CSIR in Media



News Bulletin 21st to 25th February 2020





CSIR-NML

25th February 2020

Students of Tata Workers' Union School visit NML

Mail News Service

Jamshedpur, Feb. 25: A group of 42 students of Std. VIII & IX from Tata Workers' Union High School, Kadma, accompanied by two teachers, Shipra Mishra and MadhuriKumari visited at CSIR-Metallurgical National Jamshedpur and Laboratory, interacted with scientists and research scholars in this morning under Jigyasaprogramme, jointly collaborated by Ministry of HRD, Govt.of India and the Council of Scientific & Industrial Research, New Delhi. The students were thrilled to visit the laboratory and interact with different working group.

The programme was scheduled for two and half hours, which comprises, brief up about CSIR and NML, documentary film show and laboratory visits. The

programme was coordinated by Mishra. Principal Scientist. He delivered welcome address and introduced Jigyasa team to students. Talk about contributions of CSIR in different branches of Science Technology and products developed by CSIR and its benefit goes to the common people. Further, he discussed about NML and its contribution towards the proper and gainful utilization of natural resources such as ores, minerals for developing different types of metals & alloys used as components in different industries. The students expressed their feelings asked questions and clarify their doubt. Dr. A.K. Sahu, Sr. Tech.Officer proposed the vote of thanks. Further, laboratory visits programme was arranged and organized by S.N. Hembram, Sr. Tech.Officer to gain practical exposures of R&D to students.



Students further visited at creep testing units of Materials Testing & Evaluation Division, Prabir Kumar Roy, Sr. Tech.Officer explained about the fatigue, creep, fractures prevailing in different types of industrial components like boiler, reformer tubes, pressure vessel etc. Students get exposure of different machine like Servo Hydro Testing Machine, Servo Electrical Machine and furnace. Students were impressed to observed various equipment and facilities available at the Analytical Chemistry Centre. SoniJha, nicely explained about the role of chemical analysis unit and discussed how this unit performing chemical analysis of minerals, ores, slag, water.

The laboratory has recently setup a New Electronic Waste Unit and it was remained attraction among the students, and faculties, they show their keen interest about the methodology and the steps involved in the recycling of various electronics appliances for recovery of valuable metals like gold, copper, lithium, cobalt, nickel etc. Dr. M.K. Jha has explained the relevance and need of electronic waste unit to save the environment as well as mankind.

Students were surprised to observed the 69 years' history of NML at museum and they asked different question based on sample and poster pertains to the minerals based products and facilities.

Published in:

The Avenue Mail



Mushroom Cultivation Trg Imparted

CSIR-NEIST

24th February, 2020

ITANAGAR, Feb 24: Twenty unemployed youths and students participated in a training programme on mushroom cultivation, organized by the North East Institute of Science & Technology (NEIST), in collaboration with the NE regional centre of the GB Pant National Institute of Himalayan Environment & Sustainable Development, here on Monday.

During the training, the NEIST's Senior Technical Officer, Dr Budhen Chandra Baruah, made a PowerPoint presentation on the nutritional and medicinal value of mushrooms, and the prospects of commercial cultivation of mushroom for sustainable socioeconomic development.

Dr Baruah also presented a demonstration on preparing mushroom bags.

Published in:

Arunachaltimes



Welfare Board Meeting Held At NCL

CSIR- NCL

24th February, 2020

Singrauli: Meeting of NCL welfare board, an apex joint forum of Management & Trade Unions responsible for the welfare of the employees of the Company held on Monday at company's Headquarters.

Matters pertaining to the welfare of employees were deliberated, discussed and decided. Also, the progress on renovation of residential quarters, canteens, toilets and rest shelters were reviewed.

The Chairman & Managing Director NCL, Shri P.K.Sinha, Director (Technical / Operations) NCL, Shri Gunadhar Pandey, Director (Finance and Personnel) NCL, Shri N. N. Thakur, General Manager (P/Welfare) Sri Charles Juster, General Managers/HOD's along with JCC Member Shri Munni Lal Yaday, Shri Ashok Dubey &



Welfare Members of NCL remain present in the meeting.

Published in:
Psuconnect



CSIR-CDRI Scientist bags SERB Women Excellence Award

CSIR-CDRI

Dr Niti Kumar, Senior Scientist from Division of Molecular Parasitology and Immunology, CSIR-Central Drug Research Institute (CDRI), Lucknow, has won the SERB Women Excellence Award for the year 2020. Dr Niti Kumar will receive the Award from the President of India during National Science Day Celebrations on February 28, 2020, at Vigyan Bhawan.

This is a huge recognition of her research group's work on understanding the protein quality control machinery in human malaria parasite. The study could well lead to finding an alternative drug for malaria intervention.

24th February, 2020



Instituted by the Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India (SERB-DST), the award is given to women scientists below 40 years of age who have received recognition from other national academies. The award constitutes a research grant of Rs 5 lakh per annum for 3 years.

Dr. Niti Kumar has many awards and recognitions to her credit. Some of the prominent ones include: Innovative Young Biotechnologist Award (DBT-IYBA, 2015); INSA Medal for Young.



Scientist (2010) by Indian National Science Academy; Ramalingaswami Fellowship (2013-2018); EMBO Post-Doctoral Fellowship (2010-2012); Alexander von Humboldt Fellow (2010); Max Planck Post-doctoral Fellowship at Max Planck Institute of Biochemistry (2009); and Marie Curie Early Stage Research Fellowship by European Union under 6th Framework Programme (2005-2006).

Published in:

Business Line



NRDC Licensed CSIR NPL Developed Technology on Recycling of Plastic Waste Into Useful Tiles

CSIR-NPL

24th February, 2020



New Delhi: National Research Development Corporation (NRDC) licensed a technology for "Recycling of Plastic Waste into Useful Tiles" technology developed by CSIR-National Physical Laboratory, New Delhi to NAS Industries.

The technology offers a simple and novel process of production of tiles, pavement blocks, panels, etc. from the waste plastic bags and bottles. Recycling of the waste plastic bags and bottles into decorative coloured tiles creates a durable material from waste. Thus, this technology not only provides a sustainable living for the people who are collecting them

from the garbage but also converts waste into a useful product and saves the environment.

Dr. Shekhar Mande, DG, CSIR, Dr. H. Purushotham, Chairman & Managing Director, NRDC, Dr. D.K. Aswal, Director, CSIR-NPL and Shri Shubham Agrawal, Designated Partner, NAS Industries signed and exchanged the Tripartite License Agreement. Senior officials of CSIR, NPL and NRDC were also present in the event and witnessed the TLA exchange of the "Recycling of Plastic Waste into Useful Tiles" technology. This technology will provide a viable solution for solid waste management problem which is a huge challenge facing the country.

Published in:

PsuWatch



23rd February 2020

CFTRI STEPS UP RICE MILLING RESEARCH

The institute will set up a state-of-the-art rice plant in Mysuru equipped with industry-leading technology

EXPRESS NEWS SERVICE@ Mysuru

THE city-based Central Food Research Technological Institute (CFTRI) will step up its research and training facilities on rice milling in an effort to ramp up the output of rice from mills and to increase the nutrition value of rice.

As a part of this, the institute will set up a state-of-the-art rice mill plant in Mysuru equipped with industry-leading technology at a capacity to process six tonne per hour.

Apart from this, the foundation for a first of its kind Global Centre for Rice Technology, a Rs 25 crore project, was laid on Saturday at the CFTRI Quarters campus on Kalidasa Road.

A Srinivas, incharge officer of the centre, speaking at the groundbreaking ceremony, said the CFTRI has already approached MP Pratap Simha for sourcing the land for the facility and he has responded positively.

Meanwhile, the rice mill centre for which the foundation stone was laid will exist as a training institute for rice mill personnel. It will also engage in research to improve by the utilization of byproducts from the mills, increasing the digitization of rice mills to make them future proof, as well as



CFTRI director K S M S Raghava Rao interacts with Shashikumar Thimmaiah of APIT and others after signing an MoU for Global Centre of Rice Technology in Mysuru on Saturday | s udayshankar

attempt methods to increase the nutritional value of rice in line with the Swasth Bharath movement.

Speaking about the centre, CFTRI director K S M S Raghav Rao said it would aim at value addition and training for those working at rice mills.

"If we do the right value addition, we can give rice from the mills free of cost, but there is no training and no standard operating procedure for it. This centre aims to fill this gap," he said.

The centre is being built jointly by



If we do the right value addition, we can give rice from the mills free of cost, but there is no training and no standard operating procedure for it. This centre aims to fill this gap

K S M S Raghav Rao, CFTRI director

the CFTRI as well as rice milling equipment majors Buhler and APIT and an MoU was signed at the event.

Sid Mukherjee, CEO of Silicon Road, who was also present at the event, stressed on the importance of the facility. "For over 50 per cent of the world, rice is the main staple food and hence 20 per cent of the globe's calorific intake comes from rice making." He said research is needed to improve the efficiency of milling and byproduct utilization in which India is falling behind and added efforts are needed to mitigate the threat of rice contamination like that from Arsenic.

The event was also attended by Shashikumar Thimmaiah of APIT, Prashant Gokhale, Buhler India and S Z Ali, former director of CFTRI Department of Grain Science and Technology.

Published in:

Indian Express



23rd February 2020



Published in:

Mysore Mitra



23rd February 2020

Foundation stone laid for CFTRI's Rice Technology Centre

nice is in great demand as a food source.

across the world, the CFTRI Director said

that the Centre will also focus on imple-

mentation of Swachh Bharat' in Rice Mills.

partment of Grain Science and Technolo-

gy. CFTRI, Dr. S.Z. All, former faculty, Sha-

shikumar Thimmaiah, Managing Director

of APIT, Bengaluru, Prashanth Goldhale,

Managing Director, Buhler India, Bengalu-

ru and others were present.

A. Srinivas and A. Jaydeep, faculty, De-



Dignitaries performing 'Guddall Puja' for Global Centre for Rice Technology at CFTRI residential quarters in city yesterday.

Mysuru, Feb. 23 (PM&DM). The Foundation stone for the ambitious project of Council of Scientific and Industrial Research - Central Food Technological Research Institute (CSIR-CFTRI) — Global Centre for Rice Technology (GCRT) — was laid in the premises of CFTRI residential quarters in MG Halli, along Kalidase Road (close to Chandrakala Hospital) here yesterday. Speaking as the chief guest on the occasion, Sid Mukherjee, MD, Silicon Road, said that it is a very important project for all of us as 'Rice' is consumed by 50 percent of the global population.

Pointing out that the Centre would establish the missing vital link between the Rice milling sector and academia, he added that the Centre would go a long way in making the country stronger and self-sufficient.

Stating that this is going to be a world-class training Institute, Mukherjee said that the Centre will be of great help in preparing Rice Mills for the future.

CFTRI Director Dr. KSMS Raghava Rao, who also spoke on the occasion, said that the GCRT is coming up at an estimated cost of about Rs.30 crore. The Centre will train Rice Mill owners, Mill operators and all others concerned, he said and added that as far as his knowledge, there is no such 'School' anywhere else in the country.

The CFTRI Director further said that the GCRT will be a collaborative venture between CFTRI, Mysuru, Buhler India (P) Ltd., Bengaluru and APIT (Agri Process Innovations Technologies). Bengaluru: While Buhler India, which helped setting up of the International School of Milling Technology at CFTRI, will provide machinery for the GCRT, CFTRI will provide knowledge input and APIT will provide all the other necessary infrastructure, he said.

Pointing out that the countries surrounding peninsular India were major rice producing and consuming countries, the CFTRI Director said that Rice Milling Industry has come a long way and the previous decade has witnessed large scale investments in the sector.

Continuing, he said that GCRT's goal includes setting up of a world class Institute to provide customised training for different category of personnel and for durations, focussing on entire gamut of Rice milling, including by product utilisation, setting up a rice analytical laboratory for the benefit of the Industry and Inking up Pre-harvest and Post-harvest Technological Institutes to provide a complete and comprehensive solution to the Rice Industry.

Noting that qualified personnel is the need of the hour and also key for conserving rice, especially at a time when



Artist's Impression of CFTRI's Rice Technology Centre.



Specialist in Neuro Rehabilitation at is available for consultation at St. Joseph's Hospital, Bannimantap, Mysuru on Saturday, 29th Feb 2020

People suffering from stroke, brain injury and spinal cord injury and are paralysed or hed-ridden may take an appointment.

between 10 am to 2 pm

PRO-9686769100 \$ 0821-400 3900 www.stjosephshospitalmysuru.com

Published in:

Star of Mysore

23rd February 2020

Global rice milling centre to come up in Mysuru

It will address shortage of trained manpower in the industry

SPECIAL CORRESPONDENT
MYSURU

The Global Centre for Rice Technology (GCRT), the first of its kind in the country, is coming up in Mysuru to facilitate the rice milling industry to keep pace with technological advancements in the field.

The GCRT will be a collaborative venture between the Central Food Technological Research Institute (CFTRI), Mysuru, Buhler India Pvt. Ltd., Bengaluru, and Apit, Bengaluru.

While Buhler India, which helped set up the International School of Milling Technology at CFTRI, will provide machinery for the GCRT, the CFTRI will provide the knowledge input. Apit will provide the other infrastructure and help run the centre.

At a function organised to lay foundation stone for the GCRT at M.G. Halli on Kalidasa Road in the city, CFTRI director K.S.M.S. Raghavarao regretted the absence of technology training for rice milling industry and said there was a huge scope for value addition in the sector.

Rice mill operators have little knowledge about under milling and complete milling. He also regretted the absence of protocols and standard operating procedures for different varieties of rice. Hence, GCRT, which is a ₹25 crore project, will seek to address the shortage of trained manpower at dif-



A memorandum of understanding being signed for the Global Centre of Rice Technology in Mysuru on Saturday. • M.A. SRIRAM

ferent levels in the rice milling industry.

The GCRT seeks to establish the missing, but vital link between the rice milling sector and academia and bring about the much-needed synergy between them.

Pointing out that the countries surrounding peninsular India were major rice producing and rice consuming countries, the CFTRI director, in a statement, said rice milling industry has come a long way and the previous decade has witnessed large scale investments in the sector.

Trained manpower would not only ensure proper operation and maintenance, but also increase the yield of valuable head rice and proper utilisation of byproducts. In addition, safety of workers and making the products safe for consumption will also be addressed, he said.

GCRT's goal includes setting up a world class institute to provide customised training for different category of personnel and for durations, focussing on entire gamut of rice milling including byproduct utilisation, setting up a rice analytical laboratory for the benefit of the industry, and linking up preharvest and post-harvest technological institutes to provide a complete and comprehensive solution to the rice industry.

About 30 rice millers from different parts of India had been invited to participate in the foundation stone laying ceremony.

Published in:

The Hindu

23rd February 2020

Centre for rice technology soon

TIMES NEWS NETWORK

Mysuru: City-based Central Food Technological Research Institute (CFTRI) conducted the ground-breaking ceremony for the construction of Global Centre for Rice Technology. The centre, which is the first-of-its-kind in the world, will be completed by 2021.

The centre will be jointly set up by CSIR-CFTRI, Mysuru along with Buhler India Pvt Ltd and Association of Processing and Innovative Technologies, Bengaluru. The bhoomi puja was conducted by Silicon Road Company's Sid Mukherjee at MG Halli campus on Kalidasa Road on Saturday.

"Due to scientific food processing units established in US, the food production will not be wasted. But it is not in India where tons of paddy is wasted during processing due to lack of implementation of technology. So the rice training centre will help in preventing wastage of food," said Mukherjee, TNN

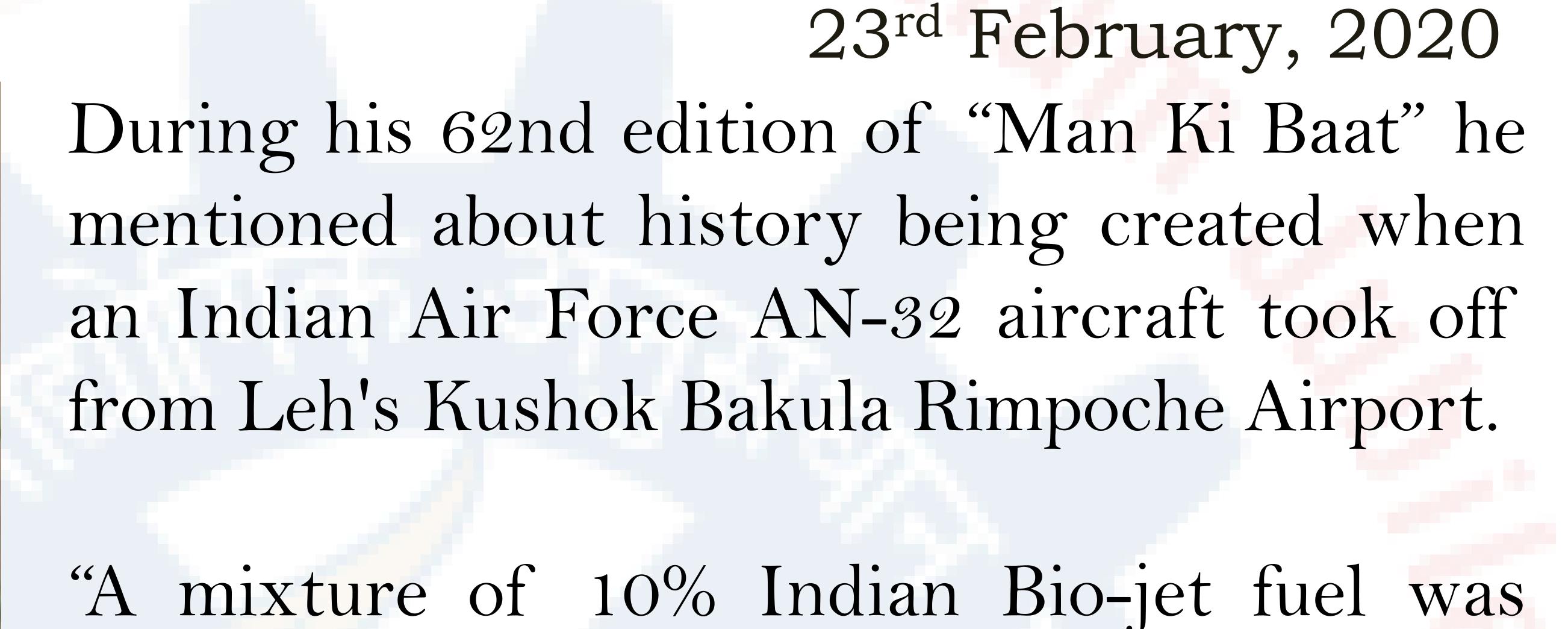
Published in:

Times of India



Bio-jet fuel: PM Modi lauds CSIR and IIP scientists for developing technology

CSIR-IIP





used in this flight and this was the first time that this mix was used in both engines. Not just that, but the airport from which this plane took off from Leh is not only one of the highest altitude airports in India but also in the world," he added.

New Delhi/UNI: Prime Minister Narendra Modi on Sunday congratulated scientists of CSIR and Dehradun-based Indian Institute of Petroleum for developing the technology to fly Indian Air Force transport aircraft with bio-fuel.

He also said that the bio-jet fuel is prepared from non-edible tree borne oil. "It is procured from various tribal areas of India. These efforts will not only reduce carbon emissions but may also reduce India's dependence on crude oil imports," the prime minister said.

Stressing that the efforts will empower the Make in India' mission, the prime minister said, "I congratulate all the people involved in this significant mission, especially the scientists of CSIR and Indian Institute of Petroleum, Dehradun, who made it possible to develop the technology to fly an aircraft with bio-fuel.

Published in: India Blooms



Three day International conference organized at CSIR-NEIST, Jorhat

CSIR-NEIST



JORHAT: A three-day international conference has been organized in engineering sciences and technology at the Council for Scientific Industrial Research (CSIR)-North East Institute of Science and Technology (NEIST).

"The international conference intends to bring eminent scientists, technologists and young researchers from several disciplines across the globe together so as to provide a common platform for discussing their achievements and newer directions of cutting-edge research," said Dr Jatin Kalita, the Public Relation Officer, NEIST, on Saturday.

23rd February, 2020

Dr Kalita said that the ESTEC-2020 conference would focus on recent advances in engineering sciences and technology from theory and experiment to applications for sustainable development and environmental care. The scientific programme consists of plenary sessions, invited talks, oral and poster presentations with deliberation of latest developments in the field of engineering sciences and technology worldwide and within the country.

Altogether five international and 61 domestic scientists along with over 100 junior fellows took part and presented their papers on various burning issues. Several papers were presented on the earthquake hazard in Northeast India and adjoining regions.

Earlier, the three-day global conference was inaugurated by Professor TG Sitaram, Director of the Indian Institute of Technology, Guwahati.

Published in: Sentinelassam

23rd February 2020

/ಜಿಎನ್ಸ್ ಸಿಎಎಸ್ಆರ್ ಪ್ರಾಧ್ಯಾಪಕ ಪ್ರೊ.ಅಮಿತಾಬ್ ಜೋಷಿ ಅಭಿಮತ ಲೈಫ್ ಸೈನ್ಸ್ ನಲ್ಲಿ ಸಂಶೋಧನೆಗಳಾಗಬೇಕಿದೆ

■ ವಿಜಯವಾಣಿ ಸುದ್ದಿಜಾಲ ಮೈಸೂರು ಜೀವ ವಿಜ್ಞಾನ ಕ್ಷೇತ್ರಗಳಲ್ಲಿ ಹೆಚ್ಚಿನ ಸಂಶೋಧನೆ ನಡೆಯಬೇಕಿದೆ ಎಂದು ಬೆಂಗಳೂರಿನ ಜಿಎನ್ಸ್ಎಎಸ್ಆರ್ ಪ್ರಾಧ್ಯಾಪಕ ಪ್ರೊ.ಅಮಿತಾಬ್ ಜೋಷಿ ಹೇಳಿದರು.

» ಸಿಎಸ್ಐಆರ್ ಸಹಯೋಗದಲ್ಲಿ ಸಿಎಫ್ಟಿಆರ್ಐನಲ್ಲಿ ವಿಶೇಷ ಉಪನ್ಯಾಸ



ಸಿಎಸ್ಐಆರ್, ಸಿಎಫ್ ಟಿಆರ್ಐ ಸಹಯೋಗದಲ್ಲಿ ಜೀವಶಾಸ್ತ್ರ ಮತ್ತು ಜೀವನ ಎರಡು ವಿಕಾಸ ಏಕೆ ಕೇಂದ್ರ ವಾಗಿದೆ? ಎಂಬ ವಿಷಯ ಕುರಿತು ಸಿಎಫ್ಟಿಆರ್ಐನ ಚಲುವಾಂಬ ಸಭಾಂಗಣದಲ್ಲಿ ಗುರುವಾರ ಆಯೋಜಿಸಿದ್ದ ವಿಶೇಷ ಉಪ ನ್ಯಾಸ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಮಾತನಾಡಿದ ಅವರು, ನಿಫಾ ಹಾಗೂ ಕ್ಯಾನ್ಸರ್ ಚಿಕಿತ್ಸೆಯಲ್ಲಿ

ಜೀವ ವಿಜ್ಞಾನ ಅತ್ಯಂತ ಸಹಕಾರಿಯಾಗಿದೆ. ಹಾಗಾಗಿ ಈ ಕ್ಷೇತ್ರದಲ್ಲಿ ಹೆಚ್ಚಿನ ಸಂಶೋಧನೆ ಆಗಬೇಕು ಎಂದು ತಿಳಿಸಿದರು.

ಕಡಿಮೆ ಹಣದಲ್ಲಿ ಜೀವ ವಿಜ್ಞಾನ ಕ್ಷೇತ್ರದಲ್ಲಿ ಸಂಶೋಧನೆ ನಡೆಸಬ ಹುದಾಗಿದೆ. ಮಾತ್ರವಲ್ಲದೆ ನಮ್ಮ ದೇಶದಲ್ಲಿ ಅತಿಹೆಚ್ಚು ಸಂಶೋಧಕರು



ನಗರದ ಸಿಎಫ್ಟಿಆರ್ಐ ಚೆಲುವಾಂಬ ಸಭಾಂಗಣದಲ್ಲಿ ಗುರುವಾರ ಆಯೋಜಿಸಿದ್ದ ವಿಶೇಷ ಉಪನ್ಯಾಸ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪಾಲ್ಗೊಂಡಿದ್ದ ವಿದ್ಯಾರ್ಥಿಗಳು.

ಈ ವಿಚಾರದಲ್ಲಿ ಪಾಂಡಿತ್ಯವನ್ನು ಸಹ ಹೊಂದಿದ್ದಾರೆ. ಅಂತಹವರನ್ನು ಬಳಸಿಕೊಂಡು ಹೆಚ್ಚು ಸಂಶೋಧನೆ ಮಾಡುವ ಅಗತ್ಯವಿದೆ ಎಂದರು. ಸಿಎಫ್ಟಿಆರ್ಐನ ನಿರ್ದೇಶಕ ಕೆ.ಎಸ್.ಎಂ.ಎಸ್.ರಾಘವ ರಾವ್ ಸೇರಿದಂತೆ ಇತರರಿದ್ದರು.

Published in:

Vijaya vani



J-K institute, Canadian firm sign pact on cannabis research

CSIR- IIIM

22th February, 2020

Jammu, Feb 22 (PTI) Jammu and Kashmir will be the first in the country to develop medicines from the cannabis plant, said Union minister Jitendra Singh describing it a "historic" achievement.

The CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu, signed a major agreement on cannabis research with IndusCann, a Canadian company, here on Saturday in the presence of the Union minister and R R Bhatnagar, adviser to Lt Governor G C Murmu.

"This is the first-of-its-kind project in India and a historic moment for Jammu and Kashmir. Till now, we only have the misuse and abuse of this ancient plant having lot of medicinal values and with the signing of this agreement, we are reintroducing this ancient product with all good properties," Singh said addressing the gathering after the signing of the agreement.

The Minister of State in the Prime Minister"s Office shared the efforts made by the IIIM Director Ram Vishwakarma over the past two years to get a nod from the government for the project.

He said when a patent developed from this, it would be a major source of revenue for the UT and India as a whole.

"Incidentally, it is happening at a time when the UT government is trying hard to attract investors from outside," he said.

Produced by Unit for Science Dissemination, CSIR, Anusandhan Bhawan, 2 Rafi Marg, New Delhi



"Other investors are yet to come but one of the first major foreign investment is happening in Jammu and Kashmir," Singh said.

He said the IIIM had remained under-utilised.

"I am sure today, it will mark the beginning of a new journey when it will get the deserved recognition and glory. The new dawn is unfolding for Jammu and Kashmir," the minister said referring to scrapping of J-K"s special status.

He also referred to the upcoming bio-technology park in Kathua, saying it will be completed in the next six months.

Vishwakarma said the cannabis had been associated with the Indian culture and medicine since centuries but due to its misuse as psycho-active substance, it was banned worldwide in 1980s onwards and put under narcotic list.

"The current scientific collaboration between the CSIR-IIIM and IndusCann on cannabis research will totally transform the uses and application of cannabis," he said. PTI TAS RDK

Published in:

Outlookindia



CSIR -IITR

22th February 2020



पर्यावरणीय बदलाव मनुष्यों के साथ-साथ वनस्पतियों और अन्य जीवों पर भी प्रतिकूल प्रभाव डाल सकते हैं। इसलिए रासायनिक एजेंटों का सुरक्षित उपयोग और निपटान सुनिश्चित करना जरूरी है। इस तरह के आनुवांशिक बदलावों के लिए जिम्मेदार इन एजेंट्स को म्यूटेजेन कहते हैं, जो कैंसर जैसे रोगों को जन्म देने के लिए जाने जाते हैं।

नई दिल्ली। (इंडिया साइंस वायर): प्रदूषण जैसे पर्यावरणीय कारक मनुष्य के स्वास्थ्य, प्रतिरक्षात्मक व्यवहार और पारिस्थितिक तंत्र के जीनोम को प्रभावित करते हैं। इस प्रक्रिया में कई भौतिक, रासायनिक या फिर जैविक एजेंट आनुवंशिक रूपांतरणों का कारण बनकर उभरते हैं। इस तरह के आनुवांशिक बदलावों के लिए जिम्मेदार इन एजेंट्स को म्यूटेजेन कहते हैं, जो कैंसर जैसे रोगों को जन्म देने के लिए जाने जाते हैं।

रासायनिक तत्व, पराबैंगनी अथवा एक्स-रे विकिरण जैसे एजेंट्स म्यूटजेन के कुछेक उदाहरण हैं। "अधिकतर मामलों में इस तरह के परिवर्तनों के पीछे निहित कारणों को निर्धारित करना एक चुनौती के रूप में देखी गई है। हालांकि, यह स्पष्ट है कि पर्यावरणीय बदलाव मनुष्यों के साथ-साथ वनस्पतियों और अन्य जीवों पर भी प्रतिकूल प्रभाव डाल सकते हैं। इसलिए, रासायनिक एजेंटों का सुरक्षित उपयोग और निपटान सुनिश्चित करना जरूरी है।"

वैज्ञानिक अनुसंधान रैंकिंग में शीर्ष पर सीएसआईआर

मुंबई स्थित भाभा परमाणु अनुसंधान केंद्र की सचिव डॉ. बिराजालक्ष्मी दास ने ये बातें कही हैं। वह लखनऊ स्थित भारतीय विषविज्ञान संस्थान (आईआईटीआर) में आयोजित ईएमएसआई के 44वें वार्षिक सम्मेलन में बोल रही थीं। इस तीन दिवसीय सम्मेलन में देश-विदेश के विशेषज्ञ शामिल हो रहे हैं।

इस मौके पर मौजूद भाभा परमाणु अनुसंधान केंद्र के पूर्व निदेशक और एन्वायरमेंटल म्यूटजेन सोसाइटी ऑफ इंडिया (ईएमएसआई) के अध्यक्ष डॉ के.बी. सैनीस ने कहा कि "अनुवांशिक रूपांतरणों के लिए जिम्मेदार म्यूटेजेन्स की क्षमता का पता लगाने के लिए आनुवांशिक परीक्षण की प्रभावी हाई-थ्रूपुट तकनीक का विकास जरूरी है। हाई-थ्रूपुट वैज्ञानिक प्रयोग की एक विधि है जिसमें तत्वों के विस्तृत संग्रह का जैविक परीक्षण किया जाता है। इस विधि में ऑटोमेशन, लघु परीक्षण और बड़े पैमाने पर डेटा विश्लेषण की तकनीकों का उपयोग होता है।"

वैज्ञानिकों ने बनाया रासायनिक उद्योगों के लिए नया माइक्रो-रिएक्टर

आईआईटीआर के निदेशक प्रोफेसर आलोक धवन ने बताया कि "म्यूटजेन सोसाइटी के अतिरिक्त, ईरान एवं यूनाइटेड किंगडम के सोसाइटीज भी इस तीन दिवसीय सम्मेलन में भाग ले रही हैं। इस संस्थान के वैज्ञानिकों द्वारा पर्यावरणीय सुरक्षा में दिए गए योगदान को देखते हुए यह ईएमएसआई के सम्मेलन के आयोजन की मेजबानी के लिए सबसे उपयुक्त जगह है।"

इस दौरान पर्यावरणीय बदलावों के कारण मानव स्वास्थ्य से जुड़े खतरों, जेनेटिक टॉक्सिकोलॉजी, नैनो-जीनोटॉक्सिसिटी और डीएनए क्षति एवं मरम्मत जैसे विषयों पर वैज्ञानिक प्रस्तुतीकरण भी किए गए। वैज्ञानिकों द्वारा इस मौके पर पोस्टर्स प्रस्तुतिकरण भी किया गया।

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NIO: ready to investigate reason behind 'mysterious sound' heard in Canacona, Quepem

CSIR-NIO

21th February, 2020

The mysterious loud sound heard by the residents of Canacona and Quepem on Wednesday afternoon could be either due to the cracking of the earth crust or eruption of gas activated in that area.

In April 2016, a team of NIO scientists led by former chief scientist Dr Rajiv Nigam had gone to probe similar incident reported at Nivati beach in Sindhudurg district of Maharashtra, and prima facie they found the sounds may be due to existence of geographic fault (crack in the earth's crust) or gas emission.

While the cause remains unknown, the NIO says it is ready to investigate the reason behind the mysterious sound heard in Canacona if the district authority requests them to carry out the detailed study.

In what sounds like a plot device from a science fiction movie, involving sea monsters and aliens, a strange sound was heard by some residents of Canacona and Quepem, and it was so loud that it was heard from a far distance. The suggested explanations from the experts, include a sonic boom from an aircraft or a meteorite exploding in the atmosphere. But NIO has since then cast doubt on these explanations. Meanwhile, experts in the state have ruled out any geophysical explanation for the mysterious sound in Canacona that left residents feeling worried.

On Thursday, speaking to this daily, Dr Manoj Ibrampurkar of geology department, Dhempe College of Science, Miramar, said, that, the sound cannot be attributed to any geological activity taking place in the region. Dr Ibrampurkar who checked the earthquake



Records during the day, said that in the last eight days "no earthquake of even minor intensity" occurred around the state.

"Even a small earthquake would have made us suspect geological activity. I don't think there is any geological reason for the sound," he said. After the mysterious sound was heard in Canacona, residents feared that it was caused by a possible earthquake or tsunami. However the Dhempe College professor said that linking the sound to both would not be scientifically correct.

The residents in Canacona heard the mysterious deafening sound at around 1.15 pm. In some places, the sound seemed to have come from the sea and it was accompanied by rattling of the window panes.

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CSIR-IITR

Lifestyle diseases reduce potential of cells to fight cancer: Expert

LUCKNOW: Life style diseases such as diabetes, stress and disorders caused by climate change, reduce the potential of body cells to fight cancer, said an expert on Thursday during the ongoing summit of Environmental Mutagen Society of India (EMSI) at Indian Institute of Toxicology Research (IITR), Lucknow.

Professor Gareth J Jenkins,
Swansea University, UK in his
keynote lecture said, "We are
exposed to an array of stimulants which can be carcinogenic and lead to cancer in the
body. The effect of this carcinogen can be done away by
regular checkups and early diagnosis of cancer in the
body."

Professor Jenkin's laboratory
has developed a novel method
to screen for cancer causing
mutations in a particular gene
using patient blood samples.
The method is simple, rapid
and cheap, and offer many
advantages over traditional
tests.

The 44th edition of the three day long annual summit be-

gan on Tuesday at IITR. Experts from the field of toxico... ogy and immunology are participating in it. The summit is also being attended by the delegation from Iran and USA.

During a separate session on "Environmental mutagens & human', Dr Birajalaxmi Das of BARC (Bhabha Atomic Research Centre), Mumbai, de21th February 2020

livered talk on "Assessment of low dose and high dose radiation

Risk on human population".

Das, who is known for her studies over the effect of radiation on newborns and heading a research impact of survivors of Bhopal gas tragedy, said, "Rearrangements and involvement of chromosomes studied for 30 years, post-disaster in methyl isocyanate (MIC)-exposed survivors is being done to identify the long term genetic impact of the chemical on human body".

The Bhopal gas tragedy occurred at a Union Carbide subsidiary pesticide plant in the city on the night of December 2-3, 1984. The plant released approximately 40 tonnes of toxic methyl isocyanate (MIC) gas, exposing more than 500,000 people to toxic gases.

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