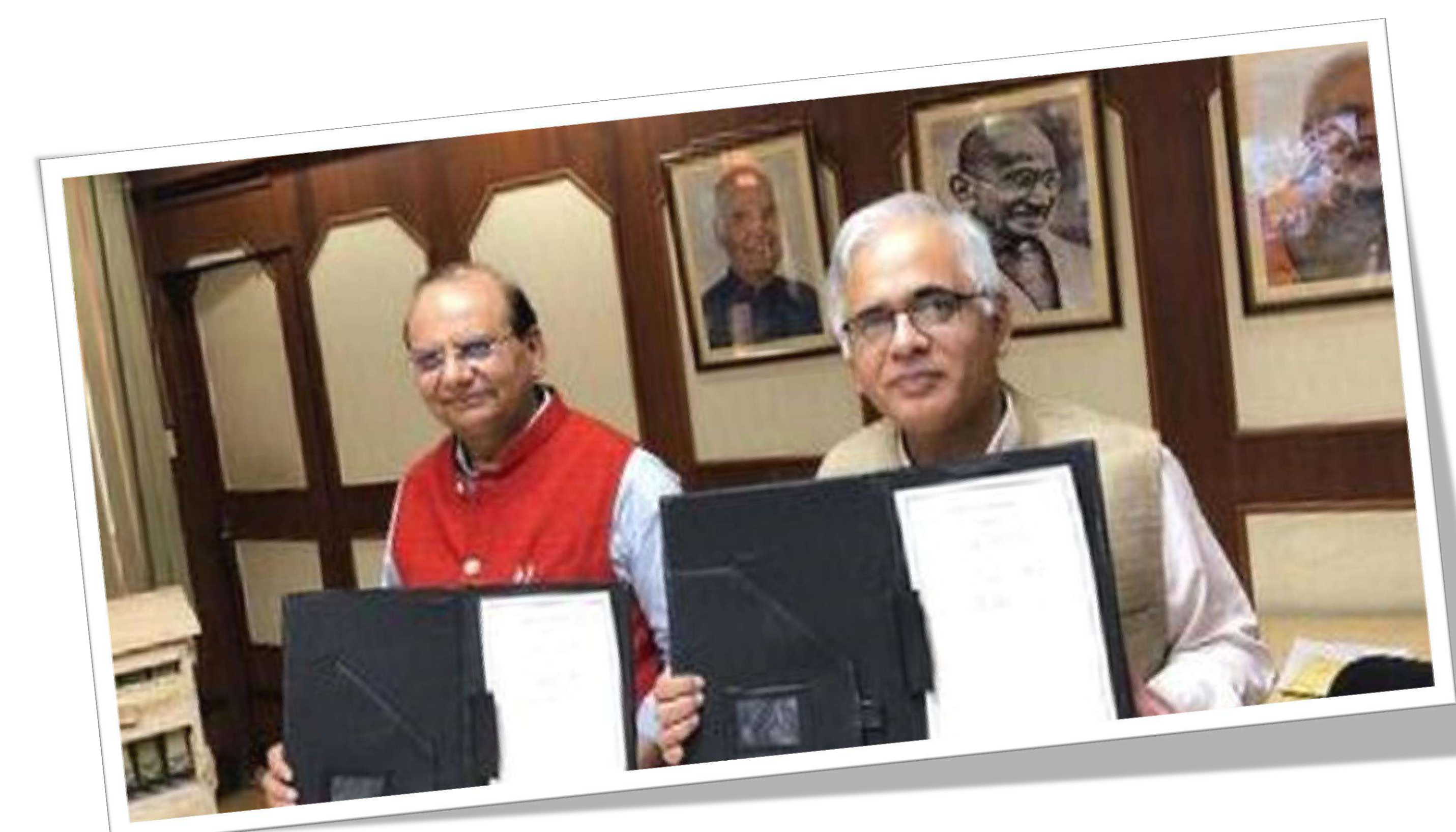


CSIR in Media



News Bulletin
1st to 5th December 2019



CSIR and BHEL join hands for commercialisation of indigenous technologies

CSIR

5th December, 2019



This effort has been made under the “Make in India” initiative. The MoU will remain in force for five years duration. The MoU was signed by Dr. Shekhar C. Mande, Secretary, Department for Scientific and Industrial Research and Director General, CSIR and Dr. Nalin Shinghal, Chairman and Managing Director, BHEL. CSIR, is amongst the foremost scientific and industrial research organisation of the world while BHEL is one of India’s largest engineering and manufacturing enterprise in executing large Engineering, Procurement, Construction (EPC) contracts and commercializing the developed technologies for sustainable business solutions in the field of energy, industry, transmission, transportation renewables, defence & aerospace, oil & gas, water, energy storage and e-mobility.

Soon Bharat Heavy Electricals Limited (BHEL) would start commercialisation of various indigenous technologies developed by Council of Scientific and Industrial Research (CSIR). CSIR and BHEL have signed a Memorandum of Understanding (MoU) to cooperate, collaborate and pursue industrial application oriented research programmes and its commercialization in large scale. The first joint project to be taken up under this collaboration shall be for commercialization by BHEL of various water purification / sewage disposal related technologies developed by CSIR. Thus, indigenously developed technologies by CSIR shall be commercialised & implemented jointly by BHEL & CSIR in the country.

Published in:
[Business Line](#)

Effort to promote sweet revolution

CSIR



Under the Honey Mission honey production has seen an upsurge both in production and export of honey. To keep this growth on track the Council of Scientific & Industrial Research (CSIR) has entered into a Memorandum of Understanding (MoU) with the Khadi and Village Industries Commission (KVIC) to leverage the expertise available in CSIR with the effort of KVIC for promotion of honey production. It would also enable wider outreach of the CSIR technologies and products. This MoU would also provide Khadi outlets a chance to display CSIR products. The MoU will help formalize the working relationship between the two organizations in areas such as honey testing, promotion of Honey Mission

5th December, 2019

alongside the CSIR Aroma Mission and the proposed CSIR Floriculture Mission. It will also explore enlisting of CSIR licensees in the KVIC network, display of CSIR technology products at important KVIC outlets such that CSIR products can reach to wider audience. Amongst its various activities aimed at the development of Khadi and other village industries in rural areas, the KVIC is implementing Honey Mission for introducing and popularizing modern beekeeping in the rural areas.

It is also a low-investment and low-input business enterprise that directly generates economic gains for the participating members and integrates well with agriculture that forms the main economic activity for communities living in the rural areas. The MoU was signed by Dr. Shekhar C. Mande, Secretary, Department for Scientific & Industrial Research and Director General, CSIR and Shri Vinai Kumar Saxena, Chairman, KVIC here yesterday.

CSIR has over the years, been pursuing R&D in various sectors and has developed a portfolio of processes, technologies and products in these sectors. In the agriculture and nutrition sector, the focus has been in development of technologies and products pertaining to medicinal and aromatic plants, floriculture and food processing.

Published in:
Business Line

Soon, new apple variety to hit NE market

CSIR-IHBT

4th December, 2019

The Northeastern (NE) states, which had to face great difficulties while purchasing fresh variety of apples of Himachal Pradesh and Kashmir, will soon get a low-chilling variety of the fruits in their states only, if the new variety of fruits, developed by Council for Scientific and Industrial Research (CSIR), starts penetrating the NE market. Consumers of the NE regions hardly get a fresh variety of the fruits due to hilly terrain. If at all they get, the fruits contain “carbon footprints” and costly too. If the new variety starts yielding results, the fruits will be available in the NE market in April and May when the apples of Himachal Pradesh and Kashmir are out of stock.

IHBT director Dr Sanjay Kumar said the availability of the locally grown apple in the local market will bring down carbon footprints and provide much-needed nutrition also to the people there. The CSIR through its Himachal Pradesh-based Institute of Himalayan Bioresource Technology (IHBT) at Palampur has successfully introduced this new variety of apple in the North-East. The research body has got high density yield with each plant bearing 60 to 80 apples collectively on 16 acres of land in Champhai district of Mizoram.

The pilot project was undertaken in 2016 with less than 100 plants. Following good results, more farmers came forward to grow the low-chilling variety. Now, 500 plants have reached at the stage of bearing the fruits. Principal scientist Dr Rakesh Kumar told TOI that the low-chilling variety required 300 to 500 hours of temperature below 7 degrees Celsius, while the traditional varieties of the fruits from Jammu & Kashmir, Himachal Pradesh and Uttarakhand needed 1,500 hours of same temperature. “We had tied up with DRDA (District Rural Development Agencies) in Mizoram in 2016. Eight spots spread across 16 acres of land were identified while 32 farmers were chosen for the pilot project in Champhai district.

The IHBT provided technical guidance and planting material to them,” he said. The first flowering and fruiting was reported in 2017-18. “Tests were done at Palampur. Glucose, sucrose and other parameters of the new yield of apples were found completely matched with the ones available in market,” he said. After this, the farmers in Champhai achieved two more fruiting seasons in July 2018 and this year. Kumar said the project, under NERCOM (North Eastern Region Community Resource Project Management), has been extended to more locations in Manipur and Meghalaya. The North East Council has approached the IHBT and funded a project to provide training to farmers in Ukhrul (Manipur) and Nongstoin (Meghalaya) districts, respectively.

The IHBT director said the North East region is conducive for such cash crops. “We observed that there was no such crop. Rajya Sabha MP from Mizoram Ronald Sapa approached us to find ways to increase farmers income. We suggested him about our new technology, ‘Rootstock’, and told a new apple variety developed in India could be introduced there,” he said. “We have proposed 1 lakh plantation in Mizoram with the department of science and technology. Manipur farmers have also shown interest in the new variety of apples,” he said, adding that the new variety of the fruits would be made available in market across the country if it was successful in the NE region.

Published in:

[The Times of India](#)

ఐఐసీటీ ఎన్ఎంఆర్కు యూఎస్ఎఫ్డీఏ గుర్తింపు

ఈనాడు, హైదరాబాద్: ఇండియన్ ఇనిస్టిట్యూట్ ఆఫ్ కెమికల్ టెక్నాలజీ(ఐఐసీటీ)లో ఉన్న న్యూక్లియర్ మాగ్నటిక్ రెసొనెన్స్(ఎన్ఎంఆర్) పరీక్ష కేంద్రానికి యూఎస్ ఫుడ్ అండ్ డ్రగ్ అడ్మినిస్ట్రేషన్ (యూఎస్ఎఫ్డీఏ) గుర్తింపు లభించింది. యూఎస్ఎఫ్డీఏ ప్రతినిధులు ఈ ఏడాది ఆగస్టు 21, 22 తేదీల్లో హైదరాబాద్ ఎన్ఎంఆర్ కేంద్రంలో తనిఖీలు నిర్వహించారు. అన్ని అంశాల్లో ప్రమాణాల మేరకు అత్యుత్తమ ఉత్పత్తి పనితీరు కనబర్చినట్లు వారి పరిశీలనలో తేలడంతో యూఎస్ఎఫ్డీఏ నుంచి గుర్తింపు దక్కింది. ఈ మేరకు ఎన్ఎంఆర్ కేంద్రాన్ని నో యాక్షన్ ఇన్వియేటివ్(ఎన్ఎఐ)గా వర్గీకరించింది. పలితంగా దేశీయంగా ఔషధ, రసాయన పరిశ్రమలకు ఇది ఉపయోగపడనుంది. ఔషధ, ఇతర రసాయన అణువుల నిర్మాణ లక్షణాలను ఎన్ఎంఆర్ స్పెక్ట్రోస్కోపీ స్కాన్ చేసి విశ్లేషిస్తుంది. 'దేశంలోనే అతిపెద్ద కేంద్రాల్లో ఇదొకటి. ఇందులో తొమ్మిది అత్యాధునిక హై ఫీల్డ్ ఎన్ఎంఆర్ స్పెక్ట్రో మీటర్లు ఉన్నాయి. తాజాగా యూఎస్ఎఫ్డీఏ గుర్తింపు దక్కడంతో నాణ్యమైన విశ్లేషాత్మక పరిశోధన, అభివృద్ధి సేవల విస్తృతికి దోహదం చేస్తుంది' అని ఐఐసీటీ డైరెక్టర్ డాక్టర్ ఎస్.చంద్రశేఖర్ తెలిపారు.



న్యూక్లియర్ మాగ్నటిక్ రెసొనెన్స్ పరీక్ష పరికరం

CSIR-CMERI

4th December, 2019

CSIR develops & patents two different CNC micromachining facilities



Kolkata, Dec 4 (UNI) CSIR-Central Mechanical Engineering Research Institute has developed and patented two different CNC micromachining facilities which are totally indigenous in terms of its controller and graphical user interfaces and can conduct operations such as micro turning, micro-milling, micro-drilling and laser engraving with an accuracy of 1 micron.

The first CNC micromachining centre namely "Multi Fab" was developed in the period 2016-2017. Based on the success of the first machine and to address consumer demands the second machine "Nano Lase" with far better accuracy (1 micron) was developed in 2018-2019.

CSIR-CMERI has signed an agreement with M/s.Tequity Ventures, Mumbai to implement technology for commercialization of the machine, today at Kolkata Press Club.

In his address, Prof. (Dr.) Harish Hirani, Director, CSIR-CMERI, Durgapur told that the machines are cost-effective compared to imported ones and have applications in surgical tool-making industries and jewellery industries where very small parts, features and patterns are required to be fabricated. The machines were demonstrated at Baruipur Surgical Cluster and Domjur Jewelry Cluster under MSME cluster industries.

He also added that automation of these small scale industries by these indigenous machines will enhance the quality of life and income of these families. The machines are also capable of skill inculcation among students and industry personnel related to learning CNC operation which contributes to the "Skill India" initiative.

Prachi Kulkarni, owner, M/s.Tequity Ventures, Mumbai told that CNC micromachining technology is very interesting and has lots of potential application areas for such technology ranging from skill

development, engineering institutions (for ITI and B.Tech training) and PhD research work. It remains to be seen if the setup can have industrial applications but if there is, even better.

Attending this ceremony Prof. Hirani briefed about the new technology on water purification, designed & developed by CSIR-CMERI.

He said that Iron-free water is not only required for drinking but also for cooking & cleaning. Heavy iron concentration damages the home appliances like geyser etc. So, as per the demand of industries, CSIR-CMERI, Durgapur has developed the new affordable and high flow rate community level iron removal technology (within WHO safety limit) water. This technology has filtering capacity 15000-17000 lit/day with three-stage purification technology with a flow rate of 3000 lit/hr.

He also added that this technology can filter with a maximum iron concentration of 10-12 ppm to the desirable limit. The developed water filter produces iron-free water at < 1.0 paisa/litre.

UNI BM SJC RN

Published in:

UNI

CSIR-IICT Nuclear Magnetic Resonance test facility gets US FDA certification

CSIR-IICT

3rd December, 2019



“Our NMR laboratory, an NABL accredited facility is one of the country's largest facilities, equipped with nine state-of-the-art high field NMR spectrometers, and the USFDA's clearance added further impetus to the wide range of quality analytical R&D services for APIs”.

The CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad has announced that the Nuclear Magnetic Resonance (NMR) test facility at the institute has passed the US Food and Drug Administration (USFDA) inspection with “no observations”. The NMR spectroscopy is an important technique for structural characterization of pharmaceutical and other chemical molecules. The USFDA inspected the NMR facility during August 21-22 and found the facility in an acceptable state of compliance with regard to Current Good Manufacturing Practice (CGMP). Accordingly it classified the facility as “no action initiated (NAI)”. S Chandrasekhar, the Institute Director stated that

Published in:
Business Line

CSIR-CFTRI

3rd December, 2019



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Headlines Karnataka Mysore

Scientist-student connect programme held at CSIR-CFTRI

Murali 03/12/2019

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Mysuru, December 3:- "Jigyasa" is one of the major initiatives taken up by CSIR at the national level for further widening and deepening its Scientific Social Responsibility (SSR) in collaboration with Kendriya Vidyalaya Sangathans (KVS). The programme focusses on connecting school students and scientists to inculcate the culture of scientific thinking in children at the school level. Starting from the current year, such programmes are held for students from Navodaya and Government Schools along with KVs.

As part of Jigyasa programme held on November 27-28, 83 students and 10 teachers from schools, GHS - Vontikoppal, GHS - Vinayakanagara and GHS - Maharaja High School of Mysuru participated.

Food processing demonstrations and a visit to various pilot plants, and sophisticated instrumentation facility were also arranged as part of the programme. Identification of various food adulterants with a kit developed by CFTRI gave an opportunity for students to understand the importance of food safety to health and well being of the society.

Further, simple and interesting experiments of microbiology, chromatography and recombinant DNA technology were shown during practical sessions. Dr R Subramanian, chief scientist, CSIR-CFTRI, presided over the valedictory function.

CSIR- CFTRI has been conducting such student-scientist connect programme since 2017 for the students and teachers of Kendriya Vidyalaya, Jawahar Navodaya Vidyalaya and other Government Schools from Mysuru and neighbouring districts. (MR)

Published in:
City Today

CCMB completes genome analysis of vulnerable bear cats

CSIR-CCMB



Bearcat is known as a keystone species in the rain forest ecosystem because of its special relationship with fig trees. Being a species that fully subsist on fruits, the animal facilitates and propagates seed germination for fig.

Researchers from Centre for Cellular and Molecular Biology (CCMB)-Laboratory for Conservation of Endangered Species (LaCONES) have completed the genome analysis of the highly vulnerable Indian species of bear cats, also known as binturong. This is for the first time that researchers have concluded the genome sequencing of a wild-caught binturong of known provenance belonging to the Indian subspecies *Arctictis binturong albifrons*, using Next-Generation Sequencing (NGS) methods. The genome sequencing work on bearcats by

3rd December, 2019

CCMB-LaCONES was published in the 'PeerJ-Journal of Life and Environment' this November and was led by LaCONES senior scientist, Ajay Gaur and funded by Council for Scientific and Industrial Research (CSIR). Bearcats or binturongs are unique because of their cat like face, a bear like small body and a tail that is almost similar to a monkey. They inhabit in the rain forests of NorthEast India and are characterised by coarse, black fur and a prehensile tail. The blood samples of the bearcat were collected from Sepahijala Zoo in Tripura for DNA analysis and also deposited in the Genome Bank at the Laboratory for Conservation of Endangered Species (LaCONES), CCMB. Genome sequencing of the entire DNA which is the process of determining the complete DNA sequence of an organism's genome, will eventually help in conservation. In the last three-decades, according to conservationists and animal welfare activists, there has been a 30 per cent decline in bearcat population. Researchers said that the bearcat was known as a keystone species in the rain forest ecosystem because

of its special relationship with fig trees. Being a species that fully subsist on fruits, the animal facilitates and propagates seed germination while fig tree provides a stable dietary source to the animal. According to the LaCONES study, there were nine subspecies of bearcat spread across Southern and SouthEast Asia. ‘Further molecular studies are required to test the distinctiveness and diversity of the nine putative subspecies of binturong,” the LaCONES study said. Binturongs are presently being poached for their meat, traditional medicines and the pet trade, and alongside habitat destruction, these factors have contributed to decreasing the numbers of binturong to a few geographical pockets across the species’ former range. As a result of these increasing pressures, the binturong is listed as ‘Vulnerable’ on the IUCN Red List of Threatened Species, the study said.

Achievements of CCMB-LaCONES

Asiatic Lions

The researchers at CCMB-LaCONES led by Ajay Gaur took-up study of genetics and population structure and evolutionary history of the Asiatic lions in the Gir forests in India.



The study was taken up because the entire wild population of the lions are confined to a single location, as a result the Asiatic lion is facing an increased risk of extinction because of very low numbers and continuous inbreeding. The CCMB-LaCONES reported the first draft of the whole genome assembly of male Asiatic lion.

Stress levels on Indian tigers



The CCMB-LaCONES researchers led by G Umapathy also conducted study on tiger, the critically endangered species. The researchers studies the physiological stress response of tigers due to disturbance such as encounter rates from livestock and humans etc in three tiger reserves including Sariska, Bandhagarh and Kanha. Studies found that stress levels among tigers were high during tourism period and low during non-tourism period.

Indian Mouse Deer



The captive mouse deer population by the end of October 2019 increased to 173 animals. The release of the mouse deer was done in Amrabad tiger reserve, Kinnerasani wildlife sanctuary and Mrugavani National Park.

The researchers at LaCONES collaborated with the conservation experts in Nehru Zoological Park for conservation breeding and reintroduction of Indian Mouse Deer in Telangana.

Published in:
[Telangana Today](#)

NEC and Council of Scientific & Industrial Research (CSIR) sign MoU to increase focus on Big Data and High-Performance Computing

CSIR

3rd December, 2019

NEC Technologies India (NECTI), a subsidiary of NEC Corporation (TSE: 6701), and the Council of Scientific & Industrial Research (CSIR) signed an MoU to collaborate in the development of innovative solutions using big data analytics and High-Performance Computing (HPC).

Under this collaboration, NECTI and CSIR will jointly harness the capabilities of AI and machine learning in data science to solve critical issues plaguing society in areas including water shortages, energy, agriculture, healthcare and social security.

NECTI and CSIR plan to set up a Center of Excellence to create and test new solutions. It will also facilitate local talent development, particularly in the areas of big data analytics and machine learning.

Mr. Takayuki Inaba, Managing Director, NECTI said, “This collaboration between NECTI and the Council of Scientific & Industrial Research combines our strengths and expertise and will help spur the development of innovative solutions across verticals such as Smart City, Smart Healthcare and Smart Agriculture in India. We are proud to be a part of this joint effort to empower India’s businesses and its citizens.”

Dr Shekhar Mande, DG, CSIR and Secretary said, “We are delighted to partner with NEC Technologies India and believe that this cooperation will open up new avenues of research. We look forward to a fruitful collaboration as we work towards building a safe and secure society.”

Published in:

[India Education Diary](#)

CSIR-CRRI

3rd December, 2019

Environment-friendly Technology for road construction in Mizoram

OUR REPORTER
AIZAWL, DEC 3

The Central Road Research Institute (CSIR-CRRI) and Mizoram PWD together organised a training and awareness program to study the environmentally friendly road construction technology called 'Coldmix technology' at the PWD Conference Hall in Tuikhuahtlang on Tuesday. According to sources, the

'Coldmix technology' comprises of "Cold asphalt mix being produced by mixing unheated mineral aggregate with either emulsified bitumen or foamed bitumen.

Unlike hot mix asphalt (HMA), cold asphalt mix does not require any heating of aggregate which makes it economical and relatively pollution-free (no objectionable fumes or odors). Production of cold asphalt mix does not require high

investment in equipment, which makes it economical. It is also suitable for use in remote areas. Cold asphalt mixes can be used both for initial construction (100% virgin mixes) and for recycling of asphalt pavements."

Er J Zothanpuia Chief Engineer MPWD spoke at the program appreciating the CRRI representatives for arranging the training and awareness session. He

encouraged the engineers to make good use of the program for the construction of better quality roads in the state.

Dr. Siksha Swaroopa Sr. Scientist- Flexible pavement CSIR-CRRI said the Coldmix technology decreases pollution as heating of cold tar is not required.

The other advantages she highlighted were that the technology can be used through all

seasons including monsoon season and also paves way for increased productivity. Er. Deepak Singh, Territory In-charge, M/s Bitchem Asphalt Technology Limited, Guwahati also spoke at the program saying cold mix technology which was discovered by the CSIR- CRRI and Bitchem Asphalt Technology Limited through various steps of Research and Development is widely successful in different parts of India.

Published in:

The Mizoram Post

CSIR-NEERI

2nd December, 2019

On eve of Bhopal Gas Tragedy's 35th anniversary, survivors form human chain near the abandoned factory

Leaking toxic gas from the now-defunct Union Carbide factory in Bhopal resulted in the deaths of thousands of people and left lakhs maimed on the intervening night of December 2-3, 1984.



Published: 02nd December 2019 12:12 AM | Last Updated: 02nd December 2019 12:12 AM



A view of abandoned Union Carbide Factory is seen from Atal Ayyub Nagar one of the most affected areas in Bhopal Friday Nov. 23 2018. (File | PTI)

By Express News Service

BHOPAL: A human chain was formed by hundreds of survivors of the 1984 Bhopal Gas Tragedy near the long-abandoned killer pesticide factory here on the eve of the 35th anniversary of the tragedy, which is widely acknowledged as the world's worst industrial disaster.

Demonstrating near the site of the gas leak, the protesters demanded free health care, clean-up of the contaminated lands and adequate compensation from the Dow Chemical, which is the current owner of the Union Carbide.

The protesters also said that the MP Government plan to build a memorial to the disaster at the factory site was nothing, but a cover-up for the ongoing crime against the environment and people.

The human chain was formed under the banner of four organizations working for the victims of the 1984 tragedy.

Leaking toxic gas from the now-defunct Union Carbide factory in Bhopal resulted in the deaths of thousands of people and left lakhs maimed on the intervening night of December 2-3, 1984.

"It is because of the reckless dumping of extremely poisonous waste within the pesticide factory till 1984 and outside the factory in 1996 that the groundwater has been found to be contaminated in places over four km from this factory. Since 1990, the groundwater in and around the factory has been tested some 16 times by government and non-government agencies and these have shown that pesticides, heavy metals and poisonous chemicals, including six persistent organic pollutants are present at depths greater than 30 metres and distances of several kilometers from the factory," said Rashida Bee, who along with her colleague Champa Devi Shukla is a Goldman Environmental Prize awardee.

Nawab Khan of the Bhopal Gas Peedit Mahila Purush Sangharsh Morcha said, "According to the latest study by the Indian Institute of Toxicology Research-Lucknow, a central government agency, the groundwater in 42 communities with a total population of nearly 100,000 is contaminated and it continues to spread. The first thing that has to happen for ending this ongoing second environmental disaster in Bhopal, is a comprehensive scientific assessment of the area within 5 km of the factory."

"We took the generous offer of officials of UNEP (United Nations Environment Programme) to carry out scientific assessment of the Bhopal site to Prakash Javadekar when he was the Minister of Environment. He refused to accept the offer saying foreigners should not be involved in this project. Despite reports of extremely toxic chemicals in the groundwater by two central government agencies – the Central Pollution Control Board and the National Environmental Engineering Research Institute – the central government has refused to acknowledge the growing problem let alone act on it," added Khan. As per Rachna Dhingra, a member of the Bhopal Group for Information and Action, "A study carried out by the state government in 2005 showed that residents who were drinking the contaminated groundwater were suffering from diseases of the eyes, skin and the respiratory and digestive systems. Despite this, and despite the Supreme Court of India's clear directions in 2012, over 10,000 families who were exposed to the contaminated groundwater for up to 20 years continue to be denied the facility of free health care by the state and central governments," said Rachna Dhingra, a member of the Bhopal Group for Information & Action.

Published in:

The New Indian Express

CSIR-NEERI

2nd December, 2019

CSIR-NEERI releases framework for monetary assessment of environmental impacts

■ Staff Reporter

ASPECIAL report on "Framework for Environmental Damage Cost Assessment with Examples" brought out by CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) was released by Dr. Sukumar Devotta, Former Director, CSIR-NEERI; Dr. R.R. Sonde, Executive Vice President, Thermax Limited; Prof. Anjan Ray, Director CSIR-IIP; Dr. Rakesh Kumar, Director, CSIR-NEERI and Dr. Atya Kapley, Scientist and Head, Director's Research Cell, CSIR-NEERI during the fourth International Conference on Sustainable Energy and Environmental Challenges held recently at CSIR-NEERI. The report highlights the methodologies by which environmental damages can monetarily be estimated. This report can act as a baseline tool for monetary assessment of environmental impacts and be useful for policy makers, industries, regulatory authorities, etc.

While releasing the report, Dr.



Dr Rakesh Kumar, Dr Atya Kapley, Dr Sukumar Devotta, Dr R R Sondec holding report.

Rakesh Kumar, Director, CSIR-NEERI said that it was urgently required to develop this framework for effective implementation of the regulations like 'polluter pays principle', 'extended producer responsibility', etc. This framework will now more facilitate the regulatory authorities and industries to derive the precise cost for environmental damages, he added.

Hemant Bherwani, Scientist, CSIR-NEERI, the lead author of the report, stated that this framework would be able to bridge the gap between national and interna-

tional standards, and will have more applicability in the country. The report contains the methodologies for evaluation of the damages and associated monetary loss due to release of pollutants in four major sectors namely air, water, climate and solid waste, said Er. Ankit Gupta, Senior Scientist, CSIR-NEERI, who is a co-author of the report. This report is a stepping stone and will continue to evolve over time adding more domains of environmental damages whilst addressing complex relationships between different environmental processes.

Published in:

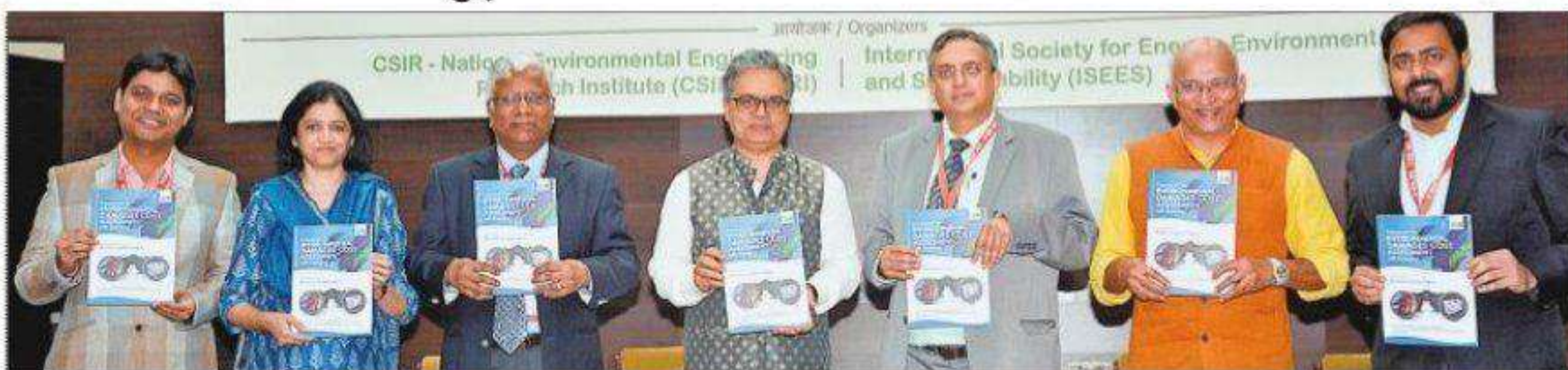
The Hitvada

CSIR-NEERI

2nd December, 2019

प्रदूषण से आर्थिक हानि पर नीरी ने तैयार की रिपोर्ट, निदेशक डॉ. राकेश कुमार ने कहा- रिपोर्ट तय करेगी प्रदूषण करने वालों की जिम्मेदारी

स्ति भास्कर | नागपुर, लगातार बढ़ता प्रदूषण सेहत के साथ-साथ आर्थिक रूप से भी नुकसान पहुंचा रहा है। पर्यावरण के प्रति असंवेदशील औद्योगिक इकाइयों की जिम्मेदारी तय करने के लिए इस दिशा में विशेष निति और नियमन की आवश्यकता है। इसी को ध्यान में रखकर सीएसआईआर (नीरी) की ओर से फ्रेमवर्क फॉर एनवायरनमेंटल डैमेज कॉस्ट एसेसमेंट विद एग्जाम्पल रिपोर्ट तैयार की गई है। हाल ही इस रिपोर्ट का लोकार्पण नीरी के पूर्व निदेशक डॉ. सुकुमार दिवोदत्ता ने किया।



**मूल्यांकन
पर डाला
गया
प्रकाश**

इस अवसर पर नीरी के निदेशक डॉ. राकेश कुमार ने कहा कि पॉल्यूटर-पे प्रिंसिपल व एक्सटेंडेड प्रोड्यूसर रिस्पॉसिबिलिटीज जैसे अधिनियमों को प्रभावी रूप से लागू करने के लिए इस रिपोर्ट की आवश्यकता थी। इससे नियामक, प्राधिकरणों और उद्योगों को पर्यावरणीय क्षतिपूर्ति के संबंध में वास्तविक व्यय आंकने में मदद मिलेगी। रिपोर्ट तैयार करने वाले प्रमुख इंजीनियर हेमंत भेरवानी ने कहा कि इस फ्रेमवर्क से राष्ट्रीय और अंतरराष्ट्रीय मानकों के बीच के अंतर को पाटने में मदद मिलेगी। वैज्ञानिक अंकित गुप्ता ने कहा कि रिपोर्ट में पर्यावरणीय हानि के चारों क्षेत्र वायु, जल, जलवायु और ठोस अपशिष्ट में प्रदूषण को लेकर आर्थिक क्षति के मूल्यांकन के तौर-तरीकों पर भी प्रकाश डाला गया है। लोकार्पण कार्यक्रम में डॉ. आर. आर. सोडे (कार्यकारी उपाध्यक्ष थर्मैक्स लिमिटेड), प्रो. अंजन रे (सीएसआईआर-आईआईपी देहरादून), डॉ. आत्या काप्ले उपस्थित थे।

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CSIR-NEERI

2nd December, 2019

3-day conference on sustainable energy and environmental challenges ends

■ NEERI, in association with ISEES had organised the International conference

■ Staff Reporter

EXPERTS from different parts of the world provided their valuable suggestions regarding preparation of a blueprint for clean and green energy options at three-day conference on sustainable energy and environmental challenges that concluded at CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) on Friday.

NEERI, in association with International Society for Energy, Environment and Sustainability (ISEES), organised the International conference. Dr Rakesh Kumar, Director, NEERI; Prof S P Gautam, former Chairman of Central Pollution Control Board (CPCB); Prof Pramod Padole, Director, Visvesvaraya Institute of Technology (VNIT); Prof Ashok Pandey, Chairman, ISEES; and Dr Nitin Labhsetwar, Organising Secretary, also shared the dais on the occasion.

Addressing the valedictory session, Prof S P Gautam said that the real obstacle in switching over to any form of energy was its economic viability. "We should try to take energy as much as possible from Sun, wind, and water," he added. He urged the scientists to closely observe Nature as energy was abundantly available in the Nature. He clarified that green technology was developed from plants and did not produce any residue and harmful products.

Prof Pramod Padole spoke on solar project in VNIT Campus.



Dr Rakesh Kumar speaking at the concluding ceremony of conference on sustainable energy and environmental challenges at NEERI. Dr R R Sonde, Dr Anjan Ray, Prof Avinash Kumar Agarwal and others also are seen on dais.

The project is reducing energy bill by Rs 80 lakh per year.

Best Poster Awards were given away on this occasion to the participants in recognition of outstanding poster presentations.

Earlier, a panel discussion on 'Balancing Energy Security, Environmental Impacts and Economic Considerations: Indian Perspective' was held. Dr R R Sonde, Executive Vice-President, Research, Technology and Innovation, Thermax Limited; Dr Anjan Ray, Director, CSIR-Indian Institute of Petroleum, Dehradun; Prof Avinash Kumar Agarwal, IIT-Kanpur; Dr R Srikanth, Professor and Head of Energy and Environment Research Programme, National Institute of Advanced Studies, Bengaluru; Dr Rakesh Kumar participated as panelists.

Dr Sonde said that India was doing well in energy intensity in terms of GDP. Energy, environment and economy are complex things, he added. He pointed out that India needed to build an adequate storage facility for solar

energy to strengthen its economy. Dr Ray emphasised on resource mining. "We need to orient research towards controlling over consumption," he added. Prof Agarwal advocated 'energy justice', seeking to apply justice principles to energy production and systems, energy consumption and energy security. Dr Rakesh Kumar said that any energy source should be rated on its overall environmental impacts. Dr Srikanth said that other countries need not be followed in energy sector. "Instead, we should consider own conditions. We have enough low-cost solutions," he said.

As many as seven technical sessions were held on the concluding day. The topics included 'Alternative Energy Resources', 'Water Pollution and Control', 'Biological Processes and Environmental Applications', 'Environment Sustainability', 'Cleaner Technology and Environment', etc. More than 250 delegates from India and other countries attended the conference.

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Director General, CSIR meets Lt. Governor

CSIR

1st December, 2019



Dr. Shekhar C. Mande, Director General, Council of Scientific and Industrial Research (CSIR) and Secretary DSIR, Government of India, met Lieutenant Governor, Girish Chandra Murmu at the Raj Bhavan here today. The Lt. Governor and Dr. Mande discussed several issues related to the promotion of Scientific and Industrial Research, industrial consultancy and technology management capabilities, promoting innovations, strengthening the linkage between scientific laboratories and industrial establishments for transfer of technologies besides various programmes and activities under CSIR.

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CDAC, CSIR ink pact for upgradation of advanced technologies

CSIR-TKDL

1st December, 2019

A Memorandum of Understanding (MoU) was signed by the Centre for Development of Advanced Computing (C-DAC), an autonomous Scientific Society of the Ministry of Electronics and Information Technology and Council of Scientific and Industrial Research (CSIR). The MoU is for pursuing cooperation related to upgradation and modernisation of the CSIR-TKDL Traditional Knowledge Digital Library, Information and Communication Technologies (ICT) and allied platform(s), including advanced technologies such as Big Data Analytics; Artificial Intelligence; mobile applications; Information processing tools, techniques and language technology standardisation covering both Indian and foreign languages.

Through this cooperation, CSIR and C-DAC shall jointly work towards updating and modernising the CSIR-TKDL ICT infrastructure to align with the demands of the time, while is also looking towards positioning the TKDL for easy adaptation to emerging and futuristic technologies. It is an initiative of India to prevent misappropriation of country's traditional medicinal knowledge at International Patent Offices. CSIR jointly with Department of AYUSH in 2001, developed the Traditional Knowledge Digital Library (TKDL), an internationally recognised proprietary database on Indian traditional knowledge for preventing bio-piracy and misappropriation.

The TKDL contains in a digitised format, information from books related to Indian systems of medicine and health – Ayurveda, Unani, Siddha, Yoga and Sowa Rigpa available in public domain, and is available in five international languages (English, French, German, Spanish and Japanese). The TKDL is a global first and has been serving effectively as a prior art database of traditional knowledge for preventing wrongful grant of patents related to traditional knowledge.

In 2005, the TKDL expert group estimated that about 2,000 wrong patents concerning Indian systems of medicine were being granted every year at international level, mainly due to the fact that India's traditional medicinal knowledge which exists in local languages such as Sanskrit, Hindi, Arabic, Urdu, Tamil etc. is neither accessible nor comprehensible for patent examiners at the international patent offices.

It is a collaborative project between CSIR, Ministry of Science and Technology and Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Health and Family Welfare.

The MoU was signed by Colonel AK Nath (Retd), Executive Director (Corporate Strategy), C-DAC and Dr Viswajanani J Sattigeri, Scientist-H and Head, CSIR-Traditional Knowledge Digital Library (CSIR-TKDL) Unit in the presence of senior officials from both the organisations.

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[Telangana Today](#)

CSIR-NEERI

1st December, 2019

सृष्टि में प्रचुर मात्रा में है ऊर्जा : गौतम

■ ऊर्जा व पर्यावरण सम्मेलन का हुआ समापन ■ देश-विदेश से शामिल हुए 250 से अधिक प्रतिनिधि

सिटी भास्कर | नागपुर

ऊर्जा के किसी भी स्रोत को उपयोग में लाने से पहले उसकी आर्थिक व्यावहारिकता को देखा जाना चाहिए, क्योंकि आगे चलकर उससे बड़ी अड़चन का सामना करना पड़ सकता है। सूर्य, हवा और पानी से ऊर्जा प्राप्त करने के लिए हमें हर संभव प्रयास करना चाहिए। यह बात केंद्रीय प्रदूषण नियंत्रण मंडल के पूर्व अध्यक्ष प्रो. एस.पी. गौतम ने कही। राष्ट्रीय पर्यावरण अभियांत्रिकी अनुसंधान संस्थान (नीरी) और इंटरनेशनल सोसाइटी फॉर एनर्जी एनवायरनमेंट एंड सस्टेनेबिलिटी द्वारा संयुक्त रूप से नीरी सभागृह में 'संपोषणीय ऊर्जा एवं पर्यावरणीय चुनौतियां' विषय पर तीन दिवसीय अंतरराष्ट्रीय सम्मेलन का आयोजन किया गया।

दिए गए महत्वपूर्ण सुझाव

विशेषज्ञों द्वारा स्वच्छ तथा हरित ऊर्जा को लेकर दिए महत्वपूर्ण सुझावों के साथ कार्यक्रम संपन्न हुआ। प्रो. गौतम ने वैज्ञानिकों से सृष्टि का बारीकी से अध्ययन करने का आग्रह किया, क्योंकि सृष्टि में



पर्यावरण के प्रभावों को ध्यान में रख कर हो मूल्यांकन

विश्वेश्वरैया प्रौद्योगिकी संस्थान (वीएनआईटी) के निदेशक प्रो. प्रमोद पडोले ने बताया कि वीएनआईटी परिसर में सौर ऊर्जा परियोजना अमल में लाई गई है, जिससे सालाना 80 लाख की बचत हो रही है। 'ऊर्जा सुरक्षा संतुलन पर्यावरणीय प्रभाव एवं आर्थिक महत्व भारतीय परिप्रेक्ष्य विषय' पर पैनल चर्चा का भी आयोजन किया गया। डॉ. आर. आर. सेन्डे, डॉ. अंजन रे, डॉ. आर. श्रीकांत, प्रो. अविनाश कुमार अग्रवाल, नीरी के निदेशक डॉ. राकेश कुमार ने हिस्सा लिया। डॉ. राकेश कुमार ने कहा कि ऊर्जा स्रोत का मूल्यांकन उसके समस्त पर्यावरणीय प्रभावों को ध्यान में रखकर किया जाना चाहिए। सम्मेलन के आखिरी दिन सात तकनीकी सत्रों का आयोजन किया गया। 'वैकल्पिक ऊर्जा संसाधन', 'जल प्रदूषण एवं नियंत्रण', 'जैविक प्रक्रियाएं और पर्यावरणीय उपयोग', 'पर्यावरणीय संपोषणीय' विषय पर चर्चा हुई। कार्यक्रम में उत्कृष्ट पोस्टर प्रस्तुति के लिए प्रतिभागियों को बेस्ट पोस्टर अवार्ड प्रदान किए गए। सम्मेलन में देश-विदेश से आए 250 से अधिक प्रतिनिधियों ने हिस्सा लिया।

ऊर्जा प्रचुर मात्रा में उपलब्ध है। जो पौधों से भी विकसित की जा सकती है। इसमें अवशेष या हानिकारक पदार्थ उत्पन्न नहीं होते हैं। इस अवसर पर आईएसईईएस के अध्यक्ष प्रो. अशोक पाण्डेय और डॉ. नितिन लाभसेरवार उपस्थित थे।

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