



# CSIR IN Media

A Daily News Bulletin

1<sup>st</sup> December , 2016

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## CSIR Technofest's golden win at IITF

### CSIR

The pavilion of the Council of Scientific and Industrial Research (CSIR) has bagged a gold medal for the excellence in display in the category of 'Ministries and Departments' at the recently-concluded 36th India International Trade Fair (IITF).

Dr Girish Sahni, Director General, CSIR said: "Getting recognized for what CSIR is doing is indeed exciting. Everything happened because of the hard work put in by the entire CSIR family. The outcome of the last 75 year journey of the organization was on display and people liked it. We tried to portray our technologies in an aesthetically appealing way and we succeeded, as we stood first. This will boost us to continue the good work in the future."

Talking about the mission and vision of CSIR, he added, "A number of projects are in the pipeline to take our mission projects further. More than 10 projects are being undertaken, including menthol mint production, enabling leather industry and new improved high-yield crop varieties for farmers which will increase their incomes. "

After receiving the award, Dr Daljit Singh Bedi, Head USD and Coordinator of CSIR Platinum Jubilee Technofest expressed satisfaction, saying "It was the most appropriate recognition of the teamwork of CSIR, depicting its contribution to the nation in its journey of more than seven decades in the most effective manner."

The Technofest kicked-off on November 14 and ended each day was dedicated to different themes on various technologies, innovation and products developed by the CSIR laboratories.

A total of 14 theme-based pavilions were set up in the Technofest. Beginning with the theme of 'Aerospace & Strategic sector,' the event witnessed other theme-based activities focusing on 'Generics and Healthcare,' 'Engineering and Infrastructure,' 'Energy' and 'Leather, Mining, Minerals & Materials, Chemicals & Petrochemicals,' 'Ecology & Environment,' 'Water,' 'Agriculture & Floriculture,' 'Food & Nutrition,' 'CSIR for Societal Interventions,' CSIR 800 and IP and Entrepreneurship.

"This is an extraordinary effort by such a premier institution. This is a golden opportunity to experience the inventions by the pioneer scientists of our nation and CSIR. We hope to see such initiatives every year," a visitor said

Nov 30, 2016

Source: [www.aninews.in/newsdetail-MTg/Mjg5NDc1/csir-technofest-039-s-golden-win-at-iitf.html](http://www.aninews.in/newsdetail-MTg/Mjg5NDc1/csir-technofest-039-s-golden-win-at-iitf.html)

## Cocktail of enzymes from soil fungus to curb pollution

### CSIR-CLRI

Among its several solutions to reduce pollution from tanneries, scientists at CSIR-Central Leather Research Institute (CLRI) have developed a cocktail of enzymes from a fungus commonly found in soil that can cut down effluent discharge by 60%. It can replace harmful chemicals used in tanning and save 60% of water from being used in the process.

The enzyme developed was one of the 13 experiments and technologies on display on Tuesday at the Open Day for students. The event was organised as part of the Indian International Science Festival and CSIR's platinum jubilee celebrations.

More than 100 students from schools and colleges learned the various stages of tanning, equipment like microscopes used in laboratories, nanomaterials being studied and novel leather products produced at CLRI.

"The idea is to exhibit experiments that may be interesting to both school and college students. We encouraged them to interact with our scientists," said Narasimhaswamy, senior principal scientist, Polymer division.

A quiz was conducted for students. "We saw lot of technologies like collagen extraction, dehairing done during tanning process and purification of domestic water. It was new and quite educational to us. This is only encouraging us to take up science in higher education," said Jahnvi Umesh, a Class 10 student from Sri Sankara Senior Secondary School. Besides science students, those from other streams also took part in the event.

Nov 30, 2016

Source: [timesofindia.indiatimes.com/city/chennai/Cocktail-of-enzymes-from-soil-fungus-to-curb-pollution/articleshow/55696185.cms](http://timesofindia.indiatimes.com/city/chennai/Cocktail-of-enzymes-from-soil-fungus-to-curb-pollution/articleshow/55696185.cms)

## 3 city-based CCMB scientists bag awards

### CSIR-CCMB



Prof Amitabha Chattopadhyay, Dr Imran Siddiqi, Dr Rakesh Mishra  
(from left to right)

Three senior scientists of the city-based Centre for Cellular and Molecular Biology (CCMB) received two prestigious awards for their outstanding performance.

As per a CCMB release here on Tuesday, Dr Rakesh Mishra, director, CCMB, and Dr Imran Siddiqi, chief scientist, received the JC Bose National Fellowship.

This award is given in recognition of outstanding performance of active scientists. The fellowship is scientist-specific and very selective.

Prof Amitabha Chattopadhyay, JC Bose Fellow at the CSIR-CCMB, has been awarded the prestigious TWAS (The World Academy of Sciences) Prize in biology for 2016.

TWAS Prizes were announced last week at the Academy's 27th general meeting held at Kigali, Rwanda. Prof Chattopadhyay received the award for his seminal contribution in understanding the role of membrane cholesterol in the organization and function of a class of proteins called G protein coupled receptors (GPCRs) and its implications in health and disease, the CCMB release said.

Nov 30, 2016

Source: [timesofindia.indiatimes.com/city/hyderabad/3-city-based-CCMB-scientists-bag-awards/articleshow/55697546.cms](http://timesofindia.indiatimes.com/city/hyderabad/3-city-based-CCMB-scientists-bag-awards/articleshow/55697546.cms)

## Purifiers to come up at five signals

### CSIR-NEERI

While air pollution has taken another turn for the worse, Delhi government is pushing ahead with its plan to set up air purifiers at five major intersections. Where initially PWD, which has no expertise in the matter, said that it could take more than a year to purchase air purifiers and set them up, the National Environmental Engineering Research Institute (NEERI) has stepped up to not just supply air purifiers which it has designed but also to install them.

Additionally, deputy chief minister Manish Sisodia has commissioned five studies to Delhi Pollution Control Committee (DPCC) which include a feasibility report on the use of cow dung, sewage sludge and alum sludge for fuel pellets, tiles, bricks or other useful material, design of air pollution control system for green crematorium, and others.

NEERI will be collaborating with PWD and the Industrial Design Centre at IIT Mumbai will help NEERI design the traffic intersections. Officials said that each unit can reduce carbon monoxide and particulate emission by 40%-60% in a 20-30m radius during peak traffic hours. The project is expected to cost around Rs 60 lakh.

An official said: "A pilot study executed in IIT Bombay has shown a reduction of 55-76% in PM<sub>2.5</sub> levels and 73-88% in PM<sub>10</sub> levels. Air quality sensors, anemometers, cameras and counters will be mounted on these units."

Meanwhile, air pollution experts say that a lot more can be done and expensive, unproven technology like air purifiers, may not show any results. Sources say that each purifier costs around Rs 1 lakh and a busy intersection could require up to five of them. For the trial being conducted in Mumbai, a Maharashtra Pollution Control Board official said that a single installation cost them approximately Rs 20 lakh.

"The system creates turbulence that helps pollutants to disperse, which is helpful in Delhi's calm winter," Rakesh Kumar, director of NEERI, told TOI.

Dec 1, 2016

Source: [timesofindia.indiatimes.com/city/delhi/Purifiers-to-come-up-at-five-signals/articleshow/55714203.cms](http://timesofindia.indiatimes.com/city/delhi/Purifiers-to-come-up-at-five-signals/articleshow/55714203.cms)

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Navbharat Times, Delhi, Page 5, December 1, 2016

Amar Ujala, Page 5, December 1, 2016



## ज्ञान प्राप्ति को उत्सुकता अनमोल चाबी : गोयल

उत्तरांचल दीप ब्यूरो

**रूड़की।** केन्द्रीय भवन अनुसंधान संस्थान में डिप्लोमा मैट्रिक एवं इण्टरमीडिएट के छात्रों के लिये आयोजित प्रशिक्षण कार्यक्रम में व्यख्यान प्रस्तुत करते हुए अनुसंधान केन्द्र के प्रभारी वैज्ञानिक डॉ. आर.के. गोयल ने छात्रों के जीवन, लक्ष्य, शिक्षा, अभिस्वरूपण एवं प्रशिक्षण कार्यक्रम की जरूरत के बारे में विस्तारपूर्वक प्रकाश डाला।

यहाँ केन्द्रीय भवन अनुसंधान संस्थान में प्रशिक्षण कार्यक्रम के दौरान डॉ. आर.के. गोयल ने विभिन्न प्रकार की सुरंगों, उनकी निर्माण प्रक्रिया, उपयोगी तथा निर्माण चुनौतियाँ तथा सुरक्षा केन्द्र बिन्दुओं के बारे में जानकारी देते हुए बताया कि छात्र अपनी प्रतिभा को पहचानें। मानसिक रूप से तत्पर रहकर परिश्रम करने के लिये उन्होंने छात्रों को प्रेरित किया। साथ ही उन्होंने कहा कि प्रकृति व चट्टानों से सीख लेकर नई-नई



- छात्रों को अपनी प्रतिभा पहचानने को किया प्रेरित
- अनुसंधान संस्थान में प्रशिक्षण का आयोजन

खोज करें। प्रधान वैज्ञानिक एवं परियोजना अध्यक्ष डॉ. अतुल अग्रवाल ने छात्रों का स्वागत किया। संवाद के दौरान उन्होंने छात्रों को अपनी सोच को विकसित करने पर जोर दिया। उन्होंने कहा कि ज्ञान प्राप्ति को उत्सुकता एक अनमोल चाबी है जिसे सही दिशा में घुमाकर नकारात्मकता को हटा (किक) कर

हम जानरूपी खजाने के राजा बन सकते हैं। इस अवसर पर डॉ. ए.के. मिनोचा, वैज्ञानिक डॉ. नीरज जैन ने भी छात्रों को विषय के सम्बन्ध में विस्तारपूर्वक जानकारियाँ दी। इस अवसर पर अनुसंधान में हो रहे प्रयोग के बारे में छात्रों को बताया गया तथा प्रयोगशाला से विशेषज्ञों ने छात्रों को रुबरू कराया। प्रशिक्षण कार्यक्रम में मदरहुड यूनिवर्सिटी, टून पब्लिक स्कूल, शिवालिक गैन्जस पब्लिक स्कूल, सिविल डिप्लोमा के अलावा कक्षा 11 व 12 के विज्ञान विषय के लगभग 200 छात्रों ने भाग लिया।



Also Published in:

Dainik Jagran, December 1, 2016

Uttaranchal Deep, December 1, 2016

Rashtriya Sahara, December 1, 2016, Page 4

Awam-e-Hind, December 1, 2016

Amar Ujala, December 1, 2016 Page 6

Hindustan, December 1, 2016 Page 3



## Web-based cancer platform launched

### CSIR-IMTECH

Indian scientists have unveiled a web-based cancer biology platform that they are hoping will be used by other researchers to design new immunotherapy or vaccines against various cancers.

The platform, developed by scientists at the Institute of Microbial Technology (IMTECH), Chandigarh, is intended to find molecular targets associated with various cancer cells that could be fought with the body's own immune system.

The scientists say the platform may in the long run also be used to design personalised therapy for cancer patients. The researchers have themselves used their platform to propose several molecular targets, or "neoepitopes," found on the proteins associated with 60 cancer-specific genes selected from 905 cancer cell lines, among them cancers of the breast, colon, liver, lung and pancreas.

Cancer immunotherapy is aimed at stimulating the immune system into attacking cancer cells and several candidate therapies against brain tumours and breast, lung and prostate cancers, among others.

"We've combined previously documented information about cancer-specific genetic mutations and their ability to stimulate the immune system to build this platform," said Gajendra Pal Singh Raghava, a senior bioinformatics specialist at IMTECH, a Council of Scientific and Industrial Research laboratory.

Raghava and his colleagues have identified eight targets linked to breast cancer cells, 52 to lung cancer cells, eight to prostate cancer cells, seven to liver cancer cells and 10 to pancreatic cancer cells.

The platform works through a set of software tools that can predict how various arms of the human immune system will respond to a specific protein or a small region of a protein specifically associated with certain cancers.

"The targets we identify are predictions - they will need to be validated through real laboratory experiments through cell cultures and animal models," Raghava said.

Cancer biologists say the IMTECH platform represents an important contribution to the development of computational resources helpful in the search for new cancer immunotherapies.

"The platform is an advance towards designing genome-based personalised immunotherapy or vaccines," said Amit Dutt, a senior scientist at the Advanced Centre for Treatment and Research in Cancer, Navi Mumbai, who was not associated with the IMTECH work. "But it needs improvements to make it robust and reliable."

A personalised medicine module in the platform will allow medical researchers to compare the genomic profile of tumour samples from individual patients and generate sets of molecular targets specific to those patients. This is expected to help doctors tailor therapy for individual patients, based on their specific sets of targets.

However, scientists caution that the current version of the platform can identify only "potential candidate targets for immunotherapy" in an individual patient. "Whether an individual patient's body will actually launch an immune response against specific targets needs to be validated," Dutt said.

Medical researchers view immunotherapy as a promising strategy against several hard-to-treat cancers. Earlier this year, scientists at the Institute of Cancer Research, London, presented the results of a clinical trial that found that an immunotherapy drug improved survival for patients with relapsed head and neck cancers.

Their trial, published in the New England Journal of Medicine, noted that more than double the number of patients who took the immunotherapy drug were alive one year after treatment compared to those who did not opt for it.

Nov 28, 2016

Source: [www.telegraphindia.com/1161128/jsp/nation/story\\_121732.jsp#.WEUFfI97IW](http://www.telegraphindia.com/1161128/jsp/nation/story_121732.jsp#.WEUFfI97IW)