United Kingdom, **CSIR-National Physical Laboratory,** New Delhi, India.
Source: Eurekalert

Council of Scientific and Industrial Research (CSIR) -National Physical Laboratory celebrates One Week One Theme Program on Energy & Energy Devices

Council of Scientific and Industrial Research (CSIR) is organizing weeklong activities on One Week One Theme (OWOT) in eight different themes across its 37 laboratories to showcase translatable research leads to marketable/value-added technologies/products, enhancing interactions and connecting to stakeholders to enable ease of technology

licensing. The targeted theme "Energy and Energy Devices (EED)" is focused on conventional, non-conventional, sustainable, and innovative approaches for energy generation and storage solutions during 24-28 June, 2024 in New Delhi. **Council of Scientific and Industrial Research (CSIR) -National Physical Laboratory (CSIR-NPL)** is also organizing two days event on 26th and 27th June, 2024, under the OWOT:EED program by displaying technical strengths and achievements in the areas of Photovoltaic Metrology, Flexible solar cells (Silicon & Perovskite), Energy gas (Hydrogen & Alternative Fuels) Metrology and Agricultural waste to Biocoal, through a series of events including expert presentations, industry meet, laboratory visits, demonstration of working facilities etc.

Source: Pib

International meet on nanomaterials ends at VIT-AP University

The valedictory session of a three-day international conference on advanced nanomaterials and applications (ICANA-2024), jointly organised by VIT-AP University and the University of Southern Denmark on July 13 (Saturday) brought together renowned researchers and academicians from around the globe to discuss the latest advancements and applications in nanomaterials. The participants included Yogendra Kumar Mishra, professor at the University of Southern Denmark; Shankara Radhakrishnan, professor at the University of Pretoria, South Africa; M.M. Nayak, professor at Indian Institute of Science (IISc), Bengaluru; G.A. Basheed, principal scientist at Council of Scientific and Industrial Research **(CSIR)-National Physical Laboratory,** New Delhi; Ajeet Kaushik, assistant professor at Florida Polytechnic University, the U.S.; Leo Cristobal C. Ambolode II, professor at Mindanao State University, The Philippines; Aditya Sadhanala, professor at IISc, Bengaluru; Debasis Chaira, professor at NIT-Rourkela; L. Giri Babu, senior principal scientist at **CSIR-IICT**-Hyderabad; Tomoya Ohno, professor at Kitami Institute of Technology, Japan; Deepak Kumar Dubey, development engineer II at First Solar Inc, the U.S.; Somnath C. Roy, professor at IIT-Madras; Vijay Raj Singh, associate professor at Central University of South Bihar, India; N. Lakshminarasimhan, senior principal scientist at **CSIR-CECRI**-Karaikudi; P.K. Khanna, professor at DIAT-Pune; and Pradeep G. Siddheshwar, professor at Christ University-Bengaluru.

Source: The Hindu

CSIR-NPL Hosts Workshop On Quality Assurance Of Water And Bharatiya Nirdeshak Dravyas

Council of Scientific and Industrial Research -National Physical Laboratory (NPL) organized a workshop under the 'One Week One Theme- Chemicals and Petrochemicals' initiative on 19th July 2024, focusing on the quality assurance of water and the dissemination of Bharatiya Nirdeshak Dravyas (BNDs). The keynote address was delivered by Dr.S.R. Dhakate, Senior most scientist of **CSIR-NPL**. The convenor of the workshop Dr. S.Swarupa Tripathy briefed about the theme of workshop and emphasized on how the quality assurance of water can be done using Bharatiya Nirdeshak Dravyas. The Certified Reference Material (CRM) which is branded as 'Bhartiya Nirdeshak Dravya',

supports the testing and calibration of laboratories, for assuring quality at par with international standards. Mr. Pradeep Singh, Director of Ministry of Jal Shakti, emphasized on the significance of water quality management in India. He explained and showed the mapping of water quality control program being carried out under Jal Jeevan mission.
Source: Indiaeducationdiary

Council of Scientific and Industrial Research -National Physical Laboratory organized one day workshop on Quality Assurance of Water and Dissemination of Bharatiya Nirdeshak Dravyas BNDs under One week One Theme- Chemicals and Petrochemicals

Council of Scientific and Industrial Research -National Physical Laboratory (NPL) organized a workshop under the 'One Week One Theme- Chemicals and Petrochemicals' initiative on 19th July 2024, focusing on the quality assurance of water and the dissemination of Bharatiya Nirdeshak Dravyas (BNDs). The keynote address was delivered by Dr.S.R. Dhakate, Senior most scientist of **CSIR-NPL.** The convenor of the workshop Dr. S.Swarupa Tripathy briefed about the theme of workshop and emphasized on how the quality assurance of water can be done using Bharatiya Nirdeshak Dravyas. The Certified Reference Material (CRM) which is branded as 'Bhartiya Nirdeshak Dravya', supports the testing and calibration of laboratories, for assuring quality at par with international standards. Mr. Pradeep Singh, Director of Ministry of Jal Shakti, emphasized on the significance of water quality management in India. He explained and showed the mapping of water quality control program being carried out under Jal Jeevan mission.
Source: Pib

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) organizes a three-day program on Aerospace, Electronics, Instrumentation & Strategic Sector (AEISS) theme under the One Week One Theme

Council Scientific and Industrial Research (CSIR)-National Physical Laboratory (NPL) hosted a three-day workshop on AEISS theme from 2nd to 4th August at the **NPL** campus, as part of its 'One Week One Theme' initiative with participating labs **CSIR-CSIO, CSIR-CEERI**, and **CSIR-IIP**. Prof. Venugopal Achanta, Director of **CSIR-NPL**, extended a warm welcome to attendees. Subsequently, Dr. Abhay Anant Pashilkar, Director of **CSIR-NAL** and AEISS Theme Director, delivered a keynote address. He elaborated on the AEISS theme, outlining its pivotal role in achieving Atmanirbhar Bharat, Swasth Bharat, and Make in India initiatives. He also discussed the projected targets associated with the AEISS theme. Dr. P. C. Panchariya, Director of **CSIR-CEERI,** highlighted the crucial role of the AEISS theme in driving industrial growth. He also elaborated on the significance of a single window system for smooth and straightforward technology transfer.
Source: Pib

Timekeeping through time | Explained

An atomic clock may seem futuristic in comparison. The power source is a laser and the resonator is a group of atoms of the same isotope. The laser imparts just enough energy for the atom to jump from its low energy state to a specific higher energy state. And when the atom jumps back down, it releases radiation with a well-established frequency. For example, the caesium atomic clock uses caesium-133 atoms as the resonator. When these atoms excite and then de-excite, they release radiation of frequency 9,192,631,770 Hz. So when the counter detects 9,192,631,770 full waves of the radiation, it will record that one second has passed. Atomic clocks are distinguished by their resonator; each such clock is called a time standard. For example, India's time standard is a caesium atomic clock at the **National Physical Laboratory**, New Delhi, which maintains the Indian Standard Time.
Source: **The Hindu**

Recycling firm collaborates with DEAL-DRDO, IIT Delhi and CSIR-NPL for development of nano composites

Recyling firm Vikas Lifecare has entered into a strategic collaboration with the Defence Electronic Applications Laboratory (DEAL), a premier laboratory under the Defence Research and Development Organisation (DRDO), Dehradun, the Indian Institute of Technology (IIT), New Delhi, and the **CSIR-National Physical Laboratory (CSIR-NPL),** Delhi for development of Nano Composites. This partnership aims to advance the development of Nano composites for EMI shielding applications, targeting a broad range of commercial, military, scientific electronic devices, and communication instruments. To formalize this collaboration, a Non-Disclosure Agreement (NDA) has been signed between all parties involved. Objective of the Collaboration The primary objective of this NDA is to design and develop advanced carbon fiber and MWCNT/graphene nano ferrites composites specifically for EMI shielding applications. The focus will be on:
Source: **Zeebiz**

CSIR-NPL organizes a brainstorming Meet on Bharatiya Nirdeshak Dravyas (BNDs) with Stakeholders

CSIR National Physical Laboratory (NPL) organized a one-day Brainstorming Meeting on "Enhancing global competence in quality by providing SI traceable measurements through Bharatiya Nirdeshak Dravyas (BNDs) [Certified Indian Reference Materials)" in **CSIR-NPL,** New Delhi on 9th August 2024. The event was inaugurated by Shri Rajesh Kumar Singh, Secretary of DPIIT (Govt. of India), Vaidya. Rajesh Kotecha, Secretary (AYUSH), Ms. Dr. N. Kalaiselvi, Secretary DSIR & DG, **CSIR**, Dr. Parveen Malik, CEO (Agrinnovate, India. Ltd), Dr. Venugopal Achanta, Director, **CSIR-NPL** and Dr. S. P. Singh, Head, BND Division, **CSIR-NPL.** Addressing the ceremony, Shri Rajesh Kumar Singh, Secretary of DPIIT (Govt. of India) complimented the efforts of **CSIR NPL** on this great initiative. He emphasized the requirement for all stakeholders to join hands to make the dream of the Hon. Prime Minister of India for "Aatmanirbhar Bharat" a reality. Dr. Venugopal Achanta, Director, **CSIR-NPL** highlighted the significance of BNDs and the progress made so far by the efforts of **CSIR-NPL** in the opening remarks.

Source: Pib

Big win! CSIR-NPL launches comprehensive certification for Continuous Emission Monitoring Systems across India

Continuous Emission Monitoring System (CEMS) is a critical tool for accurate pollution monitoring and reporting, essential for industries across India. In 2014, Central Pollution Control Board (CPCB) mandated the installation of CEMS in 17 categories of highly polluting industries and common pollution control facilities. However, despite this mandate, CEMS data has yet to be fully utilised for regulatory and compliance purposes due to concerns about its reliability. To address this, a robust certification and quality assurance system is required. In August 2019, the Union ministry of environment, forest and climate change designated the **Council of Scientific & Industrial Research-National Physical Laboratory (CSIR-NPL)** as the national verification agency responsible for certifying instruments and equipment used for monitoring emissions and ambient air. After five years of dedicated effort, **CSIR-NPL** has developed a certification scheme, NPLI CS and associated testing facilities for CEMS. As of now, **CSIR-NPL** has begun accepting applications for the certification of gaseous CEMS, with certification for particulate matter (PM) CEMS expected to follow shortly.
Source: Downtoearth

CSIR-NPL, Galgotias University Collaborate to Study Delhi-NCR Pollution Using Balloon and Drone Technology

In a cutting-edge initiative, the **CSIR-National Physical Laboratory (NPL)** has embarked on a crucial study to understand pollution episodes in Delhi-NCR. The study, conducted in collaboration with leading institutions such as the Tata Institute of Fundamental Research (TIFR), the North Eastern Space Applications Centre (NESAC), and the **CSIR-National Aerospace Laboratories (NAL),** aims to provide insights into the formation of air pollution and haze over the region's atmospheric boundary layer. The experiment will involve in-situ observations of particulate matter and meteorological parameters at varying altitudes using a tethered balloon (Kytoon) and a drone platform. These observations will take place during both low-pollution conditions, set as a reference in late September, and high-pollution conditions expected in mid-October. The study's goal is to better understand the physicochemical characteristics of particles and their variation with altitude, which could help pinpoint the mechanisms behind haze formation in Delhi-NCR's atmosphere. To achieve this, the researchers will conduct concurrent experiments across three strategic locations: Maharshi Dayanand University in Rohtak, Haryana; Galgotias University in Greater Noida, Uttar Pradesh; and the **CSIR-NPL** campus in New Delhi.
Source: Tennews

Council Scientific and Industrial Research (CSIR) - National Physical Laboratory (NPL) Celebrated 83rd CSIR Foundation Day

Council Scientific and Industrial Research (CSIR)- National Physical Laboratory (NPL) celebrated 83rd **CSIR** Foundation Day at **CSIR-NPL** campus, New Delhi. The

ceremony commenced with the lighting of the ceremonial lamp followed by a welcome address from Prof. Venu Gopal Achanta, Director **CSIR-NPL,** who greeted the dignitaries, **NPL** retirees, scientists, students, staff, and other invitees. The highlight of the event was the **CSIR** foundation day lecture delivered by Dr. Sanjay Behari, Director of Sree Chitra Tirunal Institute of Medical Sciences & Technology, Trivandrum. He highlighted the role of metrology in the field of Biomedical device development and testing. He mentioned that there is growing interest in the biomedical device development within the country. He emphasized that the commercialization of the device is the measure of real success of any product development. He also highlighted the role of standard reference materials for the biomedical instrumentation.
Source: Pib

A celebration of the indomitable spirit of our freedom struggle

Seventy-five years ago, on November 26, the Constitution of India was adopted. The longest-written Constitution of any sovereign country in the world embodies the sacrifices, hopes, and ideals of a nation reborn. Two manuscripts, one in English and another in Hindi, meticulously crafted by Prem Behari Narain Raizada and brought to life with the artistry of Nandalal Bose, are more than ink and parchment papers. Its pages come alive with the imagery that journeys from the ancient marvels of Mohenjo Daro and the spiritual wisdom of the Vedic age to the indomitable spirit of India's freedom movement. Every stroke of ink represents the promise of a democratic republic. In the mid-1980s, the **Council of Scientific and Industrial Research's National Physical Laboratory (CSIR-NPL)** stepped in to safeguard these legacies. Over the next few years, **CSIR-NPL** navigated through the challenging aspects of constructing safe receptacles that can preserve the original hand written manuscripts of the Constitution of India. The display cases needed a hermetic seal with mechanical strength to withstand varying humidity, temperatures and oxygen level and the durability to endure the test of time. After years of meticulous effort, the **CSIR-NPL,** in collaboration with the Getty Conservation Institute (GCI), US, successfully installed the 'hermetically sealed glass cases' at the Parliament Library in 1994.
Source: Hindustantimes

Dr. Jitendra Singh underscores India's emerging global leadership in advance technologies

In a keynote address at the Asia Pacific Metrology Program (APMP) General Assembly 2024, Union Minister of State (Independent Charge) for Science and Technology; Earth Sciences and Minister of State for PMO, Department of Atomic Energy, Department of Space, Personnel, Public Grievances and Pensions, Dr. Jitendra Singh underscored India's emerging global leadership in advance technologies like metrology and its pivotal role in newer technologies like the quantum. Speaking on the theme "Metrology for Quantum Technologies," the Minister emphasized that precise measurement standards are crucial for fostering innovation, boosting industry competitiveness, and achieving the vision of a "Vikasit Bharat" by 2047. He highlighted India's significant contributions,

including the globally recognized indelible ink developed by the **National Physical Laboratory, India (NPL),** which is used in elections across 37 countries, symbolizing India's democratic impact on the world stage. The Union Minister spotlighted the contributions of the **CSIR-National Physical Laboratory (NPL),** positioning it as a cornerstone of India's metrological excellence and influence in the South Asian region. NPL's achievements include the development of indelible ink, a globally recognized symbol of India's democratic contributions, used in elections in 37 countries.
Source: **Pib**

ARPAN Advocates for Separate Time Zone in Northeast India to harness productivity and sustainability

Ahead of the NEC Plenary Session in Agartala, ARPAN, an esteemed administration based in Tripura, has proposed a significant reform - the adoption of a separate time zone for India's Northeastern states in its latest communication dated December 17, 2024. The organization appealed key stakeholders, including the Governors, Chief Ministers of the region, and the Union Minister for Development of North Eastern Region (DoNER), Jyotiraditya Scindia to discuss the matter at the 72nd North Eastern Council (NEC) Plenary Session in Agartala, scheduled for December 20-21, 2024. The Core Proposal ARPAN has advocated for advancing the daily schedule of Northeastern states by at least two hours relative to Indian Standard Time (IST). This proposal resonates with a prior recommendation by the **CSIR-National Physical Laboratory (CSIR-NPL),** which suggested a dual time-zone system in India. **CSIR-NPL's** framework proposed IST-I (UTC+5:30) for most of India and IST-II (UTC+6:30) for the Northeast and the Andaman & Nicobar Islands. Such a shift would better align with the Northeast's unique geographical positioning and facilitate the more efficient use of daylight hours.
Source: **Enewstime**

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CSIR-Structural Engineering Research Centre (CSIR-SERC)

CSIR Celebrates International Mother Language Day 2024

The International Mother Language Day is being celebrated with great enthusiasm at the **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC) during 21-23 February 2024. The whole programme comprises of four sessions - an inaugural programme, presentation of research activities, technical / literary talks in mother language, cultural programme and valedictory sessions. The inaugural programme was held on 21 February 2024 at 11 AM at the Vigyan Auditorium of the **CSIR** Campus. Thiru Valliappan Nagappan, economic observer & commentator, columnist, author, independent director was the chief guest of the function. The function started with Tamil Thai Vaazhthu and the lighting of the lamp by the dignitaries. Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC, gave the welcome address, in which she spoke in brief on the significance of the mother language for achieving excellence.

Source: **Pib**

CSIR-Structural Engineering Research Centre organises International Mother Language Day 2024

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Source: **Pib**

NIOT organises World Ocean Science Congress 2024 on Sustainable Utilization of Oceans in Blue Economy

World Ocean Science Congress (WOSC 2024) provides a common platform for the stakeholders of ocean, mainly in the sectors of tourism, navy and defence, maritime

industries, transportation, ports & harbour, coastal infrastructure, researchers, academicians, legal and geo-political experts, archaeologists, etc., to interact, exchange ideas and appreciate the conflicting demands of the stakeholders. The third WOSC conference has been organised at IIT Madras Research Park, Chennai from 27 to 29 February 2024 with the theme 'Sustainable Utilization of Oceans in Blue Economy' focuses on the development of coastal infrastructure, tourism in coastal states & Islands, offshore & coastal fisheries, marine biotechnology, warming of oceans, sea level rise, depletion of oxygen & acidification, marine pollution, oceanic hazards and mitigation, etc. Dr. G.A Ramadass , Director NIOT, Dr. Ranjith Rath, CMD Oil India Ltd., Prof. Raghuram Rangasamy, Director In-charge IIT Madras, Dr. Anandavalli, Director **CSIR-SERC**, Dr. Satheesh Chandra Shenoy, VIBHA and Dr. Vivekanda Pai, VIBHA.
Source: Press Information Bureau

Dr. N. Lakshmanan Memorial Quiz Competition organised exclusively for the Corporation of Chennai School students

CSIR-Structural Engineering Research Centre (CSIR-SERC), a constituent laboratory of **CSIR** organized "Dr. N. Lakshmanan Memorial Quiz Competition" exclusively for the Corporation of Chennai School students in connection with National Science Day celebrations on 28th of February 2024 under Jigyasa at **CSIR** Campus, Taramani, Chennai. The main aim of the quiz is to inculcate the aptitude for scientific research in the young minds. During the inaugural event, Dr. N. Anandavalli, Director of **CSIR-SERC** & Coordinating Director of CMC delivered a motivational talk. She encouraged the students to be creative, innovative, and to achieve success by way of dreaming big, fixing definite goals, preparing definite plans, working hard and to act with persistence. "Dr. N. Lakshmanan Memorial Quiz Competition" was conducted at the Vigyan Auditorium. More than 60 students from 21 schools participated in the Screening Test.
Source: Pib

National Science Day celebrated at CSIR Campus, Chennai

National Science Day is celebrated in India every year on 28 February to mark the discovery of the Raman Effect by Indian Physicist Sir C.V. Raman. National Science Day was celebrated with great enthusiasm at the **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC) during 28-29 February 2024. The National Science Day function was organized on 29.2.2024 and was presided over by Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC. Prof. S.K. Bhattacharyya, Vice Chancellor, Shiv Nadar University, Chennai, and Former Director, **CSIR-Central Building Research Institute (CSIR-CBRI**), Roorkee, was the Chief Guest of the function. In her welcome address, Dr. Anandavalli mentioned that science and technology are integral parts of Indian culture, deeply interlinked, and are also fundamental to the growth of the country and humanity. Speaking briefly on Sir CV Raman and the genesis of National Science Day, she said that this day is a powerful reminder of the impact of science and technology in our everyday lives. Talking about the theme of National Science Day 2024 – Indigenous Technology for Viksit Bharat, she said that India has always been a land of innovation and highlighted on the contributions of **CSIR**

towards developing indigenous technologies. Dr. Anandavalli also remembered the contributions of Dr. N. Lakshmanan, Former Director of **CSIR-SERC**, for the structural engineering field and his outstanding work at **CSIR-SERC.**
Source: Pib

613 Trees to be felled for widening of road near Ambazari dam, MSTA gives nod

Maharashtra State Tree Authority (MSTA) has given nod for the felling of 613 trees to undertake widening of Ambazari Road from Vivekand Statue till the dam, that spreads till the University land near Pandhrabodi slums. Nagpur Municipal Commissioner got the letter granting permission for cutting down the trees, in addition to trees that are being chopped that pose a threat to embankment of the dam. These trees are on the slope of the Ambazari dam that is parallel to the existing two-laned road. Among the trees that are planned to be removed includes 60 tagged with heritage status and letter is signed by Director (Environment) and Member Secretary, Maharashtra State Tree Authority. As per the permission letter, MSTA has mandated NMC to submit report from **NEERI, CSIR, NGRI, SERC** specifying need for cutting the trees as same are necessary for the structural safety of the dam. It was also directed to the local body to explore possibility of transplantation of heritage trees as their conservation is necessary. Also, there was direction to first undertake plantation of new native or indigenous species trees before undertaking cutting as part of compensatory afforestation. The same would be equivalent to cumulative age of the trees that are earmarked for cutting.
Source: The Hitavada

CSIR-Structural Engineering Research Centre signs License agreement with L & T Construction

On the occasion of International Women's Day, a License Agreement was signed between **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai and L & T Construction – Water & Effluent Treatment IC, Chennai, for transfer of technology titled “Textile Reinforced Concrete Prototyping Technology (TRCPT)”. The agreement was signed in the presence of Dr. N. Anandavalli, Director, **CSIR-SERC**, Dr. K. Sathish Kumar, Chief Scientist and Head, Business, Knowledge Management & Development Division, **CSIR-SERC**, Dr. S. Parivallal, Advisor (Management). **CSIR-SERC**, Shri. Simeshwaran Pillai, Chief Engineering Manager, L&T and Ms.Dayana Rexaline M.R., Operations Head, L&T. The technology was developed by Dr. (Mrs.) Smitha Gopinath, Principal Scientist**, CSIR-SERC**. Mrs. Sakthi Chitra, Chief Engineering Manager, signed the license agreement on behalf of L&T.
Source: Pib

Agreement signed for transfer of technology for non-corrosive textile reinforced concrete

An agreement for the transfer of technology for corrosion-free Textile Reinforced Concrete Prototyping Technology (TRCPT), a patented technology developed by **CSIR – Structural Engineering Research Centre (CSIR – SERC),** Chennai was signed here recently between **CSIR** and L&T Construction – Water and Effluent Treatment IC. TRCPT is a precast technology to produce TRC components, for which an Indian patent has been

granted. TRCPT can serve as an effective indigenous technological solution to achieve economical mass production of TRC products consisting of fine-grained cementitious binder and non-metallic textile reinforcement, a press release said. The technology, which was earlier used in toilet construction, has now been upgraded for the production of components such as facade elements, industrial flooring tiles, street furniture, canopy structure partition walls, noise barriers, roofing elements and manhole covers. Flowerpots, wash basins, doors and window frames and door panels too, can be produced using this technology.
Source: The Hindu

CSIR- Structural Engineering Research Centre and CSIR Madras Complex (CMC) organised "Phenome India" - A Unique Health Check-up Camp

The **Council of Scientific and Industrial Research - Institute of Genomics and Integrative Biology, New Delhi (CSIR - IGIB**) has initiated a unique health check –up camp called Phenome India - **CSIR** Health Cohort Knowledgebase (**CSIR** Cohort - PI-CHeCK) for the **CSIR** family. **CSIR** is one of the largest research and development organisations of India and this is a network of 37 laboratories situated across the country. The **CSIR- Structural Engineering Research Centre (CSIR-SERC)** and CSIR Madras Complex (CMC) organised "Phenome India" - A Unique Health Check-up Camp during from 8 to 11 March 2024 at **CSIR** Campus, Taramani, Chennai. Phenome India is not just a health check-up camp; it's a pioneering step towards understanding the unique health landscape of our nation. By gathering diverse data through PI-CHeCK, **CSIR** aspires to pave the way for tailored healthcare solutions and contribute significantly to the advancement of medical knowledge.
Source: **Pib**

Tamil Nadu scientists develop powerful new ‘light’ formula

It’s lightweight and low-cost but has the power to move you from darkness to light in a jiffy. The new emergency retrieval system (ERS), which comprises temporary support structures, can restore electricity supply when transmission line towers collapse or fail during natural disasters such as cyclones or disruptions such as vehicular accidents. Researchers from **CSIR-Structural Engineering Research Centre** in Chennai, who developed the technology, say the structures can be assembled and installed quickly at disaster sites to restore power supply temporarily before permanent restoration begins, at a cost 60% less than imported systems presently used in India.
Source: Times of India

International Women’s Day celebrated at CSIR-SERC and CSIR-CMC

International Women’s Day was celebrated with great enthusiasm at the **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC), Chennai, on 25 March 2024. This year's theme for International Women’s Day 2024 is Invest in Women: Accelerate Progress. Smt. Brindha Srinivasan, Assistant News Editor, Hindu Tamil Thisai, was the chief guest of the function. Smt. Porkodi, Writer, Novelist, & Cine Dialogue Writer, was the guest of honor. Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC, welcomed the gathering. In her opening remarks, she said that Women’s Day is celebrated to recognize the contributions of women and to

create awareness on gender equality. Speaking on this year's theme, she said that it is critical to invest in and empower women for the betterment of society and the nation. She spoke on the inexplicable gap between education and workforce participation and pointed out that women who study STEM (Science, Technology, Engineering, and Mathematics) are less likely to enter into STEM careers.
Source: Pib

CSIR-SERC celebrates Babasaheb Dr. B.R. Ambedkar's birth anniversary

The 133rd birth anniversary of Dr. Ambedkar was celebrated with great enthusiasm on 16th April 2024, at the **CSIR** campus jointly by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). The function was presided over by Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC. Shri K. Ashok Vardhan Shetty, Former Vice Chancellor, Indian Maritime University, Chennai, was the Chief Guest of the function. The function was inaugurated with the lighting of Kuthuvilakku by the Chief Guest and the dignitaries. Dr. K. Sathish Kumar, Chief Scientist, and Head-BKMD, CSIR-SERC, welcomed the chief guest and gave the welcome address. Dr. Sathish Kumar remembered the immense contributions of Dr. Ambedkar to Indian society and towards the drafting of the constitution of India. He also mentioned that Dr. Ambedkar advocated equality throughout his life and worked tirelessly to bring up a caste-free nation where all the people have equal respect and social justice.
Source: Pib

CSIR remember Babasaheb Ambedkar

The 133rd birth anniversary of Dr. Ambedkar was celebrated with great enthusiasm on Apr.16, at the **CSIR** campus, jointly by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). The function was presided over by Dr N.Anandavalli – Director of **CSIR-SERC** and Coordinating Director of CMC. K.Ashok Vardhan Shetty, IAS (Retd.), Former Vice Chancellor of Indian Maritime University, was the chief guest of the event. Dr K.Sathish Kumar – Chief Scientist, gave the welcome address. He remembered the immense contributions of Dr. Ambedkar to Indian society and towards the drafting of the constitution of India. Dr N.Anandavalli, in her presidential address mentioned that Dr. Ambedkar is a symbol of equality.
Source: Adyartimes

CSIR-Structural Engineering Research Centre (CSIR-SERC) and CSIR Madras Complex celebrates National Technology Day

National Technology Day was celebrated with great enthusiasm on 15 May 2024, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and CSIR Madras Complex (CMC). The function was presided over by Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC. Dr. Chandrika Kaushik, Outstanding Scientist & Director General – Production Coordination & Services Interaction (PC & SI), Defence Research and Development Organization (DRDO), New Delhi, was the Chief Guest of the function. Dr. Anandavalli welcomed all the participants on the eve of the National Technology Day and mentioned that this day is being celebrated since 1999 to mark

India's technological prowess. She briefed on the National Technology Day and said that this day is celebrated every year to commemorate India's three significant technological achievements namely, to mark the anniversary of the POKHRAN nuclear tests of 1998, first flight of the indigenously designed HANSA lightweight aircraft and the development of the surface to air missile TRISHUL.
Source: Pib

CSIR-SERC and CSIR Madras Complex organises workshop on Intellectual Property Rights

As a part of the National Intellectual Property Festival (Rashtriya Boudhik Sampada Mahotsav) 2024, a One-day workshop on Intellectual Property Rights (IPR) was organized by **CSIR-SERC** and **CSIR** Madras Complex on 17 May 2024. During the workshop, Dr N. Anandavalli, Director, **CSIR-SERC** and Co-ordinating Director, CMC, delivered the welcome address. Shri S. Udhaya Shanker, Deputy Controller of Patents & Designs, Indian Patent Office, Chennai, delivered the Intellectual Property Festival Lecture on Introduction to IPR and its impact. In his address, he briefed on the significance of intellectual property and the need to protect it. He also spoke about patents, copyrights, trademarks, and designs in detail. Shri M. Ajith, Joint Controller of Patents and Designs, Indian Patent Office, Chennai, delivered the Lecture on Patentability criteria and filing procedures. Ms. K. Susi, Assistant Controller of Patents and Designs, Indian Patent Office, Chennai, delivered the Lecture on Patentability and case studies on intellectual property rights.
Source: Pib

60th Foundation Day of CSIR-SERC celebrated at CSIR Campus, Chennai

CSIR-Structural Engineering Research Centre (CSIR-SERC) celebrated its 60th Foundation Day and Inauguration of the Diamond Jubilee celebrations with great enthusiasm on 10 June 2024 at the **CSIR** Campus, Chennai. The function was presided over by Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC. Dr. Vijay Kumar Saraswat, Hon'ble Member, NITI Aayog, was the Chief Guest of the function. Dr. S. Gomathinayagam, Former Director General, National Institute of Wind Energy, was the Guest of Honour. Dr. Anandavalli extended a warm welcome to the chief guest and guest of honour and congratulated all the staff members on the occasion of the 60th foundation day of **CSIR-SERC**. In her welcome address, the Director mentioned that civil engineering is a way of life and brought out the analogy between the five elements viz earth, air, fire, water, space, and structural engineering.
Source: Pib

Increasing urbanisation will significantly impact structural engineering, says NITI Aayog member

Increasing urbanisation may have a significant impact on the future of structural engineering, and there is a need to have more resilient and sustainable structures, Vijay Kumar Saraswat, member of NITI Aayog, said here on Monday. While delivering the G.S.

Ramaswamy Memorial Lecture during the 60th Foundation Day of the **Council of Scientific and Industrial Research-Structural Engineering Research Centre (CSIR-SERC**) and the inauguration of diamond jubilee celebrations, he spoke about the advances in structural engineering methods. “The field of structural engineering is constantly evolving, with new technologies and materials being developed all the time. This is leading to new and innovative ways to design and build structures, which are efficient, safe, and sustainable,” he said.
Source: The Hindu

One Week One Theme (OWOT) Programme for Energy (Conventional and Nonconventional) and Energy Devices (EED) theme of CSIR celebrated at CSIR-SERC

As part of the One Week One Theme (OWOT) Programme for Energy (Conventional and Nonconventional) and Energy Devices theme of CSIR, an event was organized under the Energy Infrastructure thrust area on 25th June 2024 from 2.00 PM to 5.30 PM at **CSIR-SERC.** Dr. M. V. Ramanamurthy, Advisor & Programme Head, Deep Ocean Mission, Ministry of Earth Sciences and Director, NCCR was the Chief Guest of the event. Dr. N. Anandavalli, Director, **CSIR-SERC** and Coordinating Director, CMC delivered the welcome address of the event. She told that Dr. Jitendra Singh, Honourable Minister (S&T) inaugurated this one week one theme (OWOT) campaign in Delhi on 24th June 2024. She informed that **CSIR-SERC** is working in the renewable energy area and as a part of the energy infrastructure thrust area, **CSIR-SERC** planned to celebrate the one week one theme (OWOT) event for Energy and Energy Devices (EED) theme of CSIR at **CSIR-SERC.** Ms. N. Ramya, Scientist, CSIR-SERC briefed about the background of the one week one theme (OWOT) Energy and Energy Devices (EED) event and also introduced the chief guest.
Source: Pib

"CSIR JIGYASA SUMMER CAMP" exclusively for the Tamil Nadu State Government school students

CSIR-Structural Engineering Research Centre (CSIR-SERC), a constituent laboratory of **CSIR**, organising a **"CSIR JIGYASA SUMMER CAMP"** exclusively for the Tamil Nadu State Government school students from 24 - 26 July 2024. at CSIR Campus, Taramani, Chennai. The event is being organised with the aim of reaching out to the student communities as part of scientific, social responsibility and knowledge sharing of various scientific developments in different fields of Science / Engineering / Technology through the JIGYASA programme. 39 students and 13 teachers from four districts (Kanchipuram, Tiruvallur, Chennai & Chengalpattu) are participating in this 3-day summer camp in Residential mode. During the inaugural event, Dr. S. Maheswaran, Senior Principal Scientist delivered the opening remarks. Dr. J. Rajasankar, Chief Scientist delivered the welcome address. Dr. N. Anandavalli, Director of **CSIR-SERC** & Coordinating Director of CMC delivered the presidential address. The inaugural session was completed with a formal vote of thanks by Mr. E. Ashokkumar, Scientist, and a group photo session.

Source: Pib

'CSIR Jigyasa Summer Camp' conducted exclusively for school students

CSIR-Structural Engineering Research Centre (CSIR-SERC), organised a **CSIR** Jigyasa Summer Camp' exclusively for the state government school students from July 24 – 26 at **CSIR** Campus, Taramani. In the event, 39 students and 13 teachers from four Kanchipuram, Tiruvallur, Chennai and Chengalpattu districts participated. Dr.N.Anandavalli – Director of **CSIR-SERC**, Dr. S. Maheswaran – Senior Principal Scientist, Dr.J.Rajasankar – Chief Scientist, and E.Ashokkumar – Scientist addressed the inaugural session. Dr.Anandavalli motivated the audience with her talk 'Inspire from Nature; Protect it for Future'. She encouraged the students to be creative, and innovative, and to achieve success by way of dreaming big, fixing definite goals, preparing definite plans, working hard and acting with persistence. Few also explained some of the inventions inspired by nature.

Source: Adyartimes

EyeROV wins DRDO contract for long range ROV for underwater object detection

India's first commercial underwater-drone technology company EyeROV won the TDF scheme fund to "develop a long-range Remotely-Operated Vehicle (ROV) for underwater object detection and neutralization", and signed an agreement with Defence Research and Development Organization (DRDO). Directorate of Technology Development Fund (DTDF) Director and Scientist 'G' Nidhi Bansal and EyeROV Cofounder Kannappa Palaniappan exchanged the agreement at Naval Science and Technological Laboratory (NSTL) in Visakhapatnam of coastal Andhra Pradesh, a release said. EyeROV will use the fund to develop an underwater drone or remotely operated vehicle (ROV) that can monitor large ranges not achieved till now. This system will be capable of deep-sea search of lost objects and can also neutralize objects of dangerous nature. EyeROV TUNA, which is the company's flagship vehicle, is being used by DRDO labs, Indian Coast Guard and **CSIR-SERC**, among others. EyeROV has completed more than 100 underwater inspection projects across the country for BPCL, Tata, Indian Railways, Adani, NHDC and KNNL.

Source: Uni India

Load deflection test conducted on vertical lift of new Pamban rail bridge

Load deflection test on the newly-built centre span of new Pamban rail bridge was held with a goods train here on Wednesday. After having tested the track on the approach to the vertical lift span in the past, the officials of Rail Vikas Nigam Limited, which is executing the mega project, conducted the load test in association with **Structural Engineering Research Centre**, Chennai. RNVL Chief Project Manager, II, T.K. Padmanaban, oversaw the testing process. "We used 11 wagons, each weighing 80 tonnes, with twin locomotives on the bridge. The load test was done with multiple runs at different speed levels of 10 kmph to 60 kmph," said a consultant to RVNL, S. Anbazhagan. The test run has proved the load bearing capacity of the 72.5-metre-long centre span, he

added. The testing which started around 11 a.m. went on upto 5 p.m. “This is one of those tests that needs to be conducted and its report would be submitted to Commissioner of Railway Safety before his mandatory inspection of the bridge for his clearance to operate train services,” Mr. Anbazhagan said.
Source: The Hindu

One Week One Theme (OWOT) Programme for Civil, Infrastructure and Engineering (CIE) theme of CSIR celebrated at CSIR-SERC

The **Council of Scientific & Industrial Research (CSIR),** known for its cutting-edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization. **CSIR** has a dynamic network of 38 national laboratories, 39 outreach centers, 1 innovation complex, and three units with a pan-India presence. One Week One Theme (OWOT) campaign was launched by Dr. Jitendra Singh, Minister of Science & Technology and Earth Sciences, to highlight India's recent successes in science and technology. Among the eight R&D themes of **CSIR**, numerous events are being organized at various places across the country. As a part of this campaign, a one-day event comprising a stakeholder meet cum exhibition under the OWOT Campaign initiative focused on Civil Infrastructure and Engineering (CIE) theme was organized on 5 September 2024, at **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, with five **CSIR** labs working in the area, viz, **CSIR-Central Building Research Institute (CSIR-CBRI),** Roorkee, **CSIR-Central Road Research Institute (CSIR-CRRI),** New Delhi, **CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI),** Durgapur, **CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI),** Bhopal and **CSIR-SERC** participating in it.
Source: Pib

CSIR-SERC jointly organised Jigyasa ATL workshop as part of Atal Tinkering Lab Adoption and Mentoring in Theni District

CSIR-Structural Engineering Research Centre (CSIR-SERC) Chennai, a constituent laboratory of **CSIR**, and **CSIR** Chennai Campus (CMC) jointly organised Jigyasa ATL workshop (Student-Scientist Connect) as part of Atal Tinkering Lab Adoption and Mentoring in Theni District of Tamil Nadu State during the 4-5 September 2024 at the following schools: Government Higher Secondary School, Okkaraipatti (625517), Government Higher Secondary School, Silamarathupatti (625528), Government Higher Secondary School, Koduvilarpatti (625534), Government Higher Secondary School, Dharmapuri (625533), "JIGYASA" is one of the major initiative taken up by **CSIR** at national level, during its Platinum Jubilee Celebration Year. **CSIR** is widening and deepening its Scientific Social Responsibility further with the programme. The focus of this scheme is on connecting school students and scientists so as to extend student's classroom learning with well-planned research laboratory based learning. The Jigyasa programme is inspired by Prime Minister Narendra Modi’s vision of a new India and Scientific Social Responsibility (SSR) of Scientific Community and Institutions.
Source: Pib

CSIR-SERC invites public to visit its Laboratories on Foundation Day

CSIR - Structural Engineering Research Centre (CSIR-SERC) is a National Laboratory under the Council of Scientific & Industrial Research, Government of India. It is engaged in Research and Development, Consultancy and Advanced Testing services in the field of Structural Engineering. It is located in the **CSIR** Campus at Taramani, Chennai, which also houses the Regional Centres of other national laboratories specializing in a spectrum of disciplines such as, electrochemistry **(CSIR-CECRI),** electronics **(CSIR-CEERI)**, environment **(CSIR-NEERI)**, metallurgy **(CSIR-NML)** and instrumentation **(CSIR-CSIO)**. This year, the **Council of Scientific and Industrial Research (CSIR**) will be celebrating its Foundation Day on 26th September, 2024. To mark the occasion, all the laboratories located at the **CSIR** Campus in Chennai will be hosting an Open Day. On this day, the laboratories will open their doors to school and college students, teachers, media personnel, professional engineers, industrial professionals, and the general public. The aim of this Open Day is to provide visitors with an opportunity to explore the scientific work carried out in these laboratories and learn more about the innovations and research that **CSIR** is involved in.

Source: Pib

CSIR Foundation Day Celebrations held in Chennai

The foundation day of **Council of Scientific & Industrial Research (CSIR),** New Delhi, an autonomous organization under Ministry of Science & Technology, Govt. of India, was celebrated with great enthusiasm on 26 September 2024, at the **CSIR** Campus in Taramani, Chennai by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). As a part of the foundation day celebrations Open Day was observed at **CSIR** Campus, Taramani, Chennai, and at TTRS (Tower Testing and Research Station) Campus, Tirusulam, Chennai, **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and Regional Units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML**. All laboratories in the **CSIR** Campus and TTRS were kept open for the general public between 9.30 am and 3:00 pm. Elaborate arrangements were made to receive the visitors. State-of-the-art facilities, Technologies and products were showcased and demonstrated for the benefit of the visitors. More than 9200 people including school and college students, teachers, professionals from the industry, entrepreneurs and the general public visited the campus with great enthusiasm.

Source: Pib

CSIR-Structural Engineering Research Centre celebrates 83rd CSIR Foundation Day

The 83rd foundation day of **CSIR** was celebrated with great enthusiasm at the **CSIR** Campus in Taramani, Chennai, by **CSIR-Structural Engineering Research Centre (CSIR-SERC)** and **CSIR** Madras Complex (CMC). Open Day was observed on the occasion of the 83rd Foundation Day celebrations of **CSIR**, on 26 September 2024, at **CSIR** Campus, Taramani, Chennai, by **CSIR-Structural Engineering Research Centre**

(CSIR-SERC) and **CSIR** Madras Complex comprising the regional units of **CSIR-CECRI, CSIR-CEERI, CSIR-CSIO, CSIR-NEERI** and **CSIR-NML.** All laboratories in the **CSIR** Campus were kept open for the general public between 9:30 AM and 3 PM. Elaborate arrangements were made to receive the visitors. Technologies, products, and state-of-the-art facilities were showcased and demonstrated for the benefit of the visitors. A record number of 9200 visitors, including school and college students, teachers, professionals from the industry, entrepreneurs, and the general public, visited the CSIR campus and the Tower Testing & Research Station (TTRS) campus of **CSIR-SERC** with great enthusiasm. They had a first-hand glimpse of multifarious and multi-discipline R&D programmes currently going on in the laboratories and the technologies developed. The visitors showed keen interest and passionately interacted with the scientific staff.
Source: Pib

CSIR, IMD stalls win awards at science and technology expo

The three-day National Science and Technology Expo concluded at the G. Pulla Reddy Memorial School in Dilsukhnagar, Hyderabad, on Sunday (October 20, 2024). The event attracted over 50,000 visitors, including students and members of the public, who had the opportunity to interact with scientists and explore a wide range of exhibits. Among the many highlights of the event, the stalls by **CSIR** and IMD were particularly well-received. Both were awarded 'Best Stall' prizes. The expo featured 100 stalls from prominent scientific organisations such as ISRO, NRSC, **CSIR, NGRI, NAL, SERC, IMMT,** IMD, UIDAI's Aadhaar Card Division, the Visvesvaraya Industrial and Technological Museum, the National Council for Science Museums, NIIST, IITM Pune, NIOT, and MOES, among others. These stalls displayed science models and projects, offering a deep dive into various fields of scientific research and innovation.
Source: The Hindu

The CSIR-Structural Engineering Research Centre, CSIR Campus, Chennai, hosted the IISF 2024 curtain raiser ceremony

From November 30 to December 3, 2024, the Indian Institute of Technology Guwahati will host the 10th edition of the India International Science Festival (IISF). The subject of IISF 2024, which is organised by **CSIR**, is "Transforming India into a science and technology driven global manufacturing hub." On November 7, 2024, the CSIR-Structural Engineering Research Centre, **CSIR** Campus, Chennai, hosted the curtain-raiser ceremony for the IISF 2024. The occasion was presided over by Dr. N. Anandavalli, Director of **CSIR-SERC** and Coordinating Director of **CSIR** Madras Complex. The main visitor was Prof. R. Velraj, a former vice chancellor of Anna University. Dr. S. Bhaskar, Chief Scientist, **CSIR-SERC**, gave the welcoming speech and provided an overview of the history and motto of IISF. In order to enhance awareness of IISF among stakeholders, he added, a number of these curtain-raiser events are being planned nationwide. In her presidential address on the theme of "Science: An Inseparable Part of Our Lives," Dr. Anandavalli noted that science is being honoured as a festival in India through IISF and

called for increased participation from all facets of society. She asserted that we should celebrate science with excitement and zeal since it is a fascinating subject.
Source: Infodea

CSIR-Structural Engineering Research Centre successfully transferred Laced Steel-Concrete Composite (LSCC) System – patented technology to M/s. Modern Prefab System Private Limited, Delhi

CSIR-Structural Engineering Research Centre (CSIR-SERC), one of the national laboratory under **CSIR** and known for its cutting edge research in structural engineering, announces the successful technology transfer of its innovative technology, Laced Steel Concrete Composite System to M/s. Modern Prefab System Private Limited, Delhi. The LSCC system, developed by scientists of Advanced Protective Structures and Mechanics Laboratory (APSML) of **CSIR-SERC,** is an innovative solution that provides enhanced performance and cost-effectiveness compared to traditional systems. The technology is designed to be prefabricated and is a system with enormous potential, direct use for structures resisting suddenly applied dynamic loads, spin-off for other structures. The technology is patented in India and USA. Key Features of the LSCC System: Novelty: Devoid of welding by connecting the components in a novel way Efficiency: The system is capable of improving support rotation, nearly 4 times that of conventional reinforced concrete flexural components. Environmental Impact: New configuration with enhanced performance, indirectly amounting to saving of natural resources. Scalability and Adaptability: The modular design of the LSCC system enables easy scaling and integration into wall and roof panels.
Source: Pib

The 10th edition of India International Science Festival (IISF) – 2024

The 10th edition of India International Science Festival (IISF) - 2024 was held from 30th November to 3rd December 2024 at IIT Guwahati. This year's IISF theme is "Transforming India into a Science & Technology driven Global Manufacturing Hub." **CSIR-Structural Engineering Research Centre (CSIR-SERC) actively** participated in the event, engaging with the general public, school and college students, and industry representatives to explain the institute's work. **CSIR-SERC** and M/s. Modern Prefab System Private Limited, Delhi, exchanged a Memorandum of Understanding (MoU) for the technology transfer of the Laced Steel Concrete Composite (LSCC) system at the **CSIR** pavilion during IISF 2024 on 2nd December 2024. Developed by **CSIR-SERC** scientists, the LSCC system is a patented innovation in India and the USA, offering superior performance and cost-effectiveness compared to traditional methods. The MoU was exchanged in presence of Dr. G. Mahesh, Chief Scientist & Head, Director General's Executive Directorate and Science Communication and Dissemination Directorate (SCDD), **CSIR**.
Source: Pib

Educational Science Field Trip to CSIR-Structural Engineering Research Centre (CSIR-SERC) by students of Virudhunagar District

A group of 100 students and 14 teachers from Sri Ramana Vidyalaya, Rajapalayam, Virudhunagar District, visited **CSIR-Structural Engineering Research Centre (SERC)** in Chennai today (5.12.2024) as part of a three-day science field visit. The students, hailing from rural villages, gained hands-on experience and insight into various research projects undertaken by the institution. This event was organised under the guidance of Dr. (Mrs.) N. Anandavalli, Director of **CSIR-SERC,** to encourage the students to be creative, innovative, and to achieve success by participating in science-related activities and events. Dr. Parivallal, Principal Scientist and Advisor (Management), addressed the gathering. Dr. S. Maheswaran , Senior Principal Scientist, spoke about the **CSIR-Jigyasa** program, which aims to promote science and research among school students. He highlighted the benefits of participating in such initiatives and how they can enhance their research and scientific thinking. The event was coordinated by several scientists and officers from **CSIR-SERC**, including Shri. R.D. Sathish Kumar , Dr. S. Sundar Kumar, Shri. A.K Farvaze Ahmed and Shri.E. Ashokkumar. The students expressed gratitude for the opportunity stating that it sparked their interest in science and research.

Source: Pib

CSIR-Structural Engineering Research Centre signs MoU with NTPC limited

A Memorandum of Understanding (MoU) was signed between **CSIR-Structural Engineering Research Centre (CSIR-SERC),** Chennai, and NTPC Limited, New Delhi, at **CSIR-SERC,** Chennai on 13 December 2024. This MoU will govern all the projects to be taken up between **CSIR-SERC** and NTPC Limited. The MoU was signed by Dr. N. Anandavalli, Director, **CSIR-SERC** and Shri K. Nagesh, AGM & HOD (Station Engineering), NTPC Limited, Raipur. The MoU function was attended by Shri Akilesh Poddar, DGM (Station Engineering), NTPC Limited, Raipur, Shri K Shanmuga Sundaram, DGM, NTPC Limited, Chennai, Dr. K. Sathish Kumar, Head, BKMD, **CSIR-SERC,** Heads of all laboratories of **CSIR-SERC,** Administrative Officer, Finance & Accounts Officer and Stores & Purchase officer of **CSIR-SERC**. Dr. Anandavalli, welcomed the guests from NTPC Limited and said that **CSIR-SERC** and NTPC Limited share three decades of long association. She also made a brief presentation on **CSIR-SERC** and highlighted on the vision and mission of **CSIR-SERC**, its thrust areas, legacy, a glance at the infrastructure, research focus, industry research & consultancy services, work towards societal development, technology portfolio and technology transfers, recent projects being under taken by **CSIR-SERC,** etc. Shri Nagesh appreciated the expertise of **CSIR-SERC** and said that this expertise shall greatly benefit NTPC Limited.

Source: Pib

CSIR-Structural Engineering Research Centre conducts CSIR Jigyasa Scientific Aptitude Assessment for school students

CSIR-Structural Engineering Research Centre (CSIR-SERC), Chennai, organized the **CSIR** Jigyasa Scientist Aptitude Assessment on 20 December 2024 at its campus. 25

students and 2 teachers from PM SHRI Kendriya Vidhyalaya, Meenambakkam, Chennai participated in the event. As a part of this event, a hands-on session followed by a scientific aptitude assessment test was organized. The students carried out a science experiment independently with the online guidance by the scientists of **CSIR-IGIB,** New Delhi. Dr. N. Anandavalli, Director, **CSIR-SERC** interacted with the students regarding their hands-on experiment session and their future goals. She asked the students to be innovative and creative by engaging in science-related events and activities and encouraged them to take science as their career. Dr. S. Maheswaran, Senior Principal Scientist & Nodal Officer Jigyasa, **CSIR-SERC** gave a brief on **CSIR, CSIR-SERC** and Jigyasa activities, which encourages school children to pursue science and research. The student participants also attended the **CSIR** Jigyasa EPIC Hackathon 2024 Finale through online mode. The students also visited various laboratories of **CSIR-SERC**, interacted with the scientists and had a glimpse of ongoing research activities of the centre.

Source: **Pib**

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