# CSIR IN INEDIA



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## CSIR-Structural Engineering Research Centre (CSIR-SERC) and CSIR Madras Complex celebrates National Technology Day

CSIR-SERC 15<sup>th</sup> May, 2024

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. Referring to this year's National Technology Day theme – Promoting Clean and Green Technologies for a Sustainable Future, she briefed on the green and sustainable technologies developed by CSIR-SERC and the technological interventions by CSIR-SERC that acted as solutions for complex engineering problems.

Dr. J. Rajasankar, Chief Scientist, CSIR-SERC, introduced the Chief Guest to the audience. Dr. Chandrika Kaushik delivered the National Technology Day lecture on Structures: From Engineering Marvels to Exploratory Science. In her lecture she gave a brief on the genesis of National Technology Day and remembered the achievements of the nation's scientist,



engineers and technologists. Referring to this year's theme, she said that the scientific community should collectively work towards achieving a sustainable future. She spoke in detail on the evolution of structures from primitive to skyscrapers, ancient engineering marvels of Tamil Nadu, engineering structures from research community, evolution of structural material, innovation in structural component technologies, trends in architectural process, bio-inspired structures and tough engineering challenges that lie before us. She highlighted that ancient Indian civilization had rich diversity of structures and created many finest architectural masterpieces that withstood even fierce natural disasters. She called upon the scientific community to collaborate meaningfully and harness the expertise of various organizations to create sustainable solutions for betterment of the society.

Dr. G.S. Palani, Chief Scientist, CSIR-SERC, proposed vote of thanks.



## CSIR-NML: ग्लोबल वार्मिंग से बचने के लिए स्वच्छता, सुरक्षा और हरित पर्यावरण जरूरी: राजीव मंगल

CSIR-NML

15<sup>th</sup> May, 2024

भारत सरकार के "स्वच्छ भारत" मिशन के अनुरूप बर्मामाइंस स्थित सीएसआईआर-राष्ट्रीय धात्कमे प्रयोगशाला (एनएमएल) में आयोजित स्वच्छता पखवाड़ा-2024 बुधवार को संपन्न हआ. सीएसआईआर-एनएमएल के निदेशक डॉ संदीप घोष चौधरी के मार्गदर्शन और कार्यक्रम 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 भार-कर 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 दवारा 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.

15 दिनों के कार्यक्रम का समापन समारोह दिनांक 15 मई 2024 को सीएसआईआर-एनएमएल में आयोजित किया गया. समारोह में मुख्य अतिथि टाटा स्टील सुरक्षा, स्वास्थ्य एवं स्थिरता विभाग के उपाध्यक्ष राजीव मंगल थे. मंच पर उनके साथ सीएसऑईआर-एनएमएल के निदेशक डॉ संदीप घोष चौधरी, मुख्य वैज्ञानिक डॉ शर्मिष्ठा सागर और प्रशासनिक अधिकारी विप्लव विशाल मौजूद थे. मुख्य अतिथि ने ग्लोबल वार्मिंग से बचने के लिए स्वच्छता, सुरक्षा और हरित पर्यावरेण की आवश्यकता पर बल दिया. राजीव मंगल ने संदेश दिया कि स्वच्छता की शुरुआत सबसे पहले घर से होनी चाहिए.



डॉ संदीप घोष चौधरी ने अपने स्वागत भाषण में समाज और भावी पीढ़ियों के लाभ हेतु स्वच्छता पखवाड़ा और संबंधित सरकारी मिशन के महत्व के बारे में जानकारी दी. डॉ शर्मिष्ठा सागर ने पखवाड़े के दौरान प्रयोगशाला के विभिन्न परिसरों में आयोजित कार्यक्रमों का समग्र सारांश और पूरे कार्यक्रम से आगे की रणनीति प्रस्तुत की. गणमान्य व्यक्तियों ने पखवाड़े के दौरान आयोजित विभिन्न प्रतियोगिताओं के विजेताओं को पुरस्कार और प्रमाण-पत्र प्रदान किये. सीएसआईआर-एनएमएल के प्रशासनिक अधिकारी विप्लव विशाल ने धन्यवाद ज्ञापन किया. राष्ट्रगान के साथ कार्यक्रम सम्पन्न ह्आ.

#### Published in:

Lagatar



## सुगंधित पौधों की खेती से महकंगे आदिवासी इलाके, बरेली की कंपनी ने सीमेप और सीएसआईआर से किया करार

CSIR-CIMAP

15<sup>th</sup> May, 2024

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 मितल 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। किसानों के कल्याण के लिए प्रतिबद्ध है कंपनी इन इलाकों में लोगों के पास पीने के लिए ठीक से पानी तक नहीं है और वे कई चीजों से वंचित हैं। हमारी कंपनी एरोमैटिक एंड अलाइड का मिशन इन सभी क्षेत्रों का विकास करना और सुगंधित फसलों का विकास करके लोगों को बुनियादी सुविधाएं प्रदान करना है और उन्हें इन फसलों से मूल्यवर्धित उत्पाद बनाने के लिए मशीनें प्रदान करना है। उन्हें आय और धन पैदा करने का एक तरीका प्रदान करेगी। हम अपने देश और हमारे देश की रीढ़ "किसानों" के कल्याण के लिए काम करने के लिए प्रतिबद्ध हैं।

#### Published in:

Patrika



## CSIR-NIIST, NIT Calicut ink tie-up to promote research in cuttingedge domains

CSIR-NIIST 14<sup>th</sup> May, 2024

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.

Prof. Krishna, who also gave a special address on National Technology Day, said the MoU with CSIR-NIIST will facilitate joint efforts in providing unique opportunities for graduate and post-graduate engineering students with flair of applied R&D.

ALSO READ: Kerala's high female voter turnout complicates predictions

The agreement also envisages joint curriculum development for MTech programmes, skill development workshops and instrumentation training.



Dr. P. Nishy, Head, Business Development Unit, CSIR-NIIST and Dr. U S Hareesh, Head, Human Resources and Academic Division, CSIR-NIIST, also spoke.

NIIST is a constituent laboratory of Council of Scientific and Industrial Research (CSIR), which is known for its cutting edge R&D knowledge base in diverse science and technology areas.

### Published in:

Newindian



### NEERI celebrates Tech Day with talk on wastewater treatment

CSIR-NEERI 14<sup>th</sup> May, 2024

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.

Panchal urged researchers to take up comprehensive studies of material balance, including input and output, for effective wastewater treatment. He advised scientists to follow the principle of RD&D (Research, Development, and Demonstration) instead of R&D (Research and Development) for the benefit of industry and society.

Panchal also briefed about recent technological developments in wastewater treatment, emphasizing automation, digitization, and IoT. He expressed hope that artificial intelligence



and machine learning will play a major role in industrial wastewater treatment. Panchal raised concerns over the operation and maintenance of effluent treatment plants across the country. Vaidya briefed on the significance of National Technology Day. He also highlighted the contributions of Prof P Khanna, former director of NEERI, in the development of environmental technologies.

Kavita Gandhi, senior principal scientist, CSIR-NEERI, conducted the proceedings. Prakash Kumbhare, senior principal scientist, CSIR-NEERI, proposed a vote of thanks.

Panchal visited decentralized sewage treatment facilities created at CSIR-NEERI. Fifty B.E. (Civil Engineering) students from J D College of Engineering and Management and thirty B.Pharm students from Adarsh Institute of Pharmacy participated in the event and visited laboratories where they interacted with CSIR-NEERI scientists.

## Published in: Times of India



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

CSIR-CCMB 14<sup>th</sup> May, 2024

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.

The research team from CCMB and IIRR comprise C. G. Gokulan, Umakanth Bangale, Vishalakshi Balija, Suneel Ballichatla, Gopi Potupureddi, Deepti Rao, Prashanth Varma, Nakul Magar, Karteek Jallipalli, Sravan Manthri, A. P. Padmakumari, Gouri S. Laha, L. V. Subba Rao, Kalyani M. Barbadikar, Raman Meenakshi Sundaram, Hitendra K. Patel, M Sheshu Madhav and Ramesh V. Sonti.

The scientists pointed out that rice is the staple food of about half the people of the world and among the various pests and microorganisms, the YSB poses a serious threat resulting in up to 20-70% loss in the crop yield. YSB insects are 'monophagous' — feeding only on rice. The female moths lay eggs on the leaf tips and after hatching, the larvae move towards a suitable site on the stem to bore and further feed on the tissue material inside the stem affecting productivity. The pest infestation is observed as different symptoms based on the growth stage of the plants.



During the vegetative growth stage, the larvae bores the base of the stem, and feeds towards the top — causing the stem to turn brownish and finally die, leading to "dead hearts". Infestation during the reproductive stage of rice occurs at the peduncle thus leading to no grain filling, resulting in empty panicles called "white ears".

Plants deploy various strategies to fend off invading organisms including physical barriers and specialized chemical compounds. However, the pest breaks the plant defence barriers resulting in disease or infestation. This forces farmers to rely on chemical interventions for pest management leading to environment degradation, they explained.

The research had revealed modulation of particular pathways and functions crucial for YSB resistance in rices. This could help in transfer of YSB resistance to susceptible rice varieties through traditional breeding approaches. This work is considered to be one of the first to study the detailed molecular mechanisms that govern rice-yellow stem borer interaction and has provided valuable knowledge and avenues for future research.

An important resource for YSB resistance breeding has also been generated by this study which has the potential to reduce crop loss and can significantly bring down the usage of chemical insecticides. The research has been published in the latest issue of the journal - Theoretical and Applied Genetics <a href="https://doi.org/10.1007/s00122-024-04628-7">https://doi.org/10.1007/s00122-024-04628-7</a>

### Published in:

The Hindu



## Secretary, Ministry Of Earth Science Visits CSIR-IMMT, Bhubaneswar

CSIR-IMMT 14<sup>th</sup> May, 2024

As part of its Diamond Jubilee, the CSIR-Institute of Minerals and Materials Technology (CSIR IMMT) hosted a prestigious event, the "Diamond Jubilee Foundation Day Lecture of Eminence," featuring Hon'ble Dr. M. Ravichandran, Secretary, Ministry of Earth Sciences, as the keynote speaker graced the moment and deliberately discussed the vision 2047: Ocan project and giving more importance on the ocean of opportunities, Sustainability and blue economy. Dr. Debasis Dash, Director of the Institute of Life Sciences (ILS), expressed his amusement at being present here and discussed about the Scientific fertility of this place while working with any work.

Dr. Ramanuj Narayan, Director, CSIR-IMMT Bhubaneswar, expressed his gratefulness for the presence of Dr. M. Ravichandran and his contribution to IMMT and thanked the faculty, and students present on this occasion.

Dr. Kali Sanjay, Chief Scientist and project leader of the polymetallic nodules programme, coordinated the program with a welcome address.

Manorama Mohanty, Director of IMD said that forecasting is a challenging job but she is entitled to determine it with full accuracy and wishes a prosperous career for students who will be scientists in the future.

During his visit, the Secretary toured various institute departments such as the Hydro & Electrometallurgy Department, Mineral Processing Department pilot plant, Central Characterization Department, etc, and engaged with scientists, staff, and students. This presented an opportunity to showcase the institute's expertise, particularly in the metallurgical extraction of Cu, Ni, Co, and Mn from polymetallic nodules, a deep-sea mineral, as well as its Mineral Processing and Characterization facilities. A highlight of the event was



the inauguration of the 'Advanced Extractive Metallurgy Pilot Plant building', highlighting CSIR-IMMT's dedication to pioneering research and innovation.

An interactive session followed, encouraging lively discussions and potential collaborations facilitated by the Directors of ILS and CSIR-IMMT. This event underscored CSIR-IMMT's commitment to research excellence and significant contributions to the scientific community, marking a memorable milestone in its Diamond Jubilee celebrations.

## Published in:

Orissadiary



### 12 new technologies developed at CSIR-CFTRI

CSIR-CFTRI

13<sup>th</sup> May, 2024

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.

According to the scientists who have developed the technology, the ready-to-eat malted ragibased weaning food is suitable for children of the age group of six months to three years. Notably, fruits like apples, mangoes, oranges, and vegetables like carrots or tomatoes can be incorporated in the food.

CFTRI scientists say the new improvised multigrain pizza base is developed using the combination of wheat and millet by prudently reformulating and optimising processing conditions. The pizza base has shown significant improvement in protein and dietary fiber by 1.4 and 1.2 times respectively compared to wheat flour pizza, apart from improvement in other nutrients. The pizza base has a mould free shelf life of five days when stored at room temperature.

"Since most teenagers and middle-aged people eat pizza, refined wheat flour which looks to



have a low nutritional value, may be used to make most pizzas. This might result in nutritional deficiencies for future generations. Therefore, the institute reformulated the ingredients of pizza base to incorporate sources of high-quality protein and fiber to help prevent the nutritional issue," a note on the technology said.

### Published in:

The Hindu



## More women turning entrepreneurs to commercialise CFTRI technologies

CSIR-CFTRI 13<sup>th</sup> May , 2024

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.

This October, the CFTRI will be completing 74 years. There is a huge scope in the area of food processing since food is a basic need and it is now a thriving business. The food industry in India will be a 535 billion dollar market by 2025 and the scope is huge, she explained.

On the occasion, the licensees, mostly women entrepreneurs, were felicitated. The licence that was taken for commercial ventures include convenience flour from ragi suitable for stiff porridge; chikki/nutra chikki (three formulations); preparation of ready-to-cook multigrain whole mix for drink/porridge; decortication of ragi; multigrain nutri cookies, RTS beverage and tamarind candy.



She told the entrepreneurs and the licensee to focus on brand building and packaging to market their produce. She said the CFTRI has primarily been catering to MSMEs and is largely society-oriented. Some of our technologies are available free. The technologies are transferred laterally and sometimes CFTRI do not get credit for the original discovery.

Ms. Singh said she has asked the licensee to prominently put the logo of CFTRI on their products so that the consumers come to know the genesis of the products through scientific research.

Mr. Arjun Ranga, who spoke on "Agarbathi to aerospace – creating an innovation mindset", gave an overview of the journey of agarbathi industry his ancestors started and how the company has diversified its businesses from agarbathi to aerospace, leaving an indelible mark.

"Creativity comes from curiosity. We need to understand to whom we are catering and accordingly, we need to innovate. Understanding the market is key," he said, in his address. Mr. Ranga said his company progressed because of the adoption of technology.

In India, opportunities are plenty. Sky is the limit if there is innovation. The native intelligence has to be harnessed and convert that into an innovative idea. There is no dearth of funding in India for innovation and the upcoming entrepreneurs need to explore the opportunities to take India forward, he advised.

### Published in:

The Hindu



## Celebrating National Technology Day 2024 at CSIR-IHBT, Palampur

CSIR-IHBT 13<sup>th</sup> May, 2024

On May 13, 2024, the CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT) in Palampur, Himachal Pradesh, celebrated National Technology Day. This day serves as a symbol of technology's unprecedented contribution to the nation's progress. During the event, Dr. Sudesh Kumar Yadav, the Director of CSIR-IHBT, welcomed guests and highlighted how technology is



transforming lives and knowledge. The institute actively works on various projects and missions, contributing to social and economic development. Notably, the Aroma, Floriculture, and Phytopharmaceuticals Mission focuses on improving farmers' income through crop enhancement and processing.

The chief guest, Prof. (Dr.) Arun Kumar Sinha, emphasized technology's vital role in national progress. He encouraged students to embrace scientific curiosity and learn from failures. Dr. Shirshendu Mukherjee, the keynote speaker, discussed the Innovation Ecosystem for Self-reliant India. He highlighted government schemes like BioNest, Sitare, BIPP, and PACE, which promote innovation and drive fundamental changes.

Additionally, four technology transfers were signed during the event, including Gondla Cut Flower Cluster, Komal Innovation and Wellness (aeroponics), Prorima Healthcare (Seabuckthorn Tea), and Satvik Agritech Lab (hydroponics). CSIR-IHBT also organized a program on its success stories under the Floriculture Mission.

#### Published in:

Himachalheadlines



## CSIR-IIIM celebrates 'National Technology Day'

CSIR-IIIM 12<sup>th</sup> May , 2024

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.

Giving the detail of the event, a spokesperson said that a science models exhibition was also organised in which the students from Jammu University, SKUAST, Government College of Engineering & Technology, Government College for Women, RRL High School, Army Public Schools, PM Shri Kendriya Vidyalaya, Air Force School, and Bhartiya Vidya Mandir High School, Government Girls High School, Gandhinagar, actively participated and put on display the science models made out of their creative and innovation brains.

During the event, RRL High School showcased projects elucidating the structure of Thermal Energy Generators within animal cells and elucidated the intricacies of thermal energy generation and different types of motion, Army Public School Jammu Cantonment



demonstrated a diverse range of projects including 'Jarvis' an AI voice assistant for Atal Tinkering Labs & Fluid Flow Profiling, Army Public School, Akhnoor, exhibited the models on IR Sensor Glasses for Obstacle Detection, Army Public School, Damana, exhibited a model on connection & communication systems, Army public school, Miran Sahib, exhibited models on innovative solutions like Automatic Fire Extinguishers and Ultrasonic Radars, PM shri Kendriya Vidyalaya Hiranagar made an impressive model such as Digital Attendance Registers, Automatic Cloth Collectors, PM Shri Kendriya Vidyalaya, GC CRPF Bantalab, displayed models on Rice Crop Disease Detection Systems, and Automatic Cloth Protection from Rain, Air Force Schools contributed to the exhibition with innovative startups like 'Bhujal Nirdharak', 'ReKindle HOPE', and a License Scanner, demonstrating their commitment to technological innovation and Bhartiya Vidya Mandir High School, Hiranagar, displayed projects focusing on Smart Bridge for Flood Protection and Automatic Zebra Crossing Protection, showcasing solutions to real-world challenges.

Appreciating the illustrious and innovative models exhibited by the students, Dr. Zabeer Ahmed, Director, CSIR-IIIM, Jammu felicitated the students with the mementoes and the certificates of appreciation and wish them the best to make their ambition in Science.

Dr. Zabeer applauded the efforts of these institutions in nurturing young minds and fostering a culture of innovation. The National Technology Day celebration served as a platform to recognize and persuade the next generation of scientists and technologists who will drive India's progress in the years to come.

Prominent among others were present Er. Abdul Rahim, Chief Scientist, Dr. Asha Chaubey, Dr. Dhiraj Vyas, Dr. Sumit Gandhi, Dr. Deepika Singh, Dr. Naveed Ahmed Qazi, (All HoDs), Dr. Shashank Singh, Dr. Tasduq Abdullah, Dr. Saurabh Saran (all scientists) & Dr. Kancherla Prasad co-ordinator of the event.

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

#### CSIR-CFTRI

04<sup>th</sup> May, 2024

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.

The faculty members for the courses have vast experience in specific areas 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.

Successful participants will be given participation certificates at the end of the course. The institute is a Training Partner (TP) for conducting Skill

Development Programs (SDPs) aligned with National Skills Qualifications Framework (NSQF) under Skill India Mission of Government of India for the skills like baking technician/operative (FIC/Q5005), food microbiologist (FIC/Q7603) and spice processing technician (FIC/Q8502).

Apart from the regular training programs, CFTRI arranges custom-made programs



exclusively designed for academic institutions, government departments/agencies, industries, FPOs, SHGs, etc., for their students/staff/sponsored-participants/members in the area of food processing, the release stated.

CSIR-CFTRI has trained more than 1,800 personnel in 2023-24 under various training streams such as Pradhan Mantri Formalization of Micro Food Processing Enterprises (PMFME) Scheme, farmer-centric training programs and short-term courses.

Also, in the previous financial year, the institute successfully organised a training program on "Rice Milling and Value Addition to Rice" for Guyanese delegation under Indian Technical and Economic Co-operation (ITEC) Programme sponsored by Ministry of External Affairs (MEA), Government of India.

The course calendar for the financial year 2024-25 has been announced. For more information and registration, visit: https://stc.cftri.res.in; e-mail: stc@cftri.res.in. Phone:0821-2514310.

### Published in:

The Hindu



## CCMB develops assay to map presence of invasive catfish

CSIR-CCMB 11<sup>th</sup> May, 2024

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.

Dr Vinay K Nandicoori, Director of CSIR-CCMB, said, "The conventional methods of detection of invasive species, which can only be used in smaller geographical coverage, and is labour and cost-intensive. On the other hand, the environmental DNA approach is reliable, accurate, and low cost; it can be used in a large landscape like Eastern Ghats water bodies in a few months' time."

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### CSIR-IIIM distributes seed material to farmers of Chenab Valley

CSIR-IIIM 11<sup>th</sup> May, 2024

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.

At the outset of the event, prominent floriculturist and J&K Kisan Advisory Board members Tejinder Singh Wazir and Hind Bhushan appreciated the outreach of CSIR IIIM under the Mission and emphasized on the effective steps being undertaken through planned implementation of the Mission for farmer empowerment and production of sustainable and quality produce of marigold flowers on large scale besides creating opportunities for gainful and remunerative employment for the farmers families across the region.

Dr Shahid Rasool, Nodal Scientist of the Mission in J&K informed that among various farmer and agri-industry oriented, innovation driven initiatives of Council of Scientific and Industrial Research GOI, Floriculture Mission is a flagship programme being implemented across country envisaging inclusive economic development of farmers and the Floriculture sector.

During the training session at the event, technical lectures were delivered by Dr Nepu Rana and Tahoora Ashraf (Project Associates in the Mission). The farmers were informed on various advanced techniques and methodology for optimal utilization of the resources and



successful production of the floricultural crops throughout the crop season which can be leveraged for supply of marigold flowers as offerings at religious places during the peak demand. The participating farmers expressed their gratitude to the Institute for providing hand holding and quality inputs for profitable utilization of their farmlands through various verticals of the Mission.

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