

CSIR in Media



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CSIR-CBRI

29th March 2017

रुड़की में सीबीआरआई के भ्रमण पर आए छात्र-छात्राओं को वैज्ञानिकों ने शोध कार्यों और वैज्ञानिक खोजों के बारे में बताया छात्र-छात्राओं ने भवन निर्माण की नई-नई तकनीकें जानी

रुड़की | हमारे संवाददाता

विद्यार्थियों में वैज्ञानिक सोच उत्पन्न करने तथा देश के विकास में योगदान करने वाली सुदृढ़ नींव तैयार करने के लिए क्षेत्र के कॉलेज के विद्यार्थियों ने केंद्रीय भवन अनुसंधान संस्थान रुड़की का भ्रमण किया।

इस दौरान सीएसआईआर प्रयोगशालाओं द्वारा संकाय प्रशिक्षण, प्रोत्साहन तथा स्कूल कालेजों का अभिग्रहण योजना के अंतर्गत संस्थान का अवलोकन किया गया। साथ ही संस्थान में किए जा रहे शोध कार्यों,

भवन निर्माण विज्ञान तथा उससे संबंधित अनेक जानकारी प्राप्त कर वैज्ञानिक चेतना का संचार किया।

परियोजना समन्वयक डॉ. अतुल कुमार अग्रवाल ने मौके पर विद्यार्थियों को सीएसआईआर व उसकी 37 प्रयोगशालाओं द्वारा किए जा रहे कार्यों से अवगत कराया। विद्यार्थियों ने सीबीआरआई की प्रयोगशालाओं को देखा और संस्थान के वैज्ञानिकों से जिज्ञासाओं को शांत किया। संस्थान के रुरल पार्क का भ्रमण कराते हुए वैज्ञानिक सयांतनी लाला ने विद्यार्थियों को ग्रामीण निर्माण, त्वरित आश्रय,

सस्ते सुलभ तथा विभिन्न भौगोलिक स्थितियों के लिए निर्माण प्रक्रियाओं, तकनीकों और प्रौद्योगिकियों के जीवंत माडलों की जानकारी दी।

डीके सहगल ने सोलर पावर प्वाइंट का अवलोकन कराया। मुख्य वैज्ञानिक आरएस चिमोटे और डॉ. सुवीर सिंह ने फायर एंड आयल एक्सप्लोजन सिस्टम की तकनीक जानकारी दी। इस मौके पर डॉ. प्रदीप भार्गव, डॉ. रेनु चौधरी, डॉ. अशोक सेठ, गुंजन अग्रवाल, नादेश, विपिन, पलक गोयल, नरेश गुप्ता, विजय, महाराजुदीन खान, हरीश आदि थे।



सीबीआरआई में छात्र-छात्राओं ने मंगलवार को भ्रमण कर कार्यप्रणाली जानी। • हिन्दुस्तान

Published in:

Hindustan, Page 6

Also Published in:

Amar Ujala, Page 7

Awam-e-Hind, Page 18

IICT finds a cost-effective answer to water purifiers

CSIR-IICT

28th March 2017

Scientists at Indian Institute of Chemical Technology(IICT) have designed hollow membranes which purify drinking water efficiently without causing any decrease in the mineral levels in water. They claim that once their product is commercialised, it will prove more cost-effective than present water purifying devices used at homes. The membranes look like thin plastic wires as they are made of polyethersulphone, a synthetic material.

“Many people buy Reverse Osmosis (RO) water purifier without knowing the fact that RO purifiers should be used only if they rely on groundwater for drinking purpose. As most of the people are now getting piped water supply from rivers, RO should not be used, as it knocks down essential minerals from water. Consuming such

water has a negative impact on physical as well as mental health,” Dr S Sridhar, head of Membrane Separations Group at IICT said.

The piped drinking water supplied by municipality has Total Dissolved Solids (TDS), which consist of minerals like Magnesium, Calcium, Sodium, Potassium and Phosphorous that are essential for the human body to stay fit.

As per the Bureau of Indian Standards (BIS), TDS levels till 500 mg/litre and usually piped water supply has TDS in the acceptable standards.

When this water is purified through reverse osmosis, the TDS levels fall down to less than 20 mg/litre. This results in drastic reduction of the essential minerals in water.

However, if groundwater is being used for drinking, then RO purifier can be used as the TDS levels in groundwater are much higher than acceptable limits.

How it works

“The hollow membrane has pores which are as small as 0.001 microns. When water passes through this membrane, various contaminants like bacteria, virus, suspended solids, and colloidal silica that are larger than the pore size are filtered, thus giving out pure water. The essential minerals dissolved in water are of very small size and they do not get filtered and stay in the water thus maintaining good levels of TDS,” Dr Sridhar says.

“Problem with RO purifier is that it removes essential minerals. In the UV purifier while the microbes are killed, their bodies continue to remain in water. In water purifiers that use charcoal, microbes are not killed.” “Therefore the membranes are better as they remove the microbes and other contaminants completely, keeping minerals intact in the water,” Dr Sridhar further added.

Electricity not required

If water purifiers for usage at home are made of the hollow membranes, they will not even require electricity. Dr Sridhar said that RO water purifiers require more than 100 psi pressure for which power has to be used, whereas the purifier using hollow membrane would require just around 15 psi which can be achieved if the water to be let into the purifier is coming from an overhead tank.

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[New Indian Express](#)

Don't flush drugs down sewer, you may contaminate groundwater: Scientists

CSIR-NEERI

29th March 2017

Beware! Don't flush your tablets or other medicines down the lavatory or dump them in sewer lines as it could later prove harmful to aquatic organisms or could contaminate the groundwater which you use daily, warn scientists.

Speaking to Express on the sidelines of a two-day national-level workshop on 'Water and Wastewater: Sustainable Management,' the chief scientist of National Environmental Engineering Research Institute (NEERI), Dr Tapas Nandy said that the country was vulnerable to environmental contamination by pharmaceuticals and personal care products (PPCPs) as it had no laboratories that could study their impact on the environment.

Nandy said the PPCPs were not easily removed by conventional water treatment processes. The inability to remove PPCPs completely in waste treatment plant posed a potential risk to aquatic organisms and public health.

The most popular parameter in waste water analysis were the BOD (biochemical oxygen demand), COD (chemical oxygen demand) and Nandy said new parameters should be developed to study the presence of PPCPs in water. He said NEERI was working in this direction. "Interestingly, a few studies in India highlighted that PPCPs had entered the aquatic environment and were ubiquitous."

Dr Rakesh Kumar, the director of NEERI said the workshop aimed at integrated management of water resources in the country, judicious usage, wastewater treatment options for recycle and re-use so as to minimise the impact on environment. It has been organised by NEERI, through its Chennai zonal centre.

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[New Indian Express](#)

CSIR-NEIST organises skill development programme

CSIR-NEIST

29th March 2017

CSIR-North East Institute of Science & Technology, Itanagar branch organised a skill development programme on “post training intervention for initial financial assistance and business link-up” under the CSIR-800 programme at the institute premises, Naharlagun on Tuesday.

CSIR-NEIST took upon itself the onerous task of developing a few simple technologies suitable for the micro-scale sector of the industry which are simple, easy to operate with low skill and minimum land, labour and capital, and are meant for the unskilled or semi-skilled entrepreneurs.

Accordingly, the institute had completed four awareness cum training programmes on mushroom spawn

production and cultivation technology, vermicomposting, banana fibre extraction and products, solid and liquid deodorant, wood care, mosquito repellent incense sticks and candles, and cultivation of aromatic plants and distillation technology during February and March this year.

The basic objective of the programme of the post training intervention programme for the beneficiaries, entrepreneurs and farmers was to set up a business link-up and initial financial assistance to start or implement the CSIR technologies.

Around 60 farmers, villagers, and beneficiaries from different parts of Arunachal Pradesh and North Lakhimpur, Assam attended the day-long programme.

Dr Pinaki Sengupta, Chief Scientist, CSIR-NEIST Jorhat, while giving a brief introduction of the institute, urged all to come forward and take the advantages of technologies developed by CSIR-NEIST, Jorhat and Itanagar branch for societal benefit.

State Council for Science & Technology Chairman, Bamang Mangha appreciated the activities of the institute on skill development for the benefits of the entrepreneurs and socio-economic upliftment of the state with its latest technologies. He assured for help and cooperation from the State Council of Science & Technology to the entrepreneurs. He also talked about joint action programme in collaboration with state Council of Science & Technology, NEIST and the concerned departments of the Government of India.

Itanagar-Capital Complex ADM & CEO, Talo Potom assured to help maintain a peaceful atmosphere in the institute for scientific development to benefit the state. He also said that the unemployed youths can take the benefit by using its technologies and also to improve lifestyle.

He requested the authorities of NEIST to inform of its rural, micro and small scale technologies to the state Chief Minister and Chief Secretary in a meaningful way for implementation.

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[Arunachal Times](#)

Petrous bone found at Narmeta excavation site

CSIR-CCMB

29th March 2017



‘It holds genomic details of the megalithic period’

In a move that may give scope for exploring the genomics of the people who lived in megalithic period, archaeologists were able to excavate petrous bone of an adolescent at a burial site located here in Nanganoor mandal.

Niraj Rai, a senior scientist of Centre for Cellular and Molecular Biology (CCMB) visited the excavation taking place here for the past one month and interacted with the staff of Archaeology Department.

He enquired about the type of material found at the megalithic site and what their expectations are.

Mr. Niraj Rai was happy on Tuesday as he was able to get the petrous bone (fragment of skull bone) at 1.98 metre depth at layer three. “This will be useful as the density of DNA will be 150 times higher comparing with other parts of the human body,” Mr. Neeraj told the officials of the archaeology department.

More promising

While in one site bones of humans were found, the main digging site was more promising with some pottery and some iron instruments. Pagadam Nagaraju, Assistant Director, A. Bhanu Murthy, a retired senior employee of the department, D. Bujji, Technical Assistant and B. Saidulu, archaeology assistant have been working at the field.

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[The Hindu](#)

Destination North East - 2017

CSIR-NEIST

29th March 2017

The Destination North East-2017 (DNE-2017) was organized to build upon the comparative advantages of the North East Region, which included Business Summit, Buyer-Seller meet, exhibition stalls showcasing best features of NE to attract investment in tourism, skill, start-up, handlooms & handicrafts, horticulture, medicinal and aromatic plants. The Office of Principal Scientific Adviser to Government of India and Council of Scientific and Industrial Research (CSIR) displayed and demonstrated appropriate rural technologies/innovations of IITs, RuTAG (Rural Technology Action Group) and other technologies. In addition, the rich cultural heritage of NE were displayed by cultural troupes

from North East Zone Cultural Council, Ministry of Culture and other NE music Bands. One of the major attractions of the event was the NE food & cuisine by the women Self Help Groups.

Office of Principal Scientific Adviser to Government of India, Ministry of Information Broadcasting, Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy, Ministry of Textile, Council of Scientific & Industrial Research, Ministry of Micro, Small and Medium Enterprises, Ministry of Skill Development and Entrepreneur participated along with the State Governments of North East.

Investment enquiries have been made by the visitors/investors regarding handloom, handicrafts and food products of North Eastern Region. The DNE 2017 was organized with a hope to encourage investments in the NER especially in sectors such as, Textiles, Food Processing industries, Medicinal plants, Organic horticulture produce and fresh flowers, tourism, Cane & Bamboo etc. which are inherent strength of NER. The RuTAG of IIT Guwahati received a concept note for processing "Biomass Dyers" for four states of North Eastern Region at an estimated cost of Rs. 5.5 crore for installation/customization of these dyers.

Destination North East event is one of the steps taken by Ministry of Development of North Eastern Region to bring North East closer and help assimilate the diverse cultural heritage of India while encouraging investment in priority sectors like Tourism, Handloom, Handicrafts, Food Processing etc. Other steps taken by Ministry of DoNER towards assimilation of North Eastern Region, are funding Business Summits, Seminars, Buyers & Sellers meets to attract investors in North Eastern Region and supporting participation of weavers/artisans of NER in Craft Bazaars and exhibitions all over India to promote their Handloom and Handicrafts and give them exposure to the National Market.

This was stated by the Minister of State (Independent Charge) for Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr. Jitendra Singh in written reply to a question by Shri S.R. Vijayakumar, Shri Sudheer Gupta, Shri T.Radhakrishnan, Kunwar Haribansh Singh in the Lok Sabha today.

Published in:

[Business Standard](#)