CSIR IN MEDIA

CSIR

NEWS BULLETIN
26 TO 31 MARCH 2022

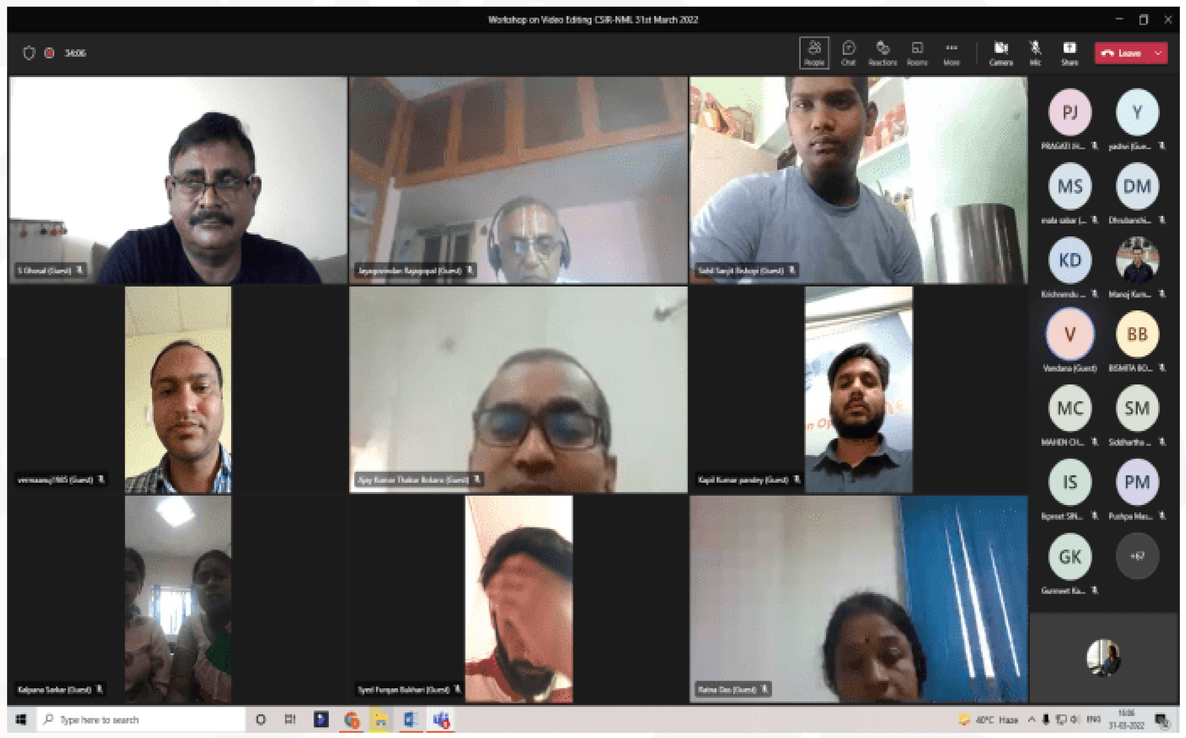
Compiled by Science Communication and Dissemination Directorate (SCDD), CSIR, Anusandhan Bhawan, New Delhi

Virtual workshop on Video Editing by CSIR NML

CSIR-NML

31st March, 2022

Jamshedpur, March 31: A workshop on Video Editing was organized under the national programme initiated by Council of Scientific and Industrial Research (CSIR) under the CSIR Integrated Skill Initiative program, was organized on digital platform by CSIR-National Metallurgical Laboratory, Jamshedpur on March 31, 2021 as part of CSIR Jigyasa 2.0 scheme.



This workshop was planned to provide exposure to school students, teachers and other interested individuals on in-depth knowledge of tools and techniques required for video editing. The main objective of this program was to train teachers and school students on video editing in a comprehensive, innovative and easy manner by using professional video editing software.

The highlights of this special event included basic approaches in video editing, Tools and techniques, Editing background, Sound effects and Noise cancellation.

The one-hour program commenced at 4 pm with the welcome address delivered by Head, KRIT Division of CSIR-NML, Dr Mita Tarafder in which she stressed the importance of understanding video editing and draw knowledge on the subject for school students and teachers thereby delving into creative contents while presenting new ideas or concepts.

The keynote speaker, Mr. Snehasis Ghoshal who is a mechanical engineer with a post graduate degree and has a rich exposure to automobile industry as a specialist, is a passionate

photographer with a keen interest in video editing technologies. In his talk, Snehasis Ghoshal observed that video editing was a subject in itself and presented an overview of different software and technologies widely used by professional photographers and videographers. The participants interacted with him and asked several pertinent questions which the keynote speaker explained to clear their doubts. The program concluded with a vote of thanks presented by KRIT Division's Pragati Jha. The virtual programme had 90 participants.

Published in:
Avenue Mail

Interaction Programme between Student, Teacher and Scientist at CSIR -IMMT

CSIR-IMMT

31st March, 2022

Bhubaneswar: Under the programe “Jigyasa” CSIR-IMMT Bhubaneswar organized a demonstration programme for students and teachers. Three school of Bhubaneswar such as Nayapalli Govt. School, DM School and Sainik School participated in this programe. There were 14 groups of 10 students each for visitingthe scientific experiments. 5 experiments of physics, 1 of ore Materials, 2 of Sophisticated Instruments, XRF, SEM(Electron Microscope), RAMAN, XRD and many more showcased during the demonstration.

After the pandemic, such type of Demonstration programme was organized for the first time under Scientific Social Responsibility Initiative.

On this occasion Prof. Suddhasatwa Basu, Director CSIR-IMMT, Bhubaneswarsaid that, Exposing the school children to the state-of-the-artlaboratory facilities and creating interest and awareness to high science is important for the nation, when these school children’s end up in taking R&D and innovation as their profession. IMMT is organizing two Jigyasa events after a gap of two years to interact with scientists and experience the high-end facilities through their own eyes.

Dr. Bhagyadhar Bhoi, Chief Scientist of CSIR-IMMT, Bhubaneswar interacted with the students and encouraged the young minds of the country to become next generation Scientist and to play a vital role in the sustainable development of the nation.

National research development laboratory of CSIR have taken of JIGYASA progrmme to provide different types of demonstration that will ignite the minds of school students. Today CSIR-IMMT has invited school students along with teachers to witness different scientific experiments and also see a no of sophisticated instruments used in advanced scientific research.

Students of Nayapalli Govt. School, DM School and Sainik School were excited seeing the electron microscope physical experiments and other experiments.

Published in:
Orissa Diary

Manufacturers' Meet Cum Demonstration On Fly Ash Bricks Technology Held At CSIR-IMMT

CSIR-IMMT

31st March, 2022

Bhubaneswar(31/03/2022): CSIR-IMMT has organized a Skill Development Program on "Manufacturers' Meet cum Demonstration on Fly Ash Bricks Technology" under the CSIR Integrated Skill initiative and part of Azadi Ka Amrit Mahotsav celebration. Dr.Bhagyadhar Bhoi (Chief Scientist& Scientist -in- Charge), Dr.Nabin Kumar Dhal(Chief Scientist & Head)E&S Department., Dr.SK Pradhan, Coordinator CSIR Skill Development Program, R.Sathish (Senior Scientist& Convener) and Dr. Syed M Mustakim (Co-Convener) have organized this program. This program was useful for bricks manufacturers, Entrepreneurs aspiring to work on fly ash bricks manufacturing and persons who are already working in relevant industries. Bricks manufacturers, MSMEs, Entrepreneurs, Startup companies in Bricks manufacturing, Industrial waste utilization sectors etc. participated in this meet.

CSIR-Institute of Minerals and Materials Technology, Bhubaneswar is actively engaged in development of innovative, energy efficient green processes for utilization of various industrial and mining solid wastes in manufacture of building materials such as brick, block, concrete, aggregate etc.

A considerable research work on fly ash has been done to develop processes for manufacture of cold setting building brick and block by mineral cementation method.

The mineral polymerization reaction develops cementation property which is very effective to develop the binding strength in the product.

Under this R&D activity, Environment & Sustainability Department, CSIR-IMMT has also created pilot plant facility for brick and block manufacturing to demonstrate the process for development of commercial technology.

This facility has been used for demonstration and training to the licensees during technology transfer for manufacturing of cold setting building brick and block.

This process has been adopted commercially in MSME sector (17Nos.) and major industries (4Nos.) for manufacture of cold setting building brick containing up to 70 % flyash. Demonstration on Production of fly ash bricks using cold setting building bricks manufacturing process, Fly ash bricks quality testing and characterization facilities, Technology/know-how licensing protocols were conducted during the day.

R Sathish Senior Scientist Environment & Sustainability Department CSIR-IMMT, Dr.S.M.Mustakim Senior Technical officer Environment & Sustainability Department CSIR-IMMT, Dr.N.K.Dhal Chief scientist & Head Environment & Sustainability Department CSIR-IMMT, coordinated and organized themeet cum demonstration activity.

Published in:
Orissa Diary

CSIR-CFTRI sees Bifidobacteria's potential to improve immunity, propels tech-transfer for its Bifidocurd

CSIR-CFTRI 31st March, 2022

CSIR-Central Food Technological Research Institute (CFTRI) sees that Bifidobacteria holds immunity potential from common cold to cancer. The institute already has two probiotic products, "Bifidocurd and Bifidobacteria enriched soya curd."

In 2019, the institute developed curd using Bifidocurd technology. The research was undertaken by CSIR, New Delhi, under the 12th Five Year Plan project spanning 2012-2017. The institute is now aggressively looking to accelerate its talks for technology transfer. Bifidobacteria are a kind of probiotics, commonly referred to as good bacteria that exist in the gut. Research indicates it aids in the control of intestinal disorders breaking down food, absorb nutrients, and fight off bad organisms that could cause diseases.

Noting the importance of Bifidobacteria as a probiotic and the need for Indian food and beverage processing companies to focus on it as it is indispensable in daily consumption, CSIR-CFTRI felt it was pertinent to delve further into its benefits via a recently concluded national workshop on Probiotic Bifidobacteria held at its campus in Mysuru. Apparently, the workshop was sponsored by the Probiotic Association of India (PAi).

Dr Sridevi Annapurna Singh, Director CSIR-CFTRI, inaugurated the two-day workshop with chief guest, Dr Shrilakshmi Desiraju, Probiotic IP advisor, TENSHI Life Sciences, Benguluru, and Dr Prakash M Halami, Organising Secretary and Head of MFT Dept, CSIR-CFTRI.

In her presidential address, Dr Singh, emphasised the role of Bifidobacteria in the development of the newborn child and maintaining gut microbial homeostasis in the entire life of the individual and its potential to immunise humans from common cold to cancer. Dr Halami highlighted the health-promoting properties of bifidobacterial supplementation in the prevention of colon cancer. "Bifidobacteria colonise in the colon and lead to an array of health

benefits, including intestinal health maintenance, gut microbial homeostasis, organic acid production, immune system maturation, digestion of food not digested in small intestine, suppression of pathogens and detoxification of antinutritional factors, etc.

He also mentioned that in the Indian market, none of the probiotics products are meant for colon health, since most of probiotics are lactobacilli based that colonise only in small intestines. Keeping this in mind CSIR-CFTRI's Bifidocurd and Bifidobacteria enriched soya curd are ready for technology transfer.

Dr Desiraju noted that bifidobacteria and infant nutrition, are the 1st bacteria entering the gut of an infant born by normal delivery. Moreover we have observed the increase in demand for probiotics post-pandemic though probiotics have been a part of our life for 8,000 years. Prof. Yogesh S Shouche, visiting professor, Azim Premji University; Benguluru, spoke about the genomic diversity of bifidobacteria and their adaptation to different environment. Dr Jayesh J Ahire, Scientist, Unique Biotech, Hyderabad, shared his opinion about bifidobacterial probiotics from laboratory to the industry.

The workshop had six practical sessions on the techniques associated with bifidobacterial probiotic supplementation. During the workshop hands-on training was provided to the participants with interpretation of results. Panel discussion was organised to interact with experts in the field of gut microbiota, prebiotics, polyphenols and mass production of probiotics. Nearly 80 participants from across the country registered for the workshop and 26 participated in offline mode. A poster presentation session was also organised for online as well as offline participants.

Participation certificates and prizes were distributed to the poster presenters during the valedictory event chaired by Dr RP Singh, Chief Scientist and Head, Department of Biochemistry, CSIR-CFTRI Mysuru.

Published in:
Fnbnews

CSIR-IMMT

31st March, 2022

सीएसआईआर-आईएमएमटी में फ्लाई ऐश ब्रिक्स प्रौद्योगिकी प्रदर्शनी

इस ईंट की ताकत और आकार मिट्टी की ईंटों से कई गुना बेहतर

■ नवभारत ब्यूरो | भुवनेश्वर.
www.navabharat.news

सीएसआईआर इंडिया दक्षता विकास कार्यक्रम के तहत निर्माताओं द्वारा फ्लाई ऐश ब्रिक्स तकनीक पर भुवनेश्वर में सीएसआर- आईएमएमटी का अध्ययन करने के लिए एक दिवसीय कार्यक्रम का आयोजन किया गया. सीएसआईआर-खनिज और सामग्री प्रौद्योगिकी संस्थान परिसर में ईंटों, कठोर पत्थरों, कंक्रीट, समुच्चय आदि के उत्पादन में विभिन्न उद्योगों और खनिजों के उपयोग के लिए नवीन और मजबूत हरित प्रौद्योगिकियां विकसित करने के लिए काफी अध्ययन किया गया है. खनिज पॉलीमराइजेशन प्रक्रिया से सीमेंटिंग गुण विकसित होते हैं जो अनिवार्य ऊर्जा उत्पादन को विकसित करने में बहुत प्रभावी होते हैं. अनुसंधान और विकास गतिविधियों के तत्वावधान में, पर्यावरण और स्थिरता विभाग, सीएसआईआर- आईएमएमटी ने वाणिज्यिक प्रौद्योगिकी के विकास को प्रदर्शित करने के लिए ईंटों और ठोस चट्टान के उत्पादन के लिए एक पायलट संयंत्र भी स्थापित किया गया है. कोल्ड सेटिंग बिल्डिंग में ईंट और पत्थर के उत्पादन के लिए प्रौद्योगिकी के हस्तांतरण के दौरान लाइसेंस प्राप्त लोगों को दिखाने और प्रशिक्षित करने की सुविधा है. इस प्रक्रिया को व्यावसायिक रूप से एमएसएमई क्षेत्र (17एनओ) और प्रमुख उद्योगों (4एनओ) में 70% फ्लाई ऐश के साथ कोल्ड सेटिंग बिल्डिंग ब्रिक्स के उत्पादन के लिए अपनाया गया है. कोल्ड सेटिंग बिल्डिंग ईंट बनाने की प्रक्रिया, फ्लाई ऐश ईंट गुणवत्ता परीक्षण और डिजाइन सुविधा प्रौद्योगिकी लाइसेंसिंग प्रोटोकॉल का उपयोग करके फ्लाई ऐश ईंटों के उत्पादन का प्रदर्शन किया गया था. सीएसआईआर-आईएमएमटी, पर्यावरण और स्थिरता विभाग के वरिष्ठ वैज्ञानिक डॉ सतीश, सीएसआईआर-आईएमएमटी, पर्यावरण और स्थिरता विभाग के वरिष्ठ तकनीकी अधिकारी डॉ एसएम मुस्तकीम, सीएसआईआर- आईएमएमटी, मुख्य वैज्ञानिक, डॉ एन के धल और गंजाम जिला फ्लाई ऐश संघ के मुख्य डॉ नटवर साहू ने पर्यावरण और स्थिरता के समन्वय और मीटकॉम प्रदर्शन कार्यक्रम का आयोजन किया. इस संबंध में डॉ साहू ने कहा कि, 2011 से 12 तक उन्होंने पहली बार फ्लाई ऐश ब्रिक्स तकनीक का इस्तेमाल किया जो फिलहाल 152 यूनिट्स पर काम कर रही है. इस ईंट की ताकत और आकार मिट्टी की ईंटों से कई गुना बेहतर है. यदि कंपनियों की फ्लाई ऐश का उपयोग किया जाता है, तो राख की मात्रा कम हो जाएगी और पर्यावरण की रक्षा होगी. फ्लाई ऐश फ्लायर उन उद्यमियों के लिए उपयोगी है जो ईंट बनाना चाहते हैं और जो संबंधित उद्योगों में काम करते हैं. इस बैठक में ईंट निर्माता, एमएसएमई, ईंट निर्माण उद्योग के उद्यमी और अन्य उद्योगों जैसी स्टार्टअप कंपनियों ने भी भाग लिया.

Published in:
Navabharat Times

Himachal Pradesh: Chamba and Kangra identify buildings to strengthen them in wake of earthquakes

CSIR-CBRI 30th March, 2022

CHAMBA/DHARAMSHALA: Given the sensitivity of Chamba and Kangra districts of Himachal Pradesh with seismicity point of view, the administration of both the districts have identified buildings for retrofitting to make them earthquake resistant and hold various earthquake awareness campaigns on April 4, to mark the 117th anniversary of the massive earthquake that claimed over twenty thousand lives.

Deputy Commissioner, Chamba, DC Rana informed that they had identified over one hundred school buildings in the district for retrofitting . As many as 7 engineers from different departments of Chamba were undergoing training in the Council Of Scientific And Industrial Research–Central Building Research Institute (CSIR–CBRI), Roorkee for the retrofitting of the buildings.

Rana informed that to make youth aware of the earthquakes and safety guidelines they would be holding various programmes including mock drills at the educational institutions, volunteers training at Dalhousie on April 5 and 6 adding that in past they had held a 3-day engineers training conducted by CBRI on safe construction practices and retrofitting of the existing buildings.

Notably, on April 4, 1905, a massive earthquake of 7.8 magnitudes on the Richter scale had hit the Kangra district claiming around 20,000 lives besides over 53,000 animals had died and over 1 lakh buildings were destroyed. Another major earthquake of 6.5 magnitude on the Richter Scale had hit the Chamba district on June 1, 1945.

Deputy Commissioner, Kangra, Dr. Nipun Jindal informed that they had identified around 150 school and hospital buildings in the district for retrofitting to make them earthquake resistant.

He informed that the Kangra administration had written to the National Institute of Technical Teachers Training and Research, Chandigarh for the rapid visual screening, a procedure for the seismic assessment of the existing buildings, "Simultaneously we have also written to the state government for provisioning of the funds" said Jindal adding that some funds had been earmarked for the purpose but the exact funds required would be known after the survey.

Due to the increasing demand for housing units and keeping in view the accommodation required for the ever-growing tourist rush in both Chamba and Kangra districts, a massive unregulated and non-engineered construction work is being carried out especially in the rural areas which may not be of any help in the time of disaster.

Retrofitting is a technique to improve the resistance of a building from an earthquake by optimizing its strength, ductility, etc. and due to the variety of structural conditions of the buildings, the retrofitting process is carried out according to the structural deficiencies of each building .

In past, Guru Nanak Dev University had set up Geo Chemical Monitoring Stations at Kangra, Dharamshala, Palampur, Sarool, Dalhousie with a base station at Amritsar under its Geo Chemical Rare Gas Precursory Studies project which was however closed down due to lack of funds.

Professor Bikramjit Singh Bajwa of, the Physics Department, GNDU said that the previous project had been closed down but now Wadia Institute of Himalayan Geology was in process of installing seismometers. The GNDU's earlier project which has now been closed down was able to give an indication of 7.6 magnitude earthquake in Pakistan occupied Kashmir three days before it struck on October 8, 2005.

Published in:
Times Of India

CSIR-CEERI

30th March, 2022

कार्यशाला • सीरी जयपुर केंद्र में संस्थान द्वारा विकसित प्रौद्यागिकियों की प्रदर्शनी का उद्घाटन किया

डेयरी एवं खाद्य प्रौद्योगिकियों में डिजिटल क्रांति पर कार्यशाला

भास्कर न्यूज | पिलानी

सीएसआईआर-सीरी के जयपुर केंद्र में डेयरी एवं खाद्य प्रौद्योगिकियों में डिजिटल क्रांति विषय पर कार्यशाला का आयोजन किया गया। डिजिटल क्रांति में ऑटोमेशन, इंटरनेट ऑफ थिंग्स, दूरसंचार और उन्नत एनालिटिक्स से लेकर स्मार्ट कार्यप्रणाली और ग्राहक-केंद्रित उत्पादों तक नवीन एवं अत्याधुनिक प्रौद्योगिकियों का लाभ उठाया जाता है। कार्यशाला के आयोजन का उद्देश्य एमएसएमई के उद्यमियों एवं नए स्टार्ट अप्स के साथ-साथ सभी प्रतिभागियों को डेयरी एवं खाद्य के क्षेत्र में सीएसआईआर-सीरी, सीएसआईआर-सीएफटीआरआई, मैसूर तथा सीएसआईआर-आईएचबीटी, पालमपुर द्वारा विकसित प्रौद्योगिकियों एवं इन क्षेत्रों में हो रही डिजिटल क्रांति से अवगत कराना है। कार्यशाला में एमएनआईटी-जयपुर के निदेशक प्रोफेसर एनपी पाढ़ी मुख्य अतिथि के रूप में तथा आरईआईएल, जयपुर के पूर्व प्रबंध निदेशक डॉ एके जैन एवं एमएसएमई, जयपुर के निदेशक वीके शर्मा विशिष्ट अतिथि के रूप में मौजूद थे। अध्यक्षता सीएसआईआर-सीरी के निदेशक डॉ. पीसी पंचारिया ने की। एमएसएमई और स्टार्ट अप्स एवं उद्योगजगत के प्रतिनिधियों सहित विज्ञान भारती राजस्थान के पदाधिकारियों, शोधार्थी छात्रों एवं शिक्षाविदों ने भाग लिया। मुख्य अतिथि ने सीएसआईआर द्वारा विकसित प्रौद्योगिकियों एवं खाद्य उत्पादों की भी चर्चा की। इस महत्वपूर्ण क्षेत्र में निवेश के लिए उद्यमियों को आमंत्रित किया। विशिष्ट अतिथि डॉ. ए के जैन ने हरित क्रांति और श्वेत क्रांति पर चर्चा करते हुए खाद्य और दूध चेन के महत्व पर जानकारी दी। खाद्य व डेयरी उत्पादों में मिलावट का पता लगाने में विश्लेषणात्मक समाधान की आवश्यकता बताई। विशिष्ट अतिथि वीके शर्मा ने उद्योग जगत के प्रतिनिधियों व शोधार्थियों को इस क्षेत्र में हो रही डिजिटल क्रांति से भारतीय जनमानस को लाभांवित करने के लिए कहा। वरिष्ठ वैज्ञानिक नवजोत कुमार ने संस्था न द्वारा विकसित डेयरी प्रौद्योगिकियों पर, आईएचबीटी-पालमपुर के डॉ. महेश गुप्ता ने खाद्य, चाय और शहद उत्पादों पर तथा सीएफटीआरआई-मैसूर के डॉ. प्रकाश हालमी ने बेकरी एवं खाद्य उत्पादों पर अपने प्रस्तुतिकरण दिए। सीरी जयपुर केंद्र में संस्थान द्वारा विकसित प्रौद्यागिकियों की प्रदर्शनी का उद्घाटन किया। अतिथियों ने प्रौद्योगिकी प्रदर्शनी एवं जयपुर केंद्र में स्थित विभिन्न शोध प्रयोगशालाओं का परिदर्शन भी किया।

पिलानी. कार्यशाला को संबोधित करते अतिथि।

Published in:

Dainik Bhasker

CSIR-CFTRI

30th March, 2022

Workshop on 'probiotic bifidobacteria' held at CSIR-CFTRI in Mysuru

MYSURU

A two-day national workshop on "Bifidobacterial probiotics: Supplementation through fermented food" was held at CSIR-Central Food Technological Research Institute, here on March 24 and 25. The workshop was sponsored by the Probiotic Association of India (PAI).

Dr Sridevi Annapurna Singh, Director, CSIR-CFTRI, the chief guest, inaugurated the two-day workshop.

Dr Shrilakshmi Desiraju, Probiotic IP Advisor, TENSHI Life Sciences, Bengaluru and Dr Prakash M Halami, organising secretary and head of MFT Department, CSIR-CFTRI, were present.

Dr Sridevi emphasised the role of bifidobacteria in the development of the newborn child and maintaining gut microbial homeostasis in the entire life of the individual and its potential to immunise humans from common cold to cancer. She also appreciated the relevance of the workshop.

Dr Prakash explained the health-promoting properties of bifidobacterial supplementation in prevention of colon cancer. In his lecture, he further explained that bifidobacteria colonise in large colon and lead to an array of health benefits, including intestinal health maintenance, Gut microbial homeostasis, organic acid production, immune system maturation, digestion of food not digested in small intestine, suppression of pathogens and detoxification of antinutritional factors, etc.

He also mentioned that in the Indian market, none of the probiotics products is meant for colon health, since most probiotics are lactobacilli based that colonize only in small intestines. Keeping this in mind, CSIR-CFTRI has already developed two different probiotic products, "Bifidocurd and Bifidobacteria enriched soya curd" which are ready for technology transfer.

In her keynote address, Dr Shrilakshmi Desiraju highlighted the increase in demand for probiotics post-pandemic though probiotics have been a part of our life for 8000 years. Emphasising the bifidobacteria and infant nutrition, she mentioned that bifidobacteria as the first bacteria entering the gut of an infant born by normal delivery.

Other resource persons included Prof Yogesh S Shouche, visiting professor, Azim Premji University; Bengaluru, who spoke about the genomic diversity of bifidobacteria and their adaptation to different environments.

Dr Jayesh J Ahire, scientist, Unique Biotech, Hyderabad shared his opinion about bifidobacterial probiotics from laboratory to industry.

The workshop had six practical sessions on the techniques associated with bifidobacterial probiotic supplementation. During the workshop, hands-on training was provided to the participants with interpretation of results. Panel discussion was organised to interact with experts in the field of gut microbiota, prebiotics, polyphenols and mass production of probiotics.

Nearly 80 participants from different states registered for the workshop and 26 participated in offline mode. A poster presentation session was also organised for online as well as offline participants.

Participation certificates and prizes were distributed to the poster presenters during the valedictory function chaired by Dr R P Singh, chief scientist and head, Department of Biochemistry, CSIR-CFTRI, Mysuru. -MR

Published in:

City Today

CSIR-CFTRI

30th March, 2022

CSIR-CFTRI sees Bifidobacteria's potential to improve immunity, propels tech-transfer for its Bifidocurd

ಆರೋಗ್ಯವರ್ಧಕ ಬ್ಯಾಕ್ಟೀರಿಯಾ ಕುರಿತು ರಾಷ್ಟ್ರೀಯ ಕಾರ್ಯಾಗಾರ

ಪ್ರಯೋಜನಕಾರಿ ಸೂಕ್ಷ್ಮ ಜೀವಿಗಳ ಮಹತ್ವದ ಬಗ್ಗೆ ಬೆಳಕು ಚೆಲ್ಲಿದ ಕಾರ್ಯಕ್ರಮ

ಮೈಸೂರು : ಮೈಸೂರಿನ ಕೇಂದ್ರೀಯ ಆಹಾರ ತಂತ್ರಜ್ಞಾನ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ (ಸಿಎಸ್‌ಐಆರ್)ಯಲ್ಲಿ ನಡೆದ 'ಪ್ರಯೋಜನಕಾರಿ ಬ್ಯಾಕ್ಟೀರಿಯಾ' ಕುರಿತ ರಾಷ್ಟ್ರೀಯ ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಕೆಲವು ಸೂಕ್ಷ್ಮಾಣುಗಳಿಂದ ಆರೋಗ್ಯ ವೃದ್ಧಿಗೆ ಆಗುವ ಅನುಕೂಲಗಳ ಮೇಲೆ ಬೆಳಕು ಚೆಲ್ಲಲಾಯಿತು.

'ಬೈಫಿಡೋಬ್ಯಾಕ್ಟೀರಿಯಲ್ ಪ್ರೋಬಯೋಟಿಕ್ಸ್ : ಸಪ್ಲಿಮೆಂಟೇಷನ್ ಥ್ರೂ ಫರ್ಮೆಂಟೆಡ್ ಫುಡ್' ಕುರಿತ ಎರಡು ದಿನಗಳ ರಾಷ್ಟ್ರೀಯ ಕಾರ್ಯಾಗಾರದ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿದ್ದ ಸಿಎಸ್‌ಐಆರ್-ಸಿಎಫ್‌ಟಿಆರ್‌ಐ ನಿರ್ದೇಶಕರಾದ ಡಾ. ಶ್ರೀದೇವಿ ಅನ್ನಪೂರ್ಣ ಸಿಂಗ್ ಅವರು ಮಾತನಾಡಿ, ನವಜಾತ ಶಿಶುವಿನಲ್ಲಿ ಕಂಡುಬರುವ ಪ್ರಯೋಜನಕಾರಿ ಬ್ಯಾಕ್ಟೀರಿಯಾ ಪಾತ್ರವನ್ನು ವಿವರಿಸಿದರು. ಮನುಷ್ಯನ ದೇಹದಲ್ಲಿರುವ ಇಂಥ ಸೂಕ್ಷ್ಮಾಣುಗಳು ಸಾಮಾನ್ಯ ಶೀತದಿಂದ ಹಿಡಿದು ಮಾರಕ ಕ್ಯಾನ್ಸರ್ ತನಕ ರೋಗಪ್ರತಿರೋಧಕ ಶಕ್ತಿಯನ್ನು ಹೆಚ್ಚಿಸುತ್ತವೆ ಎಂದು ತಿಳಿಸಿದರು.

ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಪ್ರಧಾನ ಭಾಷಣ ಮಾಡಿದ ಬೆಂಗಳೂರಿನ ಟೆನ್‌ಶೀ ಲೈಫ್ ಸೈನ್ಸಸ್‌ನ ಪ್ರೊಬಯೋಟಿಕ್ ಐಪಿ ಸಲಹೆಗಾರ್ತಿ ಡಾ. ಶ್ರೀಲಕ್ಷ್ಮಿ ದೇಸಿರಾಜು, ಆರೋಗ್ಯವರ್ಧಕ ಬ್ಯಾಕ್ಟೀರಿಯಾ ಮತ್ತು ಶಿಶುಗಳ ಪೋಷಣೆ ಕುರಿತು ಪ್ರಸ್ತಾಪಿಸಿದರು. ಬೈಫಿಡೋಬ್ಯಾಕ್ಟೀರಿಯಾ ನವಜಾತ ಹಸುಳೆಯ ಕರುಳಿನಲ್ಲಿ ಕಂಡುಬರುತ್ತದೆ. ಇದು ಪ್ರಯೋಜನಕಾರಿ ಸೂಕ್ಷ್ಮ ಜೀವಿಯ ಸಂಕುಲವನ್ನು ಕಾಪಾಡಿ ಮಕ್ಕಳ ಬೆಳವಣಿಗೆಗೆ ನೆರವಾಗುತ್ತದೆ ಎಂದು ಹೇಳಿದರು.

ದೊಡ್ಡ ಕರುಳು ಕ್ಯಾನ್ಸರ್ ರೋಗ ತಡೆಗಟ್ಟುವಲ್ಲಿ ಇಂಥ ಬ್ಯಾಕ್ಟೀರಿಯಾಗಳ ಆರೋಗ್ಯವರ್ಧನೆ ಗುಣಗಳು ಸಹಾಯ ಮಾಡುತ್ತವೆ. ಕರುಳು ಆರೋಗ್ಯ ರಕ್ಷಿಸುವಲ್ಲಿಯೂ ಈ ಸೂಕ್ಷ್ಮಾಣುಗಳು ಮಹತ್ವದ ಪಾತ್ರ ವಹಿಸುತ್ತವೆ. ಸಣ್ಣ ಕರುಳಿನಲ್ಲಿ ಪಚನವಾಗದ ಆಹಾರಗಳ ಜೀರ್ಣಕ್ರಿಯೆಗೆ ನೆರವಾಗುವ ಇವು ಉದರದಲ್ಲಿರುವ ರೋಗಕಾರಕ ಸೂಕ್ಷ್ಮ ಜೀವಿಗಳನ್ನು ನಿಗ್ರಹಿಸಿ ವಿಷ ವಸ್ತುಗಳನ್ನು ಹೊರ ಹಾಕುತ್ತವೆ ಎಂದು ಸಿಎಸ್‌ಐಆರ್-ಸಿಎಫ್‌ಟಿಆರ್‌ಐನ ಎಂಎಫ್‌ಟಿ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಡಾ. ಪ್ರಕಾಶ್ ಎಂ ಹಲಾಮಿ ತಿಳಿಸಿದರು.

ಸಂಪನ್ಮೂಲ ವ್ಯಕ್ತಿಗಳಾದ ಪ್ರೊ. ಯೋಗೇಶ್ ಎಸ್. ಸೌಚೇ ಅವರು ಬೈಫಿಡೋಬ್ಯಾಕ್ಟೀರಿಯಾದ ವಂಶವಾಹಿ ವೈವಿಧ್ಯತೆ ಮತ್ತು ವಿವಿಧ ಪರಿಸರಗಳಲ್ಲಿ ಅವುಗಳ ಬಳಕೆ ಕುರಿತು ಮಾತನಾಡಿದರು. ಹೈದರಾಬಾದ್‌ನ ಯೂನಿಕ್ ಬಯೋಟೆಕ್‌ನ ವಿಜ್ಞಾನಿ ಡಾ. ಜಯೇಶ್ ಜೆ. ಆಶೈರ್ ಅವರು ಪ್ರಯೋಗಾಲಯದಿಂದ ಹಿಡಿದು ಉದ್ಯಮದ ತನಕ ಪ್ರಯೋಜನಕಾರಿ ಸೂಕ್ಷ್ಮಾಣುಗಳಿಂದ ಆಗುವ ಉಪಯೋಗಗಳ ಮೇಲೆ ಬೆಳಕು ಚೆಲ್ಲಿದರು.

'ಬೈಫಿಡೋಬ್ಯಾಕ್ಟೀರಿಯಲ್ ಪ್ರೋಬಯೋಟಿಕ್ಸ್ : ಸಪ್ಲಿಮೆಂಟೇಷನ್ ಥ್ರೂ ಫರ್ಮೆಂಟೆಡ್ ಫುಡ್' ಕುರಿತು ಆರು ಪ್ರಾಯೋಗಿಕ ಅಧಿವೇಶನಗಳು ನಡೆದವು. ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಆಸಕ್ತರಿಗೆ ಈ ವಿಷಯ ಕುರಿತು ತರಬೇತಿಗಳನ್ನೂ ನೀಡಲಾಯಿತು. ಪ್ರಯೋಜನಕಾರಿ ಸೂಕ್ಷ್ಮ ಜೀವಿಗಳು ಮತ್ತು ಅವುಗಳ ಉಪಯೋಗ ಕುರಿತು ತಜ್ಞರೊಂದಿಗೆ ಸಮೂಹ ಸಂವಾದ ಮತ್ತು ಚರ್ಚೆಗಳೂ ನಡೆದವು.

ವಿವಿಧ ರಾಜ್ಯಗಳಿಂದ 80 ಮಂದಿ ಈ ಕಾರ್ಯಾಗಾರದಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದರು. ಆನ್‌ಲೈನ್ ಮೂಲಕ 26 ಅಭ್ಯರ್ಥಿಗಳು ಇದರ ಪ್ರಯೋಜನ ಪಡೆದುಕೊಂಡರು. ಉತ್ತಮ ಪೋಸ್ಟರ್‌ಗಳನ್ನು ಪ್ರಸ್ತುತಪಡಿಸಿದವರಿಗೆ ಬಹುಮಾನಗಳು ಮತ್ತು ಪ್ರಮಾಣಪತ್ರಗಳನ್ನು ವಿತರಿಸಲಾಯಿತು. ಸಮಾರೋಪ ಸಮಾರಂಭದಲ್ಲಿ ಸಿಎಸ್‌ಐಆರ್-ಸಿಎಫ್‌ಟಿಐಆರ್‌ನ ಬಯೋಕೆಮೆಸ್ಟ್ರಿ ವಿಭಾಗದ ಮುಖ್ಯಸ್ಥ ಮತ್ತು ಮುಖ್ಯ ವಿಜ್ಞಾನಿ ಡಾ. ಆರ್. ಪಿ.ಸಿಂಗ್ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿದ್ದರು.

Published in:

Andolana

CSIR-CMERI and their record-breaking solar trees need a pause

CSIR-CMERI

29th March, 2022

Earlier this month on March 14th, the Council of Scientific and Industrial Research's Central Mechanical Engineering Research Institute (CSIR-CMERI) unveiled the world's largest solar tree, officially certified by the Guinness World Records (GWR), which has been installed at its Centre of Excellence for Farm Machinery in Ludhiana, Punjab. Rated for a capacity of 53.6 kW, the solar tree comes with an on-grid inverter of 50 kW and has been built at a cost of Rs 41.6 lakhs.

Intended to bring visibility to solar technology, solar trees are a bit like art installations that enhance the surrounding landscape as well as increase awareness about solar energy. Additionally, in land-scarce areas, solar trees complement rooftop solar systems and other green building measures by occupying little installation space. The working of a solar tree is much like that of a real one—leaf-like solar panels connected through metal branches using sunlight to make energy.

This is not the first time CSIR-CMERI has built a solar tree or broken its own record of building the largest one in the world. In 2016, the institute designed India's first and the world's then largest solar power tree and set it up in its Residential Colony in Durgapur, West Bengal. The solar tree was inaugurated by Mr. Harsh Vardhan, who was the Science and Technology minister at the time. The tree was built on 4 sq. ft of land, and produced 3 kW of energy, claimed to be enough to power 5 households. Developed under the leadership of S N Maity, Chief Scientist at CMERI, the system was built at a cost of around Rs.3 lakh with

battery back-up. “The tree charges a battery backup system that can provide two hours of light after sunset on a full charge. The solar tree is also self-cleaning, with a built-in water sprinkler to clear any debris that would interfere with efficiency,” the institute said at the time.

In 2018, National Research Development Corporation (NRDC) licensed the patent-protected process know-how for the manufacture of solar power tree technology developed by CSIR-CMERI, Durgapur, to Surya Power Tree, Vishakhapatnam.

“1kWh tree can also be manufactured to suit the residential needs and it will cost around Rs.85,000/- only. It will also benefit commercial enterprises, while the distribution company’s charge Rs.9 per unit, solar power could be produced @ Rs.3.5 per unit and excess power can be exported to the grid which can also help in earning revenues,” NRDC had claimed.

In 2021, CSIR-CMERI developed the world’s largest solar tree, again, which was installed at its Residential Colony, in Durgapur, West Bengal, again. “The installed capacity of the solar tree is above 11.5 kWp. It can generate 12,000-14,000 units of clean and green power annually,” said Harish Hirani, director of CSIR-CMERI. The tree ensures minimum shadow area and can power agricultural equipment's like high capacity pumps, e-tractors and e-Power tillers, said the institute.

“Each tree will cost Rs 7.5 lakh and interested MSMEs can align their business model with the Pradhan Mantri Kisan Urja Suraksha Utthan Mahabhiyan (PM KUSUM) Scheme for farmers, for developing a renewable energy-based energy grid.” stated the developers.

While CSIR-CMERI’s contribution, including the latest one in Punjab, towards the development of the largest solar trees across the world is indeed notable, it betrays the fact that the premier institute directing its energies towards an effort that by now is quite predictable with little original research or development involved. Even the cost reductions on a per Kw basis that have been managed owe more to the secular drop in panel prices than anything else. The structural costs in solar trees, the key additional cost that makes them

distinct, are also the biggest reason why they have not caught on with the rest of the world yet, especially with metal prices seemingly set to remain elevated for the foreseeable future. Thus, besides the higher need for subsidy support, many would also question how prudent it is to encourage farmers to rely on a delicate and costly single source of power — the solar tree — to fulfil all their energy needs for activities agricultural and otherwise? It's worth noting that with higher capacity and larger sizes, maintainance costs also enter the picture, and at Rs 0.61 per unit per month in the largest case, add a sizeable component to these projects.

In fact, a very cruel but not wholly unfair insinuation could be that a solar tree is nothing more than a larger version of a solar streetlight.

In their defence, it must be highlighted that the institute did showcase two other products developed by its researchers and partners, namely, a Biomass Insulation Cold Storage, and an Islanded Solar Powered BioDiesel Mini Grid of 50 kW for distributed energy. Both these projects are relevant, and seem well worth pursuing, considering their relevance to local conditions. As was the demo project where the CSIR-CMERI's own kitchens were powered by a DC solar plant at Ludhiana, with stoves developed by their researchers. These stoves have already been licensed out to manufacturers for a wider market reach.

Finally, with a bit of history behind its efforts now, are the solar trees developed by CSIR-CMERI since the year 2016 currently functional or defunct? Have they delivered on the claims made at the time of their installation and unveiling? We reached out to the institute for clarity on the same but did not receive a response.

Published in:
Saurenergy

‘Unscientific’ disposal, treatment of waste behind massive fire at Ghazipur landfill, say experts

CSIR-NEERI

29th March, 2022

A massive fire broke out at the Ghazipur landfill on the afternoon of March 28, 2022. The flames have been doused but smouldering can be observed at several locations at the dumpsite, said officials of the East Delhi Municipal Corporation (EDMC). They added it is challenging for them to control the smouldering due high wind speed and warm climate.

Toxins from the fire will spread into adjoining habitations and public spaces, including Noida, Ghaziabad, Khichdipur residential area and Ghazipur market, experts noted. Key pollutants emitted by dumpsite fires include:

Particulate matter
Oxides of sulphur and nitrogen
Dioxins furans
Polycyclic aromatic hydrocarbons
Volatile organic compounds

The East Delhi Municipal Corporation (EDMC) attributed the fire to very high temperatures, according to media reports. But experts felt the mismanagement of waste at the dumpsite by the local government is to blame. The treatment and disposal processes at the site are un-scientific, they said: Nearly 74 per cent of the 2,700 tonnes of municipal solid waste generated per day from the EDMC area is dumped there unsegregated. Merely 26 per cent of waste is processed or treated scientifically by EDMC, the corporation reported to the National Green Tribunal in 2020.

Anaerobic decomposition of this class of waste releases explosive methane gas, increasing its concentration to multiple times that in the normal ambient air. Share of methane entrapped at dumpsites ranges from 5.3–13.9 per cent, according to studies by National Environmental Engineering Research Institute (CSIR-NEERI). Typically, methane concentration in the atmosphere in natural conditions is merely 0.00017 per cent (by volume).

The presence of any ignitable material (hot load) at the dumpsite can lead to massive fires amid high amounts of heat that remain undissipated. Hot loads refer to waste that catches fire, smoulders or spontaneously combusts. It can include brush, leaves, construction debris, fuel, tires or chemicals that react and cause a fire.

Besides, surface fires at dumpsites are also caused by equipment, people smoking on site, and waste recyclers. Causes of equipment-related fires include debris trapped under machines, heat from equipment (exhaust pipes) and welding. Informal recyclers also set fires to reclaim metals.

The sub-surface fires at dumpsites result from air filtration into the waste mass. The waste and the methane generated in the landfill act as fuel. Since the fire is below the surface, it is difficult to detect, gauge its extent and extinguish. Some visual indications of subsurface fires include sudden subsidence and depressions, fissures and cracks, venting holes and rills as well as smoke.

The conditions at the Ghazipur site contribute to the occurrence of both surface and sub-surface fires. Unsustainable landfill operations, including dumping of mixed and uncompacted waste without soil cover, accommodate air circulation through the waste. Spontaneous combustion may occur depending on the materials present as well as moisture and temperature conditions. Un-segregated and reactive waste is haphazardly disposed of at the Ghazipur site; hot loads and explosive gases like methane are present; and temperatures are elevated. It is now imperative for the authorities to understand that these kinds of hazards can only be prevented by adopting sustainable waste management practices with a particular

focus on sustainable “landfill operations”. Installation of gas vents (methane collection and treatment mechanism) could be one of the interim measures for controlling methane gas accumulation. The key consideration for ensuring sustainable landfill operations such as minimising the dumping of unsegregated waste (mainly wet biodegradables), regular compaction of waste and soil cover should be practiced to avoid fire hazards.

Solid Waste Management Rules, 2016 mandates compaction of waste and daily soil cover of 10 centimetres (soil / inert debris / construction material).

Compaction of waste is important to remove the air pockets in the waste heap, which can otherwise accumulate methane.

Workers, drivers and officials should be informed and trained to identify and remove potential hot loads at the dumpsites. No one should be allowed to smoke in the dumpsite area. There has to be a stringent monitoring mechanism by skilled manpower for assessing the fire hazards in the dumpsite area.

Published in:
Downtoearth

Online Bakery Workshop On Mar.29

CSIR-CFTRI

28th March, 2022

Mysore/Mysuru: CSIR-Central Food Technological Research Institute (CFTRI) is organising a one-day online workshop on "Bakery Units for Urban & Rural Markets: Bringing Sustainability" on Mar.29 under the CSIR Integrated Skill Initiative for the benefit of budding Entrepreneurs / Micro-entrepreneurs/ Start-ups and SHGs needed essential skills to sustain and to meet the growing needs of the consumers.

The workshop will focus on the raw material selection, arts and science of making different bakery products, food laws, newer trends in the bakery industry and funding schemes for bakery start-ups.

The day-long session would be an ideal opportunity to those who are having small bakery units in the rural and urban settings. The Institute has expert faculties who have considerable years of experience in the area of innovative product development, undertaking of Industry projects and conducting skill development programs.

Last date for online payment and registration is Mar.28.
For details and links for registration and payment, visit https://cftri.res.in/sdp or e-mail: pmc@cftri.res.in.

Published in:
Star Of Mysore

International Webinar On Plants And Microbes For Environmental Sustainability

CSIR-NBRI

28th March, 2022

Aligarh: An international webinar on 'Plants and Microbes for Environmental Sustainability' was organized by Department of Botany, Aligarh Muslim University in collaboration with International Society of Environmental Botanist (ISEB), CSIR-National Botanical Research Institute (NBRI), Lucknow.

Lectures on different topics were delivered by Prof Emeritus M N V Prasad, Department of Plant Sciences, University of Hyderabad (Telangana); Dr P Thangavel, Department of Environmental Science, Periyar University, Salem (Tamil Nadu), and Dr Muhammad Arslan , Environmental Engineering Department, University of Alberta, Edmonton, Canada.

Prof Emeritus M N V Prasad enlightened the significance of plants, microbes, and hybrid systems in minimizing metal-pollutant's load, and thereby achieving environmental sustainability. Dr Muhammad Arslan discussed the success story of the floating treatment wetlands (FTWs), comprising consortium of unique plants and microbes (plants-bacteria synergism) as cost-effective, and an appropriate eco-technology for large-scale cleanup of sewage and industrial wastewater. Dr P Thangavel explained the mechanisms underlying metal hyper-accumulation in plants and elaborated its role in cleanup of the metal contaminated sites.

A round of discussion followed each talk. In his presidential address, Prof Wasim Ahmad, Dean, Faculty of Life Sciences appreciated the efforts of the organizing team for timely and significant theme of the webinar. Prof Nafees A Khan, organizing secretary, gave the insights into the webinar theme, and also enlightened the role of biological approach comprising plants and microbes in sustainable control of varied environmental issues, and eventually in achieving environmental sustainability.

Prof Ghazala Parveen, Chairperson and the co-organizing secretary of the webinar in her welcome address mentioned that the collaboration of Department of Botany with ISEB and NBRI, Lucknow would improve joint academic activities in the campus of AMU and NBRI, Lucknow.

Dr RD Tripathi, Secretary, ISEB, and co-convener, introduced ISEB to the gathering and expressed his desire to organize more AMU-ISEB/ NBRI collaborative events again in future also.

Dr Naser A Anjum, the convener of the webinar introduced the rationale and objective of the online event to the audience. Dr Asim Masood, the co-convener highlighted the major take-home message of the webinar, and also gave the vote of thanks.

Published in:
India Education Diary

Omicron variant BA.2 of Clade 21L still dominant in Vid, TN

CSIR-NEERI

28th March, 2022

Nagpur: The latest genome sequencing by CSIR-NEERI has found Omicron sub-variant BA.2 (Clade 21L) as the dominant variant in Covid positive samples collected from Vidarbha and Tamil Nadu. Clade is a genotypic term and used in scientific diaspora to understand the characteristics of a variant. Currently, the BA.2 belonging to Clade 21L is seen as dominant in most parts of the world. Omicron belongs to clade 21M, thus its sub-variants are further classified as BA.2 (21L) and BA.1 (21K).

Until recently, Omicron lineages belonging to Clade 21M were majorly seen in samples processed at the NEERI lab. Between January and February, BA.1 belonging to Clade 21K was reported to some extent, but it is not found now in the available samples. The NEERI study showed the percentage share of BA.2 (Clade 21L) at 77.58% and B.1.1.529 (Clade 21L) at 22.41%.

This was the 15th series of genome sequencing undertaken at Neeri since early January. The lab has now processed 1,195 Covid positive samples of symptomatic and asymptomatic patients. The turnaround time for whole genome sequencing at the lab is 1.5 days, which is the shortest among all premier facilities in the country.

The latest batch comprised 58 SarsCov2 samples from six districts of Vidarbha and Tamil Nadu collected between March 15 and 25. The lab had received 142 samples but only 58 were found fit for sequencing. GMCH, IGGMCH and AIIMS Nagpur had sent around 25 samples. All the samples included in the study have been published on GISAID and INSACOG Hub on March 26. The results are also uploaded on IHIP-IDSP (Integrated Health Information Platform- Integrated Disease Surveillance Portal)

The state government had set a genome sequencing target of 8,000 for Maharashtra in

February. As the positivity had fallen across the country, sequencing labs are not getting enough samples. Generally, samples having cycle threshold (CT) value of less than 25 are taken for sequencing purpose. But, the labs are left with no option but to accept whatever samples are made available.

Krishna Khairnar, head of NEERI'S environmental virology cell, said, "Although positivity is low, we need to keep a close vigil on genotypic surveillance of SarsCov2. It doesn't take much time for the virus to spread rapidly. If there is any mutant or variant, we need to immediately understand its dynamics. This is possible only with regular genome sequencing," he said.

Published in:
Times Of India

Gujarat gets India's first 'steel road'. Details here

CSIR-CRRI

27th March, 2022

The Diamond City of India, Surat, has become the first in India to get a road that is made out of steel waste.

Built by Arcelor Mittal Nippon Steel India with CSIR India (Council of Scientific and Industrial Research) & CRRI (Central Road Research Institute) along with the government think tank NITI Aayog, the steel slag road is a stellar example of sustainable development. Often considered as a waste material, steel slag has been a problem area for the steel industry.

Laid in the Hazira Industrial Area, the road consists of 100% processed steel slag. The 6-lane 1-kilometre long road is an experimental project that may solve the waste material issue. Slag is a by-product of smelting ores and used metals.

The disposal of metallurgical and metal-processing waste in landfills is particularly hazardous for the environment. Processed steel slag aggregate exhibits great potential as a replacement for natural construction material.

The thickness of the road has been reduced by 30%

Published in:
Economic Times

Sabarmati river pollution: Effluents from 4 CETPs don't meet parameters: Report

CSIR-NEERI

27th March, 2022

The untreated influent as well treated effluent from four Common Effluent Treatment Plants (CETPs) under the Ahmedabad Municipal Corporation jurisdiction do not adhere to prescribed parameters, stated two draft reports of Council Of Scientific And Industrial Research–National Environmental Engineering Research Institute (CSIR–NEERI).

The two draft reports submitted to the Gujarat Pollution Control Board on March 24 with respect to functioning of four of the total seven CETPs under AMC jurisdiction — Naroda Enviro Project Ltd (NEPL), Gujarat Vepari Maha Mandal Odhav (GVMM), CETP Green Environment Services Co-op Society Ltd (GESCL) Vatva and CETP Narol Textile Infrastructure & Enviro Management (NTIEM) Narol.

The two drafts reports were submitted before the Gujarat HC on March 24 by way of an affidavit by GPCB in relation to a suo motu public interest litigation being heard by the Gujarat HC concerning pollution in Sabarmati river.

In the case of NEPL and GVMM, CSIR-NEERI noted that expenditure on operation and maintenance of the CETPs has become "futile" either owing to "inappropriate treatment system" which is either because the CETPs operations are "highly complex" or "highly haphazard". CSIR-NEERI, which observed that stages of the treatment process at the NEPL CETP was operating in "highly unscientific manner", recommended to NEPL CETP that it "must make necessary efforts to optimize the operating cost by optimizing the energy and

chemical consumptions" and to GVMM, the agency recommended that it "must make necessary efforts to optimize the operating cost by optimizing the chemical consumptions".

To the GESCL CETP, which was initially designed for 16 MLD capacity but was subsequently augmented to 35 MLD to meet the requirements of member industries, the agency recommended that it must make necessary efforts to "optimize the operating cost by operating the CETP to its design capacity and optimizing energy & chemical consumptions.

Only in the case of the NTIEM CETP, the agency found that while untreated influent does not meet the requisite parameters, the treated effluent indicates that it meets the prescribed discharge standards . With cost of treatment low at the NTIEM CETP, the agency recommended that it can "explore the feasibility" of recycling or reusing the treated effluent.

GPCB in its affidavit submitted that pursuant to the CSIR-NEERI analyses of the four CETPs, the reports have also been forwarded to the concerned CETPs and have been asked to furnish the time frame action to the GPCB at the earliest.

Notably, CM Bhupendra Patel had told the Assembly that Rs 136 crore was spent in 2020 and 2021 to clean up Sabarmati river.

Published in:
Indian Express

CSIR-NAL

27th March, 2022

CSIR-NAL participation in Wings India 2022 at Hyderabad during 24-27 March 2022

ఉడాన్‌కు 'సారస్' విమానాలు అనుకూలం

ఎన్‌ఏఎల్ డైరెక్టర్ జితేంద్ర జాదవ్

ఈనాడు, హైదరాబాద్: నేషనల్ ఏరోస్పేస్ లేబొరేటరీస్ (ఎన్ఏఎల్) అభివృద్ధి చేసిన 19 సీట్ల తేలికపాటి రవాణా విమానం సారస్-ఎంకే 2 హైదరాబాద్‌లో నిర్వహించిన వింగ్స్ ఇండియా 2022 సదస్సులో ప్రత్యేక ఆకర్షణగా నిలిచింది. ఈ విమానాన్ని ప్రయాణాల అవసరాలకు, సైన్యాన్ని తీసుకువెళ్లటానికి, ప్రముఖుల ప్రయాణాలకు, ఎయిర్ అంబులెన్స్‌గా వినియోగించవచ్చని ఎన్ఏఎల్ డైరెక్టర్ జితేంద్ర జాదవ్ వివరించారు. ముఖ్యంగా దేశంలో ద్వితీయ, తృతీయ శ్రేణి నగరాలకు విమాన సదుపాయాన్ని అందుబాటులోకి తీసుకువచ్చేందుకు, ఉడాన్ పథకం కింద ప్రయాణికులకు సేవలు అందించటానికి సారస్- ఎంకే 2 విమానం ఎంతో ఉపయుక్తంగా ఉంటుందని తెలిపారు. చిన్నవి, ఎత్తైన ప్రదేశాల్లో ఉండే రన్‌వేల నుంచి సులువుగా ఎగిరే సత్తా దీనికి ఉన్నట్లు వెల్లడించారు. గ్లాస్ కాక్‌పిట్, ప్రెజరైజ్డ్ కేబిన్, డిజిటల్ యాంటీ స్కిడ్ బ్రేకింగ్, ఆటో పైలెట్, క్యాట్- 2 ల్యాండింగ్, టూ లీవర్ ఇంజన్ ఆపరేషన్ లాంటి అధునాతన సదుపాయాలు ఈ విమానంలో ఉన్నట్లు, తేలికపాటి పదార్థాలతో దీన్ని రూపుదిద్దినట్లు చెప్పారు. దాదాపు 29,000 అడుగుల ఎత్తులో గంటకు 500 కి.మీ. వేగంతో నిరంతరాయంగా 778 కి.మీ. ప్రయాణించగలదని తెలిపారు. ప్రాంతీయ విమానయాన సేవలకు ఈ విమానం ఎంతో ఉపయుక్తంగా ఉంటుందని అన్నారు. ఎన్ఏఎల్ అభివృద్ధి చేసిన హన్సా- ఎన్‌జీ ఎయిర్‌క్రాఫ్ట్, హై ఆల్టిట్యూడ్ ప్లాట్‌ఫామ్స్ (హెచ్ఏపీ) వివరాలను ఈ సందర్భంగా ఆయన వెల్లడించారు.

Published in:

Eenadu

CSIR-NAL

27th March, 2022

Visitors taking a close look at the aircraft on display as part of Wings India 2022 show at Begumpet Airport on Saturday. • NAGARA GOPAL

Flying clubs show keen interest in NAL's HANSA-NG

80 letters of intent for indigenous two-seat trainer aircraft received

SPECIAL CORRESPONDENT
HYDERABAD

CSIR-National Aerospace Laboratories (CSIR-NAL) received commitments, from prospective customers, for the indigenous two-seat flying trainer aircraft HANSA-NG, at the ongoing Wings India 2022 civil aviation event in Hyderabad.

"HANSA-NG will benefit Indian flying clubs as well as other customer applications like bird reconnaissance at airfields, cadet training, coastal surveillance and hobby flying. CSIR-NAL received firm commitments for 10 aircraft from Belagavi Aviation, and Blue Ray Aviation has also shown interest in acquiring three aircraft," Secretary, DSIR and director-general of CSIR Shekhar C. Mande said at Wings India on Saturday.

HANSA-NG has been developed by incorporating state-of-the-art technologies and new generation design features. It offers advanced digital display systems using certified instruments, two primary flight displays with built in redundant power supply, he said. The delivery of aircraft is scheduled from July with private /public industry participation, he said. The aircraft is capable of flying upto an altitude of 10,000 feet with a maximum speed of 200 kmph with more than five hours endurance. Overall, NAL has received more than 80 Letter of Intents (LoI) from various flying clubs across the country.

Mr.Mande said the multi-copter drones developed by NAL have been configured for precision agriculture, geo exploration studies and for last mile delivery/ medicine/vaccine delivery. Higher payload capacity and longer endurance are two key features of the drones.

A release from NAL said agreements were signed for technology transfer of the multi-copters – Quad, Hexa, Octa – to Scientech Industries, Indore, Magic Myna, Coimbatore and C I Network Technologies, Ahmedabad at Wings India on March 24. The MSMEs will start production in next three months. They will be making 100-200 drones per month.

On SARAS-MK II, the 19-seater Light Transport Aircraft developed by NAL, Mr Mande said Armed Forces have committed to procuring 15 of them for initial induction. The aircraft will be certified by DGCA and CEMILAC for civil and military use. The first flight is likely to be in June 2024 and the production will be from 2026-27 onwards. Exclusively designed for operations from short runways, hot and high airfields and semi-prepared runways, SARAS MKII is expected to be a game-changer to boost air connectivity to Tier 1 and 2 cities.

ICATT Air Ambulance Service has placed two LoI for SARAS-Mk II for use as flying ICU and Operation Theater.

NAL is also showcasing at Wings India a functional sub-scale model of High Altitude Platforms (HAP), a solar-powered UAV capable of day and night operation at a height of 20 km for more than 90 days.

HAP will be a game-changer to work as a pseudo satellite for telecommunication applications in the 5G and 6G spectrum with advantages like low data latency, high bandwidth, the flexibility of launch and low cost.

Mr.Mande said HAP development is on the fast track and the subscale model will fly by August to evaluate the aerodynamics, stability control and avionics and autopilot performance.

Published in:

The Hindu, Times of India

Customer interest in NAL offerings on rise

CSIR-NAL

26th March, 2022

Receives over 80 Letter of Intents for the indigenous two-seat flying trainer aircraft HANSA-NG, from various flying clubs across the country

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longer endurance are two key features of the drones. A release from NAL said agreements were signed for technology transfer of the multi-copters — Quad, Hexa, Octa — to Scientech Industries, Indore, Magic Myna, Coimbatore and C I Network Technologies, Ahmedabad at Wings India on March 24. The MSMEs will start production in next three months. They will be making 100-200 drones per month.

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Published in:
The Hindu

Cryo-electron microscopy facility opens in Hyderabad

CSIR-CCMB

26th March, 2022

Hyderabad: A cryo-electron microscopy facility has been inaugurated on Friday by Dr Shekhar Mande, Director-General, Council of Scientific and Industrial Research (CSIR) at the Centre for Cellular and Molecular Biology (CCMB) in Telangana's Hyderabad. This makes Hyderabad the second city in India to host a modern cryo-electron microscopy facility.

In a press release, CCMC said that such a facility allows scientists to look at matter to its atomic details. "A close look at molecules such as proteins have been at the forefront of understanding the structural details of living cells and drive drug discovery. In the last two years, such insights have enabled the scientists and pharmaceutical industries understand the coronavirus and find out potential cures," the release read.

Dr Rajan Sankaranarayanan, an eminent structural biologist at CCMB, said that the modern cryo-electron microscopy facility is expected to help us view the functioning of several molecular machines that operate in the cell that were earlier not amenable to conventional structure determination methods such as X-ray crystallography or Nuclear Magnetic Resonance (NMR).

"The facility on CCMB's campus is funded by the CSIR. It will be accessible to researchers in CCMB, other CSIR labs as well as in other research institutes and universities. It will also be available to the biotech and pharmaceutical industries, of which Hyderabad is a major hub. The facility has been largely built in CCMB in the last two years during COVID-19 pandemic,

thanks to our in-house teams," said Dr Vinay K Nandicoori, Director, CCMB. This facility will allow working with samples at cryogenic temperatures, around -173 oC, and photographing individual molecules using the electron microscope. This, in addition to the confocal microscopy, NMR spectroscopy and X-ray diffraction facilities at CCMB, makes it a formidable facility for researchers to look into details of living cells like never before.

"Structural biology techniques have advanced greatly in the last four decades. From needing a year to collect and making sense of each data point to doing it in a few seconds now, the power is enormous. The chasm between structural and cellular biology is diminishing, and this will allow addressing some of the very fundamental and exciting problems of biology with techniques like cryo-electron microscopy," said Dr Shekhar Mande, Director-General, CSIR.

Published in:
Siasat

Workshop held to promote the cultivation of medicinal plants in J-K's Chenab valley

CSIR-IIIM

26th March, 2022

To promote the cultivation of medicinal plants in Jammu and Kashmir's hilly Chenab valley in a big way, the National Medicinal Plant Board (NMPB) under the Ministry of Ayush on Saturday organized a stakeholders meet-cum-workshop here. The day-long workshop, attended by progressive and prospective farmers associated with the cultivation, preservation, extraction of oil, and value addition of medicinal plants, was primarily aimed at locating the available opportunities and different challenges to cultivate medicinal plants more profitably and scientifically, the organizers said.

The stakeholder's meet-cum-workshop on medicinal plant cultivation - opportunities and challenges – was organized by regional-cum-facilitation centre (RCFC) northern region II, NMPB, Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) Kashmir. In his inaugural address, regional director RCFC north second plant, Medicinal Plant Board SKUAST Kashmir, Sheikh Bilal, discussed the ongoing government schemes for farmers related to the cultivation of medicinal plants and suggested they identify species and varieties, keeping in view the agro-ecological situation and market demand into consideration. He also deliberated upon the activities to be covered under new forthcoming schemes by the NMPB for bringing higher returns to farmers from the cultivation of medicinal plants.

Nodal officer state Medicinal Plant Board Waheed said the RCFC and SKUAST Kashmir are happy to organize their first stakeholders meet in Bhaderwah to promote medicinal plants in the Chenab valley region. He lauded the workshop to bring all the stakeholders like farmers,

various government departments including forest, horticulture, floriculture, Directorate of AYUSH, besides CSIR-IIIM and tourism authorities under one roof. "Conservation and development of medicinal plants are only possible if we all work together cohesively," he said.

Touqeer Bagban, a progressive farmer and entrepreneur associated with aromatic and medicinal plants, highlighted the importance of the cultivation of medicinal plants and said resources are declining due to agricultural expansion, wood extraction, and overgrazing. "So, there is a need to conserve and cultivate medicinal plants." Representatives of the AYUSH Ministry deliberated upon the issues related to the cultivation of medicinal plants in the Bhaderwah region. They discussed the opportunity for farmers to enhance their income by cultivating medicinal plants.

Published in:
Outlook India

CSIR-IHBT

26th March, 2022

लेमन ग्रास व गेंदा की खेती बदलेगी तकदीर

संवाद सहयोगी, पालमपुर : विज्ञानी एवं औद्योगिक अनुसंधान परिषद (सीएसआइआर)-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान (आइएचबीटी) पालमपुर और देव सूर्य हिमालयन आर्गेनिक प्राइवेट लिमिटेड (एफपीओ) शिमला के बीच क्षेत्र में लेमन ग्रास और सुगंधित गेंदा की खेती को बढ़ावा देने के लिए समझौता ज्ञापन पर हस्ताक्षर (एमओयू) किए। अरोमा मिशन के तहत सीएसआइआर-आइएचबीटी की ओर से किसानों को दस लाख लेमन ग्रास पौधे और सुगंधित गेंदा के 75 किलोग्राम बीज प्रदान किए जाएंगे। इससे इन उच्च मूल्य वाली फसलों के तहत 336 एकड़ क्षेत्र को कवर करने और क्षेत्र के 1200 से अधिक किसानों को लाभांवित करने का लक्ष्य रखा है।

सीएसआइआर-आइएचबीटी के निदेशक डा. संजय कुमार ने बताया कि सीएसआइआर ने 2017 में अरोमा मिशन के तहत देश के किसानों के सामाजिक-आर्थिक उत्थान और रोजगार सृजन के लिए उच्च मूल्य वाली सुगंधित फसलों की खेती को बढ़ावा देने का काम शुरू किया था। मिशन के दूसरे चरण में सीएसआइआर-आइएचबीटी सुगंधित फसलों की खेती के तहत तीन हजार हेक्टेयर क्षेत्र लाने के लिए प्रतिबद्ध है। दुनिया में सुगंधित फसलों की खेती उनके उच्च मूल्य वाले आवश्यक तेलों के कारण की जाती है। इनका उपयोग कृषि रसायन, भोजन, स्वाद, सुगंध और दवा उद्योग में किया जाता है। हिमाचल प्रदेश वूल फेडरेशन के अध्यक्ष त्रिलोक कपूर और एफपीओ शिमला की ओर से अधिकृत हस्ताक्षरकर्ता ने कहा कि यह साझेदारी उन्हें पालमपुर क्षेत्र में सुगंधित फसलों की खेती में अग्रणी सीएसआइआर संस्थान के सहयोग से काम करने की अनुमति देगी। यह समझौता किसानों को उनकी आजीविका में सुधार करने और आत्मनिर्भर बनाने में मदद करेगा।

लेमनग्रास और सुगंधित गेंदा की खेती को लेकर हुए हुए समझौता ज्ञापन पर हस्ताक्षर के दौरान पदाधिकारी। ● जागरण

Published in:

Dainik Jangran, Amar Ujala, Sambad News

Time after time, parliamentarians want to know if India is changing time

CSIR-NPL 26th March, 2022

A favourite question of parliamentarians that has repeated, time after time, in every session of Parliament since 2002, is fittingly about time. Cutting across party lines, members from both Houses have for two decades asked the Centre at least 16 times if India proposes to have two time zones and the steps taken to implement it.

First raised in March 2002, the question was effectively settled in August of that year. "No," then Minister of State for Science and Technology Bachi Singh Rawat told Rajya Sabha Member M. Sankaralingam.

A 'High Level Committee' (HLC) constituted by the Department of Science and Technology in that year had studied the issue and concluded that multiple zones could cause 'difficulties' that would disrupt the smooth functioning of the "airlines, Railways, radio, television and telephone services" and so it was best to continue with a unified time, said Mr. Rawat.

Early sunrise and sunset

The demand for two time zones rose because the northeastern India and the Andaman and Nicobar islands, because of their geography, see an early sunrise and sunset relative to the rest of the country. But because clocks didn't account for this and official working hours being the same everywhere, valuable working hours were lost in the morning and unnecessary electricity was consumed in the evening hours in these regions and therefore, following a widely prevalent global practice — the U.S. has five time zones, Russia 11 — India too ought to have multiple ones, the reasoning goes.

The expert committee, while not favouring multiple time zones, recommended that work timings in the eastern States be advanced by one hour, to "gainfully utilise" the morning hours and would involve only administrative instructions in this regard by the authorities concerned.

Yet the matter hasn't seen closure. BJ Panda, MP, Rajya Sabha and then with the Biju Janata Dal, was the first to raise this question in 2002, a few months before Mr. Sankaralingam. Mr. Panda raised the question again in 2007 on "whether there was a proposal to work out a separate time zone to save power in the northeastern region."

This time Kapil Sibal, Science Minister in the governing United Progressive Alliance (UPA), almost verbatim repeated Mr. Rawat's answer from five years ago: "The Committee observed that this does not provide any major advantage, yet on the other hand, pose several difficulties in terms of differential timings for airlines, Railways, radio and TV, STD [Subscriber Trunk Dialling] services etc. A more prudent and effective solution would be to advance the work timings by one hour in the eastern States, which can be implemented through administrative instructions."

The question resurrected again, in 2010, this time by Sanjay Raut of the Shiv Sena. Then Minister of State for North Eastern Region, Prithviraj Chavan, reiterated Mr. Sibal's answer. Because Congress Ministers had said there was no plan to change time zones, it would appear that this question would receive quietus after 2014 when the NDA came to power. But beginning 2018, four Congress MPs raised this question, the latest being Deepinder Hooda as recently as February 2022, preceded by Manish Tewari, Pradyut Bordoloi — both in December '21 — and Komatireddy Venkat Reddy in 2019.

A trigger for this was an article in Current Science, one of India's leading scientific journals. In it, scientists from the CSIR–National Physical Laboratory (NPL), Delhi, the lab that's entrusted with maintaining Indian Standard Time, made the case for two separate time zones, citing among other things the 2017 Nobel Prize in physiology or medicine which was awarded to Jeffrey C. Hall, Michael Rosbash and Michael Young. They had over decades discovered the molecular mechanisms governing the body's internal clock, or circadian rhythm.

Productive hours of daylight

The hours of daylight were when humans were most productive because specific proteins

were expressed in those hours that governed blood pressure, temperature and reflexes, their studies had shown. This was a compelling enough reason to have a separate time zone for the northeast, the NPL scientists wrote. They also calculated that having two time zones would save 2,00,000 units of electricity annually and an issue raised, by the earlier committee, of potential train accidents could be solved if the time zone were set on the longitude passing through the West Bengal–Assam border where train inter–crossings were minimal.

While scientifically plausible, it failed, as before, to cut ice with the government. "Why this hasn't happened so far is because of political reasons," one of the scientists aware of government deliberations on the topic told The Hindu on condition of anonymity, "A separate time zone, it was feared, would lead to northeasterners seeing themselves as separate from the rest of the country and provoke secessionist demands. So irrespective of the party in power, it is unlikely that this demand will ever be met."

Though the Centre has never admitted to this in public, the phrase "strategic reasons" popped into the responses of BJP Ministers to queries by Congress parliamentarians, along with the standard–line justification.

To Rajya Sabha Congress MP Pradeep Kumar Balmuchu, in 2018, Science Minister Harsh Vardhan responded: "...[There is] a lack of detailed studies on perception and social impact on northeastern region due to shifting of Indian Standard Time and its cost implications for the Railways and other utility providers. In this meeting, the DST's [Department of Science and Technology] stand was reiterated that the earlier High–Level Committee had not recommended two time zones in view of strategic and cost implications."

Before it became a Communist state, China had five time zones until they were abolished by Mao Zedong for Beijing standard time so that a centralised standard time would also keep the country united. Bordoloi, a Congress leader from Assam, told The Hindu that he had not only asked a question in the Lok Sabha but had even moved a Private Member's Bill on the issue. "My Bill was admitted but a discussion hasn't taken place." The northeastern region wasted

about five hours of daylight every day and "precious productivity in the name of security and strategic reasons". He mentioned in his Bill that during summers, daylight broke at 4:20 a.m. at Vijaynagar (Arunachal Pradesh), while in Jaisalmer (Rajasthan), day breaks two hours later. "There is no scientific basis to not have a dual time zone. All over the world, there are different time zones to maximise productivity."

Question becomes irrelevant

While it is unclear if this question will ever see closure, some experts say the widespread adoption of the mobile phone may have made the question irrelevant.

Dinesh Aswal, former Director of the NPL and one of the authors of the Current Science study, said while technological implementation "wasn't a challenge", work had ceased to be a 9–5 activity. "To be in tune with the biological clock for all–round better health was one of the reasons why we'd suggested this but with everyone always on the phone, we've anyways disconnected from our natural rhythm," he said.

Published in:
The Hindu

Shining the light on the wonders of science

CSIR-IICT, NBRI 26th March, 2022

Scientists' contributions, evolution of science in India recalled at the 'Science Leaders Conclave 2022' held at IICT

Top scientists in India, heads of national laboratories and scientific institutions, and officials congregated at the 'Science Leaders Conclave 2022' held at CSIR-Indian Institute of Chemical Technology (IICT) here on Saturday.

It is a rare congregation where various aspects of science, its evolution in India, current and emerging challenges, and possible solutions were discussed.

An important aspect of the conclave was contribution of scientists in pre-independence era, challenges faced by them, and sacrifices made during the arduous journey. The conclave, inaugurated on Saturday, was jointly organised by the Ministry of Science and Technology, and Vijnana Bharati.

Convenor of the conclave and director of CSIR-National Botanical Research Institute-Lucknow, S.K. Barik said there are two objectives of the conclave. One is to discuss sacrifices made by eminent scientists of pre-independence era such as giving up lucrative jobs abroad to lay foundations of science and establish industries in the country. The other is to discuss five themes — energy security, One Health, applications of artificial Intelligence for water, agriculture, and environment management, climate change, and role of science and technology for meeting Sustainable Development Goals.

Brainstorming sessions on the themes were scheduled to be held where problems were to be identified and draw future road map for science and technology solutions.

Jayant Sahasrabudhe, organising secretary-VIBBHA, spoke about 'Contributions of scientists to freedom movement'. The second topic presented on Saturday was 'Presentations highlighting achievements since independence'.

Department of Science and Technology secretary S. Chandrasekhar said the deliberations at the conclave will become a white paper for the future. He cited white revolution and green revolution, to drive home the point about the efforts taken up to ensure no Indian starves and no kid is deprived of milk. "These revolutions have made India a frontrunner in the world," he said.

CSIR director-general Shekhar C. Mande and Department of Biotechnology secretary Rajesh S. Gokhale were present at the inaugural session.

Published in:
The Hindu

CSIR-CFTRI

25th March 2022

Skill development training on value addition of fruits, vegetables

KUNAL RAI

GANGTOK, March 25: A five-day residential skill development training programme on value addition of fruits, vegetables and spices was held here at Janta Bhawan from March 21 to 25.

The training programme was organised by Council of Scientific and Industrial Research-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru, Ministry of Science & Technology and was sponsored by Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce & Industry and supported by the Agriculture Marketing Wing (AMW) of Agriculture department.

The training had 40 participants which included local entrepreneurs and SHGs from all four districts of Sikkim.

The participants were trained on making tutti-frutti jams, jelly, mixed pickles, orange juice and wines from locally available fruits.

Addressing the valedictory function, CSIR-CFTRI chief scientist Dr. Ng. Iboyaima Singh said we are here to develop entrepreneurs in the food poisoning processing sector as this sector holds a good potential. Sikkim being organic State, the products developed will have a good market, he added.

He further said the State being tourism centric the availability of the market is wide but to attract the customer the quality, packaging of the product must be of highest standard. Agriculture department to develop training centre in the State wherein booster trainings in case of need can be initiated time and again, he added.

Agriculture additional director Jagdish Pradhan who was present as the chief guest said it is indeed a matter of pride that CSIR- CFTRI has organised the training programme for the participants of Sikkim. The trainees must take advantage of from the knowledge gained from the training and begin entrepreneurship, he added. Food is essential and it is consumed daily so the changes of not being sold or unavailability of market cannot be questioned. But to attain good market the product produced must be of standard quality along with its packaging as the open market is really competitive, said Pradhan.

He said there are numerous schemes both of the central government and the State government which the aspirants can opt for but the saddening part is that very few approaches. The department as a facilitator extends all possible help and even are ready to initiate hand holding approach but for the same the aspirants needs to come forward. He called upon the educated youths, aspiring, budding entrepreneurs to look for alternative opportunities apart from government jobs and shape their career in such a way that they are self-reliant and financially independent.

Earlier the program was addressed by Science & Technology director Dorjee Thinlay Bhutia and Mahesh Dawari.

All the trainees of were presented with certificates and mementoes.

Published in:
Sikkim Express

CSIR-CBRI

इंजीनियरों को भूकंपरोधी तकनीक की जानकारी दी

रुड़की, संवाददाता। सीएसआईआर-सीबीआरआई रुड़की में हिमाचल सरकार के इंजीनियरों के लिए भवनों की रेट्रोफिटिंग पर छह दिवसीय प्रशिक्षण कार्यक्रम का उद्घाटन किया गया।

प्रशिक्षण कार्यक्रम में हिमाचल प्रदेश के कांगड़ा और चम्बा जिलों के 15 इंजीनियर शामिल हुए। कार्यक्रम का शुभारंभ सोमवार को संस्थान के वैज्ञानिक डॉ. अशोक कुमार ने किया। उन्होंने कहा कि हिमाचल प्रदेश सर्वाधिक भूकम्प, भूस्खलन प्रभावित क्षेत्र रहा है। इससे सबसे अधिक नुकसान भवनों को होता है। प्रशिक्षण के दौरान भवनों, पुलों, सड़कों आदि की रेट्रोफिटिंग की विस्तार से जानकारी दी जाएगी। हिमाचल प्रदेश विज्ञान, प्रौद्योगिकी एवं पर्यावरण परिषद से आए वरिष्ठ प्रधान वैज्ञानिक डॉ. एसएस रन्धावा ने सीबीआरआई ने पूर्व में किए गए सहयोग और प्रशिक्षण के महत्त्व के बारे में अपने विचार रखे। कार्यक्रम समन्वयक एसके नेगी ने सभी अतिथियों और प्रशिक्षणार्थियों का स्वागत किया।

CSIR-CBRI

निर्माण तकनीक सीखने पहुंचे हिमाचल के इंजीनियर

रुड़की स्थित केंद्रीय भवन अनुसंधान संस्थान में छह दिवसीय प्रशिक्षण कार्यक्रम का उद्घाटन

संवाद न्यूज एजेंसी

रुड़की। उच्च कोटि के भवन निर्माण की तकनीक सीखने हिमाचल प्रदेश सरकार के 15 इंजीनियरों की टीम केंद्रीय भवन अनुसंधान संस्थान (सीबीआरआई) रुड़की पहुंच गई है। प्रशिक्षण कार्यक्रम में इंजीनियरों को भवनों और अन्य संरचनाओं के निर्माण की गुणवत्ता, विरासत भवनों की मरम्मत, निर्माण लागत प्रबंधन और कंक्रीट संरचनाओं के परीक्षण आदि की जानकारी दी जाएगी।

सोमवार को सीबीआरआई रुड़की में हिमाचल प्रदेश सरकार के इंजीनियरों के लिए भवनों की रेट्रोफिटिंग पर छह दिवसीय प्रशिक्षण कार्यक्रम का उद्घाटन हुआ। दो अप्रैल तक चलने वाले प्रशिक्षण कार्यक्रम में हिमाचल प्रदेश के कांगड़ा और चंबा जिलों के 15 इंजीनियर शामिल हो रहे हैं। हिमाचल प्रदेश के विज्ञान, प्रौद्योगिकी एवं पर्यावरण परिषद् की ओर से प्रायोजित प्रशिक्षण कार्यक्रम का उद्घाटन संस्थान के वैज्ञानिक डॉ. अशोक कुमार ने किया। उन्होंने कहा कि हिमाचल प्रदेश सर्वाधिक भूकंप, भूस्खलन प्रभावित क्षेत्र रहा है। इससे सबसे अधिक नुकसान भवनों और अन्य आधारिक संरचनाओं को होता है।

रुड़की स्थित सीबीआरआई में आयोजित प्रशिक्षण कार्यक्रम में विचार रखते वक्ता। -संवाद

उन्होंने यह भी बताया कि प्रशिक्षण के दौरान भवनों, पुलों, सड़कों आदि की रेट्रोफिटिंग की विस्तार से जानकारी दी जाएगी। हिमाचल प्रदेश विज्ञान, प्रौद्योगिकी एवं पर्यावरण परिषद् के वरिष्ठ प्रधान वैज्ञानिक डॉ. एसएस रंधावा ने सीबीआरआई की ओर से पूर्व में किए गए सहयोग और प्रशिक्षण के महत्व पर विचार रखे।

कार्यक्रम समन्वयक एसके नेगी ने अतिथियों और प्रशिक्षणार्थियों का स्वागत किया। डॉ. शांतनु सरकार और डॉ. अजय चौरसिया ने भी विचार रखे। प्रशिक्षण कार्यक्रम में प्रशिक्षणार्थियों को भवनों और अन्य संरचनाओं की रेट्रोफिटिंग की तकनीक, निर्माण कार्यों में गुणवत्ता, विरासत भवनों की मरम्मत और रेट्रोफिटिंग, निर्माण लागत प्रबंधन और कंक्रीट संरचनाओं के अविनाशी परीक्षण की जानकारी दी जाएगी।

साथ ही प्रशिक्षणार्थियों को साइट का दौरा भी करवाया जाएगा। उद्घाटन सत्र के अंत में आशीष पिप्पल ने धन्यवाद व्यक्त किया। मौके पर डॉ. धर्मराजू, डॉ. एसआर कराडे, एचके जैन, इतरत अमीन सिद्दीकी, जलज पराशर, राजीव बंसल, हरीश कुमार, सुखबीर शर्मा, मेहर सिंह आदि उपस्थित थे।

CSIR-CRRI

पीएम आवास योजना में 20 साल टिकाऊ सड़क

एलडीए

लखनऊ, प्रमुख संवाददाता। शारदानगर विस्तार में प्रधानमंत्री आवास योजना की कॉलोनी में एलडीए विदेशों की तर्ज पर बीस साल टिकाऊ वाटर प्रूफ सड़कें बना रहा है। मंगलवार सीआरआरआई (सेंट्रल रोड रिसर्च इंस्टीट्यूट) के विशेषज्ञों की निगरानी में सड़क बनाने का काम शुरू हुआ।

एलडीए के मुख्य अभियंता इन्दुशेखर सिंह ने बताया कि पीएम आवास कॉलोनी का निर्माण अत्याधुनिक तकनीक से किया गया है। इसके लिए एलडीए को राष्ट्रीय, अंतर्राष्ट्रीय स्तर पर कई पुरस्कार मिले हैं। इसी के तहत सीआरआरआई के सहयोग से सड़क बनाई गई है, जो 20 वर्ष से भी अधिक समय तक चलेगी। यह पहली बार है कि जब देश की किसी कॉलोनी में इस तकनीकी से सड़क बनाई गई है। मुख्य अभियंता ने बताया कि यहां स्टोन मैटिक्स एसफाल्ट तकनीकी से सड़क बनाई जा रही है, जिसकी उम्र सामान्य सड़क से चार गुनी अधिक होगी।

सीआरआरआई विशेषज्ञों की निगरानी में एलडीए बना रहा टिकाऊ सड़कें।

मंगलवार को सीआरआरआई के हेड एंड प्रिंसिपल साइंटिस्ट डॉ. अम्बिका बहल, प्रोजेक्ट लीडर डॉ. शिक्षा स्वरूपा और सीनियर टेक्निकल आफिसर शंख दास ने एलडीए के प्लांट व निर्माण स्थल का निरीक्षण किया।

पानी, मिट्टी, स्टील की भारी बचत कर बने मकानः मुख्य अभियंता ने बताया कि इन आवासों को बनाने में एलडीए ने विशिष्ट निर्माण तकनीकी, विशिष्ट भवन निर्माण सामग्री इस्तेमाल की है। यहां निर्माण में करीब छह करोड़ लीटर पानी, पांच हजार टन मिट्टी और 3600 टन स्टील की बचत हुई है। करीब 50 हजार मीट्रिक टन कार्बन डाईआक्साइड का उत्सर्जन रोका गया है। इन भवनों को ऊर्जा दक्षता में पांच सितारा रेटिंग, पर्यावरण अनुकूलता में गोल्ड सर्टिफिकेट मिला है। परियोजना को राष्ट्रीय स्तर पर हुडको का इनोवेटिव तकनीकी पुरस्कार मिला है।

हरियाली बढ़ाने को करार

एचसीएल फाउंडेशन के साथ लखनऊ विकास प्राधिकरण ने राजधानी में हरियाली बढ़ाने के लिए मंगलवार करार किया है। कमिश्नर, एलडीए अध्यक्ष रंजन कुमार ने बताया कि यह समझौता वनीकरण की मदद से पक्षियों, मधुमक्खियों के लिए वातावरण बनाने, जैव विविधता को पनपने में मदद कर पर्यावरण सुधार में महत्वपूर्ण भूमिका निभाएगा। यहां एलडीए जोन एक के कार्यकारी अभियंता अवनीन्द्र सिंह, एचसीएल फाउंडेशन निदेशक निधि पुंधीर, आयुक्त रंजन कुमार, उपाध्यक्ष अक्षय त्रिपाठी, सचिव पवन गंगवार ने समझौता पत्र पर हस्ताक्षर किए।

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