CSIR IN WEDIA



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

CSIR-SERC, CBRI, CRRI, CMERI, AMPRI

05th September, 2024

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. This event aims to showcase the significant research contributions made and technologies developed by CSIR Laboratories in the areas of Building Physics & Materials, Rural Infrastructure, Mobility Infrastructure & Planning, Automation & Robotics, Waste to Wealth and Structural Health Monitoring & Life Extension, Disaster Mitigation for Infrastructure. Teams of scientists from five CSIR Labs under CIE theme, participated in the event.



Stakeholders from industry, academia, research organizations, policymakers, and officials of regulatory bodies & government organizations attended the event. This event was a platform for knowledge sharing, technical demonstrations, and identifying the gaps between research outcomes and societal needs through focused discussions. The insights gained from this event shall help in contributing more effectively towards the development and maintenance of sustainable infrastructure.

The inaugural session of the event was organized with the lighting of lamp by the dignitaries. Dr. N. Anandavalli, Director, CSIR-SERC and Theme Director, CIE theme presided over the inaugural session. Prof. Ravindra Gettu, V.S. Raju Chair Professor, IIT Madras was the chief guest of the function. Prof. Prasad Rao Rangaraju, Clemson University, USA, and Prof. Hemanta Doloi, The University of Melbourne, Australia, were the guests of honour. Prof. R. Pradeep Kumar, Director, CSIR-CBRI, and Prof. Manoranjan Parida, Director, CSIR-CRRI, also graced the occasion. Dr. Amar Prakash, Chief Scientist, CSIR-SERC and Nodal Scientist, CIE Theme gave the introductory address, in which he briefed about the event and said that this campaign is an initiative to showcase our R&D capabilities. He also gave a brief on the CIE theme vertical and sub-verticals.

Dr. Anandavalli, in her welcome address, said that civil infrastructure and engineering are connected with the life of common people and that there are a lot of requirements for infrastructure. In her address, she spoke about the global infrastructure and its requirements, Indian infrastructure and requirements, and the vision of the CIE theme in meeting these requirements. She also spoke in detail on the seven sub-verticals of the CIE theme, recent achievements of the CIE theme, and the short-term, mid-term, and long-term plans of each of the sub-verticals.

Prof. Pradeep Kumar, in his address, gave a brief on the genesis and work of CSIR in 80 years of its existence. He said that the objective of this campaign is to create awareness among the public on the contributions of CSIR. He stressed on the importance of the three entities, viz, Government, Industry, and the R&D laboratories working together to serve society better.



Prof. Manoranjan Parida, in his address, spoke on the importance of infrastructure in the growth of the economy. He also briefed on the activities and works of CSIR-CRRI in the areas of national priorities. He said that CRRI is working actively on the sub-verticals, Waste of Wealth and Mobility Infrastructure & Planning.

Dr. S. Parivallal, Advisor (M), CSIR-SERC, introduced the chief guest, Prof. Ravindra Gettu, to the audience. The chief guest spoke on the topic Technology implementation as the key impact of research: IIT Madras approach in the past two decades. In his presentation, he spoke about the research implementation, experiences, and achievements of IIT Madras in three areas, viz, Fibre reinforced concrete, Early age response of concrete and Promotion of mixtures with unconventional components. He stressed on the importance of translational research and said that the complete realization of any research objective will take a minimum of ten years. He also mentioned that for technology implementation arising from research to yield impacts with positive values, there should be a proper understanding of the concerns of the industry, willingness to collaborate at the construction site, stamina for getting standards and pilot projects realized, and to realize that healthy academia-industry cooperation is essential.

Dr Ing. Saptarshi Sasmal, Chief Scientist, CSIR-SERC, introduced the Guest of Honour, Prof. Prasad Rao Rangaraju, and Prof. Hemanta Doloi, to the audience. Prof. Rangaraju, in his address, pointed out the importance of civil engineering in everyday life and said that civil engineering is vital for the upliftment of society. He also gave a brief on the areas of his research - recycling glass waste and alternate materials. Prof. Doloi, in his address, mentioned that problems are unique among different countries and societies, and science should take note of the values, culture, and heritage of our vast and diverse nation. Science should not be imposed on society; rather, it should match the values and needs of society. He said that it is necessary to have a shared vision and values and that the urban-rural divide gap should be reduced.

Dr. Harikrishna, Chief Scientist, CSIR-SERC, proposed vote of thanks.

Published in:

Pib



CSIR-SERC jointly organised Jigyasa ATL workshop as part of Atal Tinkering Lab Adoption and Mentoring in Theni District

CSIR-SERC, CSIO, CECRI

05th September, 2024

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:



- 1. Government Higher Secondary School, Okkaraipatti (625517)
- 2. Government Higher Secondary School, Silamarathupatti (625528),
- 3. Government Higher Secondary School, Koduvilarpatti (625534),
- 4. 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.



Following are the scientists/scientific officers are delivered the scientific lectures/hands-on session during the workshop:

- 1) Dr. S. Maheswaran, Senior Principal Scientist, CSIR-SERC
- 2) Dr. A. Robert Sam, Senior Principal Scientist, CMC-CSIO
- 3) Dr. D. Kalpana, Senior Principal Scientist, CMC-CECRI
- 4) Shri. A.K. Farvaze Ahmed, Principal Scientist, CSIR-SERC
- 5) Dr. S. Sundar Kumar, Principal Scientist, CSIR-SERC
- 6) Dr. T. Hemalatha, Principal Scientist, CSIR-SERC
- 7) Shri E. Ashokkumar, Senior Scientist, CSIR-SERC
- 8) Shri R.D. Sathish Kumar, Principal Technical Officer, CSIR-SERC

More than 500 students and 30 teachers participated during the events.

Published in:



KRR Heavy Engineering Expands into Aerospace Industry by Acquiring Advanced Drone and UAV Technology from National Aerospace Labs

CSIR-NAL

05th September, 2024

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:

- * NAL OCTA-COPTER DRONE: Versatile UAV with autonomous capabilities and interchangeable payloads for multiple uses.
- * NAL OCTA-AGRI: Optimized for agriculture, capable of precision pesticide spraying and hyperspectral imaging to support sustainable farming.
- * NAL OCTA-MED: Engineered for emergency medical deliveries, capable of transporting medical supplies swiftly to remote areas.



* NAL OCTA-GEO: Designed for geophysical exploration, excelling in geological surveys and remote sensing.

"Acquiring CSIR-NAL's advanced UAV technologies allows us to expand our aerospace offerings and deliver innovative solutions across defense, agriculture, and humanitarian sectors. We are committed to enhancing our technological capabilities while addressing critical societal needs. This acquisition strengthens KRR Aerospace's position in the aerospace sector underscores its dedication to social responsibility. By leveraging indigenous technologies, KRR Aerospace aims to create impactful solutions for global applications, focusing on both technological excellence and societal benefit," said Dr. Sakthivel Ramaswamy.

KRR Aerospace, a division of KRR Heavy Engineering, is dedicated to providing innovative solutions in the aerospace, defense, and space sectors. Committed to excellence, innovation, and social responsibility, KRR Aerospace continues to set new standards in the industry. Dr. Sakthivel Ramaswamy joined KRR Heavy Engineering in 2006, while completing his advanced studies in architecture, biomimetics, fiber composites, and smart materials. His expertise in these cutting-edge fields played a significant role in driving the company's diversification. Currently KRR Aerospace focusing into Indian Markets and planning to expand its business to Middle East and African countries by 2026.

Published in:

Theprint



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

CSIR-CFTRI

04th September, 2024

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.

"Through the dedicated efforts of CFTRI scientists in research, we have created a bun with 22 per cent millet content with five millets - three major and two minor. A multigrain bun should have 20 per cent of multi-grains, and this bun has 22 per cent millet, not compromising on taste or structure. It still offers the nutritional benefits of millets," she said.

Besides, the millets have been sourced from more than 5,000 farmers across India. If this creates a demand, it will definitely uplift and empower the farmers, she said.



The product was launched at a programme in Mumbai, on Wednesday. It focuses on the customer base in South and West India, initially. There are approximately around 400 McDonald outlets in this region. Wheat flour is replaced by 22 per cent millets, all cultivated in various states of India, she said.

When McDonald's India approached us with an idea of creating a millet-based bun, we were eager to take up the challenge. Our task was to develop a bun that not only meets their high standards of taste and sensory appeal, but also delivers the nutritional promise of millets, Annapurna Singh said.

Published in: Deccanherald



CSIR-NCL and Danish Patent Office Collaborate on Biotech and Medtech Patent Issues

CSIR-NCL, TKDL

04th September, 2024

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.

Given the surge of startups in the biomedical sector, the roundtable also included insights from entrepreneurs, inventors, and representatives from incubation centers like the Atal Incubation Center at IISER-Pune and Pinnacle Industries, both of which play a crucial role in supporting these emerging businesses.



The discussions were inaugurated by Prof. Dr. Unnat Pandit, Controller General of the Patents, Designs & Trademarks Office of India, and Dr. Louise Boisen, IPR Counsellor at The Royal Danish Embassy in India.

Dr. Nitin Tewari, Head of the Intellectual Property Group at CSIR-NCL, moderated the session. Indian Patent Office examiners provided an overview of the biotech patent examination process in India, citing examples from recent case laws and discussing the scope of non-patentable subject matter under the Indian Patents Act.

Danish examiners offered insights into the patenting landscape in Denmark and under the European Patent Convention, highlighting differences and similarities in approaches to biotech and medtech innovations.

Dr. Nitin Tewari presented on "IP Contributions of CSIR-NCL," emphasizing the organization's robust intellectual property culture that dates back to the 1940s, starting with the pioneering work of Dr. Shanti Swaroop Bhatnagar.

Dr. Tewari underscored CSIR's commitment to the "publish, patent, prosper" strategy, citing landmark cases involving turmeric, basmati, and neem, as well as the creation of the Traditional Knowledge Digital Library (TKDL).

He also highlighted CSIR-NCL's strategic use of intellectual property through initiatives like the Venture Center business incubator, which has led to the creation of around 15 spin-offs by CSIR-NCL scientists and students over the past 15 years.

Published in:

Thebridgechronicle



एनएमएल की मदद से कंप्यूटर दक्षता का प्रशिक्षण लेंगे एलबीएसएम के विद्यार्थी

CSIR-NML

03rd September, 2024

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 अविध 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।

Published in:

Livehindustan



हिन्दी पूरे विश्व में बोली और समझी जाती है : डॉ. परमार

CSIR-NML

03rd September, 2024

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। हिन्दी ने कभी अपनी स्वतंत्र पहचान बनाने की पहल नहीं की, अपित् सबको लेकर चलना ही इसकी संस्कृति की विशिष्टता 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 हिन्दीं 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। हिन्दी सरल सहज तथा पूरे देश को जोड़ने वाली भाषा है। प्रयोगशाला के वरिष्ठ हिन्दी अधिकारी (चयन ग्रेड) डॉ. प्रंषोत्तम कुमार ने इस अवसर पर भारत सरकार की राजभाषा नीति पर प्रकाश डाला और भारत सरकार कें राजभाषा के संवैधानिक प्रावधानों की जानकारी दी। हिन्दी सप्ताह समारोह के उदघाटन कार्यक्रम में धन्यवाद ज्ञापन प्रयोगशाला के प्रशासनिक अधिकारी आदित्य मैनाक ने किया।

Published in:

Livehindustan



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

CSIR-CRI

03rd September, 2024

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.

For this NHAI, PWD, Municipal Corporation and other road ownership agencies have to build breakers along with zebra crossings on the roads and especially in the school area. The school management will have to ensure proper exit from the school premises to the roads. Regular checks related to the condition of the school bus as well as the fitness of the driver will also have to be ensured. For the school zone, the maximum speed limit has been set at 25 km per hour on the main roads and 20 km per hour on the internal roads.

Published in:

Dailypioneer



Modern effluent treatment plant opened at Kanhangad

CSIR-NIIST

02nd September, 2024

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. He said the NIIST was seeking additional industrial partnerships to license and widely implement the technology across Kerala and neighbouring States.

The custom-designed plant had the capacity to treat approximately 60,000 litres of effluent daily, said a press release. It will recover around 500 cubic metres of biogas and produce 50,000 litres of reusable quality water from the treated effluent.

With around 150 desiccated coconut units operating across South India, including Kerala, Tamil Nadu, Karnataka, Telangana, and Andhra Pradesh, the treatment of their high-



strength wastewater has been a significant environmental challenge. Traditional methods have struggled to handle the high oil and fat content of this wastewater. In contrast, the new bioenergy-based technology developed by the NIIST efficiently processes waste, recovers biogas, and produces reusable water.

The high-rate anaerobic treatment technology used, known as the Buoyant Filter Bioreactor (BFBR), is patented in the U.S. and has been previously applied in other industries such as rice mills and cream factories. The technology was recently customised by the NIIST for the desiccated coconut industry.

The model ETP was financially supported by the Technology Mission Division of the Department of Science and Technology, Government of India, with additional support from the Coconut Development Board (CDB) and the KSPCB. Ajit Haridas, former chairperson of the KSPCB and former chief scientist at NIIST, and Vincent Mathew, Vice Chancellor of the Central University of Kerala, spoke at the function.

Published in:

The Hindu



Antibiotic-resistant genes surge in winter wastewater

CSIR-IICT

02nd September, 2024

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.

Mobile genetic elements that help spread resistance genes also exhibited a marked increase during winter months and a decrease from winter to summer. The researchers found that the resistance genes generate specific enzymes that modify antibiotic-binding targets, making the antibiotics inactive. This seasonal peak can help identify the prevalence of specific pathogens. If wastewater analysis shows a rise in norovirus levels, clinicians may advise testing for norovirus in patients with intestinal infections, says Mohan.

Published in:

Nature



Experts call for minimising nutrient loss during processing of foods

CSIR-CFTRI

02nd September, 2024

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.

As a nutritionist, Prof. Kowsalya said even now nutritionists are dependent on food technologists for advice but added that "we cannot always tell people to eat processed food".

CFTRI Director Sridevi Annapurna Singh, in his presidential remarks, pointed out that diet and disease were 'inter-related' and there was a need for people to be eating the kind of food that makes them immune to diseases.



In the earlier days of food processing, Mr. Singh said food scientists were looking towards enhancement of shelf life. For, a large quantity of food produced in India was going waste due to poor shelf-life.

"We started removing brawn and polishing the rice and refining oils and wheat. All of this probably compromised the quality of nutrients that were present. Forty-Fifty years down the line, the so-called non-nutrients we were removing from the grains, were actually giving health benefits", she said.

However, she said food processing now has to not only extend shelf life of food but also retain its nutrients. Food technology now has to cater food to a large population with convenience and less cost while also ensuring health as well as nutrition to the people, she said.

She also pointed out that "lesser and lesser" people were cooking food at home in India today and referred to advertisements of houses put up for rent or sale in Bengaluru where the kitchen was missing in Bedroom Hall Kitchens(BHKs). "It means kitchens were not present in houses that were put up for rent or sale. It means that eating processed food available in the market was the trend," she said.

Senior Manager, Technical, Biotechnology Industry Research Assistance Council (BIRAC), Government of India, Prachi Agarwal, guest of honour spoke about the upcoming Global Bio India Roadshow 2024.

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

CSIR-CECRI

01st September, 2024

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.

A specialist in electrolyzer systems for green hydrogen production, Ohmium International (Ohmium) designs, manufactures and deploys advanced proton exchange membrane (PEM) electrolysers. Its gigafactory in Chengalpattu, which would be the company's third largest manufacturing facility in India, is aimed at meeting the demands of its global project pipeline.

Meanwhile, announcing the TN government's MoU with Ohmium on social media, Chief Minister Stalin said, "We've secured a Rs 400 crore investment from Ohmium in Chengalpattu district, creating 500 jobs. This marks a significant step in nurturing the ecosystem for green energy production and fuelling a sustainable future." Recently, Ohmium had flagged off India's first green hydrogen electrolyzer manufacturing unit at Doddaballapur on Bengaluru's outskirts. The plant facilitates the breaking of water into hydrogen and oxygen using renewable energy, enabling the production of green hydrogen.



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.

Meanwhile, Stalin would leave for Chicago from San Francisco on September 2. "All arrangements are on to welcome Chief Minister Stalin in Chicago on September 2. He will meet investors and address the non-resident Tamils in Chicago. After his scheduled programmes, Stalin would leave for Chennai from there on September 11," sources said.

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National Disaster Management Authority team visits landslide-hit Vilangad

CSIR-CBRI

01st September, 2024

A study team of the National Disaster Management Authority (NDMA) visited the landsliphit 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.

It may be noted that the Kerala Government recently announced that the survivors in Vilangad will be given the same treatment accorded to their counterparts in Wayanad.

This includes rehabilitation of those who have lost their homes, agricultural land and other properties. Demands have risen from various quarters for a special rehabilitation package for Vilangad as well, after allegations that the region was neglected when all eyes were on Wayanad.

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