

CSIR in Media



A Daily News Bulletin
1st -5th January 2016

Major Developments/Achievements of CSIR, Ministry of Science & Technology during 2016

30th December 2016

Council for Scientific & Industrial Research (CSIR) entered 75th year of existence ushering in year-long Platinum Jubilee celebrations which were inaugurated by Prime Minister Narendra Modi, who is also the President of CSIR.

Recalling CSIR's pioneering inventions, the Prime Minister also held an interactive session with farmers from various parts of the country and launched improved varieties of medicinal and aromatic plants, developed by various labs of CSIR which would help in transforming the rural economy by enhancing the income of farmers.

Hailing CSIR's role in building and nurturing the nation's scientific & technological prowess, he said that starting with the indelible ink which is the hallmark of India's democratic fabric, CSIR has left an indelible mark on every sphere of life. He urged CSIR to create an 'Ease of doing Technology Business' platform to bring in right stakeholders so technologies reach beneficiaries.

The Council of Scientific and Industrial Research (CSIR) is a catalyst and driver of sustainable socio-economic change through application of science and technology. CSIR has commercialized several technologies for the society and industry in the areas of food and agriculture, generic drugs, leather, chemicals and petrochemicals, biopharmaceuticals, and materials.

CSIR is recognized to be among the International leaders knowledge creation. CSIR has been ranked 12th in the world amongst the government institutions in world according to the prestigious Scimago Institutions Rankings 2016 Report.

CSIR is granted 90% of the US patents granted to any Indian publicly funded R&D organization. The scientific staff of CSIR though constitutes only about 3-4% of India's scientific manpower but it has an overwhelming contribution amounting to 9.6% of India's scientific outputs.

CSIR is presently supporting around 8500 Research fellows, awarded 2251 Junior Research Fellowships and 65 Shyama Prasad Mukherjee Fellowship. CSIR is supporting more than 1000 research schemes to various universities.

CSIR is addressing national goals and Missions such as Swachh Bharat, Swastha Bharat, Samarth Bharat, Make in India, Innovate for India, Start-up India, Skill India etc.

Today, CSIR is attempting a Parivartan from Knowledge creation to Value creation. These includes emphasis on technology development and commercialization for the society, industry and the strategic sector, creation of S&T based entrepreneurship and participation in the national Skill Development initiative in addition to human resource development. Towards this, several new initiatives and policy changes are being brought in.

Some key achievements of the CSIR maturing during 2016 include:

- **CSIR's Global Positioning as a Front Rank R&D System**

CSIR has been ranked 12th in the world amongst the government institutions in world during the said year, thus improving its previous position of being at 14th spot for three consecutive years, according to 2016 report of the prestigious Scimago Institutions Rankings. The overall global ranking of CSIR also improved from 110 to 99th position.

Ø Head-Up-Display (HUD) In high-tech areas, CSIR-NAL made significant contribution by developing indigenous Head-Up- display(HUD) for Indian Light Combat Aircraft, Tejas. HUD aids the pilot in flying the aircraft and in critical flight maneuvers including weapon aiming.

Ø Design and Development of Indigenous Gyrotron: Addressing the challenges of technology denial: Design and development of indigenous gyrotron for nuclear fusion reactor has been accomplished.

• **Energy & Environment:**

Ø Solar Tree: On July 22nd a solar tree designed by CSIR- CMERI lab in Durgapur was launched which occupies minimum space to produce clean power.

Ø Wax Deoiling Technology: Technology developed for recovery of wax developed in collaboration with Engineers India Limited (EIL) and Numaligarh Refinery Ltd., (NRL). Country's largest wax producing (50,000 metric ton) plant has been commissioned at NRL with investment of over Rs 600 crore.

Ø Simultaneous Production of US Grade Gasoline and Pure Benzene: Technology for producing US grade gasoline and pure benzene has been developed. Plant of 700,000 tonnes per annum capacity costing Rs.160 crore was commissioned at Reliance Jamnagar Refinery.

Ø Lithium Ion Battery: India's first lithium ion battery fabrication facility based on indigenous novel materials for making 4.0 V/14 h standard cells has been established. The so developed technology on the Li-ion batteries to be commercialized soon.

Value added Agriculture:

Ø Medicinal and Aromatic Plants: Enhanced cultivation of Medicinal and Aromatic Plants in the country brought about through development of new varieties and agro-technologies. The estimated area under cultivation is more than 3.3 lakh hectares with an estimated value of Rs 3568 crores and generated employment of 7.31 crore mandays. India leads globally in Menthol Mint production due to CSIR efforts.

Ø Samba Mahsuri Rice Variety – Bacterial Blight Resistant: CSIR has in collaboration with DRR (ICAR) and DBT part funding developed an improved bacterial blight resistant Samba Mahsuri variety. It is being cultivated in ~ 90,000 hectares in the states of Andhra Pradesh, Telangana, Karnataka and Tamil Nadu.

Ø Rice Cultivar (Muktashree) for Arsenic Contaminated Areas: A rice variety has been developed which restricts assimilation of Arsenic within permissible limit. The variety has been released to farmers of West Bengal.

Ø White-fly resistant Cotton variety: Developed a transgenic cotton line which is resistant to whiteflies. It is expected to render it commercially cultivable in 10 years, after due regulatory clearances.

Healthcare:

Ø JD Vaccine for Farm Animals: Vaccine developed and commercialized for Johne's disease affecting Sheep, Goat, Cow and Buffalo so as to immunize them and increase milk and meat production.

Ø Plasma Gelsolin Diagnostic Kit for Premature Births, and Sepsis related Deaths: A new kit is being developed to diagnose pre-mature birth and sepsis.

Ø Genomics and other omics technologies for Enabling Medical Decision – GOMED: Genetic diseases, though are individually rare, cumulatively affect a large number of individuals. A programme called GOMED (Genomics and other omics technologies for Enabling Medical Decision) has been developed by the CSIR which provides a platform of disease genomics to solve clinical problems. The present portfolio includes over 80 genes and sequencing of mitochondrial loci for mitochondrial disorders. In a short span of 9 months which encompassed the proof-of-concept stage, GOMED has catered to over 600 patients from across the country.

Food & Nutrition:

Ø Ksheer-scanner: The Ksheer Scanner, a new technological invention by CSIR-CEERI detects the level of milk adulteration and adulterants in 45 seconds at the cost of 10 paise, thereby putting adulterators in the milk trade in notice was launched on 20TH February. 50 systems have been deployed at dairies across Goa, Gujarat, Jammu & Kashmir, Kerala, Maharashtra, Punjab, Rajasthan, Uttar Pradesh, and West Bengal. A hand-held device "Ksheer Tester", a mini version of Ksheer-scanner has also been developed.

Water:

- Ø Aquifer Mapping of Water Scarce Areas: Heliborne transient electromagnetic and surface magnetic technique based aquifer mapping carried out in six different geological locations in Rajasthan (2), Bihar, Karnataka, Maharashtra and Tamil Nadu.
- Ø Understanding the Special Properties of the Ganga Water: Assessment of Water Quality & Sediment Analysis of Ganga from different parts being done.

Waste to Wealth:

- Ø Non-toxic Radiation Shielding Material for X-ray Protection: Non-toxic radiation shielding materials utilizing industrial waste like red mud (from aluminum industries) and fly ash (Thermal Power Plants) developed which has been accredited by Atomic Energy Regulatory Board (AERB) for application in diagnostic X-Ray rooms.
- Ø Waste Plastic to Fuel: Process for conversion of waste plastics to gasoline/diesel or aromatics developed.

Skill development: CSIR is building a structured large scale Skill development Initiative using the state of the art infrastructure and human resources of CSIR. About 30 High Tech Skill/Training programmes are being launched for imparting skills to over 5000 candidates annually. The skill development programmes cover the following areas: Leather process Technology; Leather Footwear & Garments; Paints & coatings for corrosion protection; Electroplating & Metal Finishing; Lead Acid Battery maintenance; Glass Beaded Jewellery / Blue Pottery; Industrial Maintenance Engineering; Internet of Things (IoT); and Regulatory – Preclinical Toxicology.

Recently an Agreement has been signed between CSIR and Andhra Pradesh Scheduled Caste Co-operative Finance Corporation Ltd. (APSCCFC) for Skill training and Entrepreneurship in Leather Sector. The initiative is set to benefit 10,000 Scheduled Caste Candidates from Andhra Pradesh, creating income generation assets to the households and thus enabling social and economic development. An investment of Rs. 30.00 Crore is being made by APSCCFC in next 2-3 years.

CSIR's participation in the India International Trade Fair (IITF) at Pragati Maidan marked showcasing of various technologies in healthcare, leather, petrochemicals, aeronautical engineering, drinking water, solar power, and energy and agricultural sector. The CSIR pavilion bagged the Gold medal among all government ministries and departments.

The National Physical Laboratory (NPL), a constituent lab of CSIR, organized the India International Science Festival, (IISF) which brought together more than 500 Einstein enthusiasts in the iconic scientist's trademark garb, complete with his wig and moustache. Union Home Minister Rajnath Singh and Science and Technology Dr. Harshvardhan were prominent visitors to the festival with its focus on "Science for the Masses".

Published in:

Business Standard

Source: bit.ly/2i6iFHq

CSIR to return to R-Day parade with tableau

4th January 2016

The Council of Scientific and Industrial Research (CSIR) is set to return to the Republic Day parade as the defence ministry has approved a tableau depicting 75 years of the existence of the council.

In the tableau that would parade on the Rajpath on January 26, the CSIR would highlight its major achievements in the last six decades and how its technologies have benefited the common man, sources told DH. Science departments rarely get an opportunity to showcase their achievements in the Republic Day parade. The previous two occasions were in 2011 when the CSIR displayed its drug discovery programme and in 2009 when the Indian Institute of Astrophysics, Bengaluru, presented the high-points of Indian astronomy research.

The CSIR was set up in 1942 to provide technical backbone to large engineering and scientific projects in addition to generating trained manpower. The council now has 37 laboratories and 39 field stations. The council is under pressure from the Centre to generate more revenue from the industry and carry out more socially relevant research.

Published in:

Deccan Herald Source: bit.ly/2jiMupr

Assam's herbs bring hope for cancer patients

Lab Covered: CSIR-NEIST

5th January 2016

A few common herbs of the State have been found to be scientifically effective in curing deadly disease like lung cancer as the recent experiments of their extracts recorded 'very positive results' during the trials.

During several years of collaborative experimentation, a group of scientists of Jorhat-based CSIR-NEIST and Visva Bharati University found the unique medicinal properties in the herbs and made an extract from them which was later handed over to a pharmaceutical company for its improvement and clinical trial through a memorandum of understanding.

"Experiments are going on and the results have been found to be very positive recently," said Dr D Ramaiah, director of CSIR-NEIST. He expressed hope that the herbal medicine will help immensely in curing the disease.

The scientists, including Dr Montu Bhuyan of plant science and his colleagues of natural product chemistry, clinical staffs of CRIS-NEIST and the scientists of Visva Bharati University, worked hard to find out the healing properties of those common herbs of Assam.

The necessary works have been undertaken by the pharmaceutical company to launch the medicine in the country and to include it in the list of medicines of the National Ayush Mission soon to provide relief to the patients across the country.

Published in:

Assam Tribune , Page 8

City scientists win battle with pink bollworm

Lab Covered: CSIR-IICT

31st December 2016

Dennis Marcus Mathew

Scientists at IICT have hit the pink bollworm, a dreaded cotton pest, just where it hurts. A new technique, which uses pheromones released by female bollworms to confuse the male and thus deny him a chance at mating, has been proved successful in field trials. IICT is transferring the technology to the Telangana government to help cotton farmers here in the next cultivation season.

The battle of wits between scientists and the pink bollworm, one of the most dreaded pests attacking the cotton crop in India, has seen city scientists developing a new, and successful, technique that confuses the male pest, prevents him from mating, and in turn, stops multiplication of bollworm population.

The technique, one of the three developed as part of the Indian Institute of Chemical Technology's (IICT) Pheromone Application Technology, will be transferred to the Telangana government shortly, with the same to be used to help cotton farmers in the next season to fight the pink bollworm menace.

The trick, according to BV Subbareddy, Senior Principal Scientist, IICT, is all about utilizing gossypure, a sex pheromone or chemical released by female pink bollworms into the air to attract male moths.

The pheromone is the main ingredient in a chemical solution put in traps in cotton fields, making the male believe his mate is somewhere near and thus confusing him. Any chance he had at mating or increasing his tribe is thus lost, he explains.

This PAT technique is not only effective in tackling pink bollworms, but will also help use of insect pheromones as pest management tools by coming up as an alternative to pesticides and genetically modified crops. Pink bollworms have already proved to be untouched by pesticides and have kept attacking stems, roots and fruit of cotton in various States, including Telangana, Andhra Pradesh, Gujarat and Maharashtra, Dr. Subbareddy says.

“This mating disruption PAT technique is cost effective, with the solution costing just Rs.6 and the entire pheromone trap costing below Rs.30. We need only 10 traps per acre,” he adds.

IICT, over the last five years, has conducted successful field trials in 100 acres each of cotton fields in Adilabad and Khammam, in Dhule of Maharashtra, and in 20,000 hectares across AP, Kerala, Odisha and Maharashtra as well.

The institute has already tied up with Nuzivid Seeds for commercialization of similar PAT techniques for various crops, apart from Gujarat Agro Industries Corporation for commercialization of the mating disruption technique.

Published in:

Telangana today Source: bit.ly/2j7AyaC

Lab Covered: CSIR-CIMFR

1st January 2016

सिंफर वैज्ञानिक तैयार करेंगे नई पौध

■ जागरण संवाददाता, धनबाद

केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान यानी सिंफर के वैज्ञानिक स्कूल-कॉलेजों में शिक्षण का दायित्व भी संभालेंगे। संस्थान की इस पहल से विज्ञान व गणित शिक्षकों की कमी को काफी हद तक दूर किया जा सकेगा और विज्ञान के क्षेत्र में नई पौध भी तैयार होगी। वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद (सीएसआइआर) की सभी इकाइयों में यह व्यवस्था लागू होगी। वैज्ञानिक 50 किमी की परिधि में आने वाले स्कूल-कॉलेजों में कक्षाएं लेंगे।

सालाना न्यूनतम 12 कक्षाएं : सिंफर वैज्ञानिकों को सालाना न्यूनतम 12 कक्षाएं लेनी हैं। वैज्ञानिक छुट्टी के दिनों में कक्षाएं लेंगे। अपनी सुविधा अनुसार स्कूल-कॉलेज का चयन करेंगे। चयनित शिक्षण संस्थान तक आने जाने का खर्च उन्हें खुद वहन करना होगा।

- स्कूल-कॉलेज में करेंगे शिक्षा दान, दूर होगी विज्ञान व गणित शिक्षकों की कमी
- सभी इकाइयों में लागू होगी नई व्यवस्था



150 वैज्ञानिक होंगे शामिल : सिंफर के धनबाद-डिगवाडीह परिसर में लगभग 150 वैज्ञानिक सेवारत हैं। सभी समय निकालकर

शिक्षण कार्य करेंगे। समय-समय पर छात्र-छात्राओं को संस्थान में चल रहे शोध कार्यों से भी रूबरू कराया जाएगा।

“ संस्थान के वैज्ञानिकों के लिए यह अनिवार्य किया गया है। उनका सीआर

तभी लिखा जाएगा जब स्कूल-कॉलेज में अध्यापन से जुड़े प्रमाणपत्र प्रस्तुत किए जाएंगे। विज्ञान व तकनीक के विकास के साथ-साथ वैज्ञानिकों को सामाजिक दायित्व का भी निर्वहन करना होगा।

- डॉ. प्रदीप कुमार सिंह
निदेशक, केंद्रीय खनन एवं ईंधन
अनुसंधान संस्थान

Published in:

Dainik Jagran, Page 14

Centre orders safety audit of coal mines across the country

Lab Covered: CSIR-CIMFR

4th January 2016

Minister of state (independent charge) for power, coal, new and renewable energy, Piyush Goyal, on Tuesday, announced a safety audit of all 418 mines in India after 18 people were killed in a mine collapse at Godda in Jharkhand on December 29 last week.

“...The audit would be done by the director general of mines and safety (DGMS). If needed, we would take assistance and expert opinion from an independent third party,” he said while speaking on the sidelines of a programme here.

The 418 mines have been categorised into three types. Mines with an annual composite production of more than five million cubic metres (large mines) will be audited first. There are 58 such mines in India.

The audit for medium mines (annual composite capacity of one to five million cubic metres) and small mines (annual composite capacity of less than one million cubic metres) will be carried out later.

“All aspects of safety, including fire, subsidence, inundation and gas leakage, among others, would be looked into while conducting the audit. Every mine would henceforth have to submit a monthly report on what steps they are taking to implement the safety standards,” he added.

The minister said that he has also ordered a detailed investigation of the mine collapse, both by the DGMS and a team of experts.

While 18 bodies have already been recovered from the collapsed mine, rescue operations are still on. The Union government has already announced an ex-gratia of `5 lakh for each family that has lost a member.

“I am extremely disturbed with the accident... I will leave no stone unturned to bring out the truth. Strict action would be taken against anyone found guilty,” Goyal said.

The ministry is also planning to install hi-tech equipment inside mines to help reduce the number of accidents.

“We would be installing anti-pollution devices in dumpers of open cast mines, gas monitoring systems, electronic tele-monitoring systems, which are like online monitoring systems. We are also planning to set up geo-technical cells comprising geologists for large projects,” Goyal said.

Published in:

Hindustan Times

Source: bit.ly/2hR2DEt

CCMB signs MoUs with 4 start-ups

Lab Covered: CSIR-CCMB

4th January 2016

A Raju

The CCMB, a research establishment of the Council of Scientific and Industrial Research (CSIR), in its efforts to engage with industry and to translate its own research, had in October last year launched an Innovation Hub (iHUB@CCMB) in its medical biotechnology complex here.

Four biology start-up firms have signed up with the city-based Centre for Cellular and Molecular Biology (CCMB) to incubate their companies at Innovation Hub (iHUB). The CCMB, a research establishment of the Council of Scientific and Industrial Research (CSIR), in its efforts to engage with industry and to translate its own research, had in October last year launched an Innovation Hub (iHUB@CCMB) in its medical biotechnology complex here.

After the launch of Innovation Hub, this for the first time that four biology start-up companies - Oncosimis, Virupaksha Life Sciences, Theranosis and Bioartis - have signed and exchanged a licence agreement with CCMB recently to incubate their companies at iHUB.

CCMB Director Rakesh Mishra, in a press release, said the state-of-the-art facilities at iHUB are created such that any start-up in biology could use these facilities as "plug and play" mode and at the disposal of the companies.

"The idea is that start-ups in biology need not look beyond iHUB to be successful and the facilities would immensely help the start-ups in executing their business plans in healthcare," Mishra said.

Several activities centred at iHUB are underway, including scientist-industry interaction and training programmes to produce industry-ready human resource which would specifically benefit biotech industry, he said.

Oncosimis is planning to establish their innovative processes in the production of biosimilars and is looking forward for such an opportunity to develop a novel process to prepare a number of cancer drugs, the release said.

Virupaksha Life sciences is planning to use iHUB to develop novel molecules for diabetes. Besides, Theranosis is focused on developing novel point of care devices in cancer diagnosis, while Bioartis has plans on optimising and validating novel diagnosis methods for diseases of marine and animal origin and to develop diagnostic kits for such marine diseases, it said.

The four companies will be starting their activities very soon, the release added.

Published in:

Money Control

Source: bit.ly/2jsm2Of

Also Published in:

Telangana today bit.ly/2jswt4k

Hindu Business Line, Jan 3, Page 4, bit.ly/2i8pnQk

Lab Covered: CSIR-CCMB

30th December 2016

PRIME | STUDY ■ **CCMB given skeletal remains of humans from Megalithic period**

DNA study into TS origin begins

DC CORRESPONDENT
HYDERABAD, DEC. 29

TRACING THE ORIGINS

■ **THIS** is the first time that DNA studies will be conducted to ascertain the origins and other historical details of civilisation in Telangana state.

■ **THE** objective of the study is to ascertain the ancient population and human settlements in present-day Telangana state.

Deccan College Vice-Chancellor Prof. Vasant S. Shinde, and CCMB senior principal scientist Thangaraj.

graphical and other studies of the proto historic period in Telangana." Mr Venkatesam said.

Prof. Vasant Shinde said iron was developed in the country in Chittoor district of Andhra Pradesh way back in 1000 BC.

"Korean scientists thought they were pioneers, first to develop and later China but studies proved them wrong. We are undertaking similar studies in Telangana too which is a potential region for historical studies," Prof. Shinde said.

Mr Mishra said the country, which has the oldest population in the world, now has technology to throw some light on it and reconstruct the past through DNA.

population and human settlements in present-day Telangana state, create an individual-wise inventory of skeletal material, and give preliminary observations of the incidence of palaeopathological lesions and anomalies, interpret results in a bio-cultural perspective, trace disease process, human details and other aspects of life in ancient times.

The State Archaeology department on Thursday signed MoUs with CCMB for scientific research and with Deccan College Post Graduate and Research Institute, Pune, one of the top institutions in the world for training archaeologists.

The MoUs were signed by tourism secretary B. Venkatesam, director of archaeology and museums N.R. Visalatchy, CCMB director Rakesh K. Mishra,

Six DNA samples of human skeletal remains from the Megalithic period found in excavations in Piklihal, Raichur district of Karnataka (1954), Yeleshwaram, Nalgonda district (1960) and Pedda Marur, Mahabubnagar (1978) were handed over by the Department of Archaeology and Museums to the Centre for Cellular and Molecular Biology for detailed studies and DNA analysis.

This is the first time that DNA studies will be conducted to ascertain the origins and other historical details of civilisation in Telangana state.

The objective of the study is to ascertain the ancient

Published in:

Deccan Chronicle, Page 7

Kidney ailments taking toll in Uddanam

Lab Covered: CSIR-CCMB

4th January 2016

Kidney diseases in Uddanam area of Srikakulam became point of discussion, once again with actor-turned-politician and Jana Sena Party (JSP) Chief Pawan Kalyan's tour in Itchapuram on Tuesday.

Kidney diseases issue came to light in 1995 as some doctors belongs to Sompeta mandal appraised the problem to experts in Visakhapatnam and Hyderabad.

However, still the governments and various research institutes are to find a solution for it.

It is said that funds crunch was a major setback in finding a cure.

Almost eight different institutions have conducted research to find root cause for the disease.

USA-based Harvard University medical team collected details along with local non-government organisation (NGO), Seva.

Subsequently Hyderabad-based Centre for Cellular and Molecular Biology (CCMB) scientists' team conducted a study along with Nizam Institute of Medical Sciences (NIMS) doctors.

Stony Brue university of New York also studied the disease with Hyderabad nephrologists.

Later, New Delhi based National Geophysical Research Institute (NGRI), Centre for Scientific and Industrial Research (CSIR), Andhra University and other institutions collected details but yet to found root cause.

According to Seva organiser P Srinivasa Rao, about 1500 patients died of kidney diseases in the past 10 years in Uddanam region.

Some studies revealed that silicon content was excess in the water, which might be leading to the disease.

While, a few researchers pointed about that excessive use of adulterated tea powder besides indiscriminate use of pesticides on crops a reason for the diseases.

“Lack of political will is worsening the situation,” opined Sompeta-based doctor Yaradi Krishna Murthy.

While nephrologist of Rajiv Gandhi Institute of Medical Sciences Dr Sharath Jyotsna said that they were providing inputs to research institutes apart from treating patients suffering with kidney diseases.

Published in:

Hans India

Source: bit.ly/2i8FpK3

First quest to crack Telugu DNA mystery

Lab Covered: CSIR-CCMB

30th December 2016

City-based Centre for Cellular and Molecular Biology (CCMB) and Telangana state archaeology department have embarked upon a mega mission to unravel the genetic mystery and ancestral roots of natives of Telangana and Andhra Pradesh.

The first-of-its-kind research on people south of Vindhyas will explore the realms of ancient DNA to decode genesis of natives in modern-day AP and Telangana. It will also throw light on genetic structure of ancient people, who settled down in the Deccan plateau and coastal plains, centuries ago. CCMB researchers will also unearth food habits and lifestyles of natives of the twin states and whether they were afflicted by a particular disease.

Study on ancient DNA is an emerging field of research worldwide. CCMB is the only scientific body in south Asia equipped with an exclusive DNA research lab. It has already entered into an agreement with Anthropological Survey of India (AnSI) to unravel the mystery of skeletal remains discovered during excavation of ancient sites. On Thursday, it signed MoU with Telangana state archaeology department to study bone samples collected from various places in AP and Telangana over years.

peaking to TOI, CCMB senior principal scientist K Thangaraj said, "We studied a few samples and got promising results. Now, we have decided to take up a fullfledged research. We have a state-of-the-art ancient DNA laboratory. Analysis of skeletal and tooth samples will give us an insight into the genetic make-up of ancient people. By matching DNA, we can also find out from which part of the globe our ancestors came and when they settled down in the region."

Dr Thangaraj, a leading geneticist, has been involved in decoding genetic map of people around the world, including origin of man in the Indian sub-continent and the Andamans. In an earlier research publication, he had pointed out that "variable social customs, strict endogamy practices, long-term isolation and evolutionary forces added to diversification of Indian populations. These factors also led to a set of Indian-specific genetic variations responsible for various diseases in India. Interestingly, most of these variations are absent outside Indian subcontinent."

This is the first time CCMB is doing a full-fledged study on skeletal remains obtained from AP and Telangana. CCMB will also help in reconstruction of the evolutionary history of man in Deccan plateau and coastal plains through molecular evidence from ancient bone remains.

Dr Rakesh Mishra, CCMB director, said the MoU will help combine ancient human remains of Telangana with world-class DNA technology of CCMB. "By this initiative we anticipate to understand our ancient civilization and heritage," he said.

Published in:

Hans India

Source: bit.ly/2iY4w3x

India gets an extra second added to its time in 2017!

Lab Covered: CSIR-NPL

2nd January 2016

A 'leap second' was added to the Indian clock at 5:29.59 hours Sunday to synchronize with the Earth's rotational clock.

As the atomic clock at the National Physical Laboratory (NPL) here struck 23:59:59 Saturday night, it was programmed to add an extra second to 2017 to compensate for a slowdown in the Earth's rotation.

Adding a second barely has an impact on the daily life, but it does matter in the fields of satellite navigation, astronomy and communication.

"The Earth and rotation around its own axis is not regular, as sometimes it speeds up and sometimes it slows down, due to various factors including earthquakes and moon's gravitational forces that often results in ocean tides.

"As a result, astronomical time (UT1) gradually falls out of sync with atomic time (UTC), and as and when the difference between UTC and UT1 approaches 0.9 seconds, a leap second is added to UTC through atomic clocks worldwide," D K Aswal, director NPL said.

Adding the leap second to the Indian clock is done by the NPL under the Council for Scientific and Industrial Research (CSIR). The NPL, one of the oldest laboratories in the country, has five atomic clocks and nearly 300 such pieces exist across the globe.

Atomic clocks are so precise that the margin of error in its functioning is just of a second in 100 million years.

To be in sync with the Indian Standard Time (IST) and the Earth's rotational clock, the Indian clock need to be adjusted after the insertion of a leap second.

Aswal said the Indian atomic clock was also synchronized with the atomic clock of International Bureau of Weight and Measure (BIPM), France.

"The leap second adjustment is not so relevant for normal everyday life. However, this shift is critical for applications requiring of time accuracies in the nanosecond, which are critical in the fields of astronomy, satellite navigation, communication networks," Aswal added.

Those utilizing CSIR-NPL time dissemination services need not worry as they will receive the corrected time post the insertion of the leap second, Aswal said. Since 1972, 36 leap seconds have been added at intervals varying from six months to seven

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India a major fisheries & aquaculture country

Lab Covered: CSIR-NIO

3rd January 2016

Endowed with both marine and freshwater resources, India is a major fisheries and aquaculture country in the world, said eminent scientist and Nabard chair professor Dr S Ayyappan. He was speaking at the 51st foundation day of National Institute of Oceanography (NIO), Dona Paula, held on Sunday.

"India is a major fisheries and aquaculture country in the world, contributing nearly 5% of the agricultural gross domestic product (AgGDP), 10% of agri-exports and providing livelihood to about 14 million people," he said.

Emphasising on the role of fishery science, Ayyappan said, "Identification of untapped potentials like island fisheries, reservoir fisheries, integrated farming and ornamental fisheries need to be elaborated and action plans have to be drawn up. A 10 million-tonne fish country that India is, it has to focus in greater measures on aquatic resources, not only to produce more food, but to address the shift from starch to protein, increasing pressure on land, livelihoods and equity. These can play an important role in the blue economy of India." he said.

Looking at the demand for knowledgeable and skilled human resource for the development of standard products and services in the sector, NIO launched skill development courses in aquaculture technology. The course were inaugurated by Ayyappan on Sunday. Under the programme, it has proposed to conduct four job-specific courses, namely aquaculture technician, aquatic microbiology assistant, aquaculture worker and brackish water aquaculture farmer. NIO is in the process of documentation for affiliation and accreditation with the Agriculture Skill Council of India.

Experts from NIO said aquaculture is currently the fastest growing food-producing sector accounting for nearly 50% of the world's food fish. It's perceived to be having the greatest potential to meet the growing demand for aquatic food. Moreover, given the projected population growth over the next two decades, it is estimated that at least an additional 40 million tonnes of aquatic food will be required by 2030 to maintain the current per capita consumption.

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Feed students' curiosity of science, says National Institute of Oceanography director

Lab Covered: CSIR-NIO

3rd January 2016

Physics is losing out to engineering and medicine in Goa, director of National Institute of Oceanography (NIO) Goa Prasanna Kumar said. He was speaking at a press conference held on Monday to announce the second edition of the Science Film Festival of India (SCI-FFI).

"There is a sharp decline in the number of students taking up science, especially in the field of Physics. If we don't make this field appealing to students, college departments may need to wind up," he said.

Kumar stated that societal perception is adding to the rat-race, "Physics is losing out to engineering and medicine because of the society's perception that only these fields have high-paying jobs. There is therefore a market rush in these fields".

He also suggested that students need to be encouraged to take up science early on, when they develop initial interest.

"Many school-going students are curious about science. We must feed their curiosity at an early age and nurture that interest. Only when their interest grows, will they look at a career in science," he said.

With the aim of popularizing science among the student community, Vidnyan Parishad, a science movement, will host the second edition of the Science Film Festival of India (SCI-FFI) in Goa.

The event will be held from January 17 to 20, at Enertainment Society of Goa (ESG), Panaji.

The three-day event will feature film screenings, interactive sessions and workshops with experts and scientists with presentations on space, environment and robotics, among other subjects.

The event is being held in partnership with NIO, ESG, department of science and technology, Goa, and coastal center for agriculture research, Goa.

The Dev Patel-starrer, 'The Man who Knew Infinity', will be the opening film for the festival, while curtains will close to the 1995 American docudrama space adventure film 'Apollo 13'.

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NIO launches series of courses in aquaculture

Lab Covered: CSIR-NIO

3rd January 2016

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Emphasizing the role of fishery science, Ayyappan said, "Identification of untapped potentials like island fisheries, reservoir fisheries, integrated farming and ornamental fisheries need to be elaborated and action plans have to be drawn up. A 10 million-tonne fish country that India is, it has to focus in greater measures on aquatic resources, not only to produce more food, but to address the shift from starch to protein, increasing pressure on land, livelihoods and equity. These can play an important role in the blue economy of India." he said.

Looking at the demand for knowledgeable and skilled human resource for the development of standard products and services in the sector, NIO launched skill development courses in aquaculture technology.

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NIO is in the process of furnishing documents for affiliation and accreditation with the Agriculture Skill Council of India.

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2nd January 2016

सांस के नमूने से रोग की पहचान

संस्कृत

वैद्यलक्षण | एजेंटिया

फर्न कोविंगर आपको कोई तकलीफ हो और डॉक्टर के पास जाएं और डॉक्टर महज आपके सांस के आधार पर मर्ज बता दें। भले यह कोई विज्ञान कथा लगे, लेकिन इनरायली शोधकर्ताओं की मानें तो अब यह इकोकत है।

शोधकर्ताओं का दावा है कि उनके द्वारा विकसित नैन इनवेसिव उपकरण को मरु से कैसर और पाकिस्तान जैसी घातक 17 बीमारियों का पता महज सांस के नमूनों से लगाया जा सकता है।

प्रमुख शोधकर्ता होसम हैइक ने बताया कि इस उपकरण को विकसित करने के लिए उन्होंने 17 बीमारियों के 1400 मरीजों के सांसों के नमूने वर्ष 2011 से 2014 के बीच लिए। नमूनों में मौजूद रासायनिक संरचना का विश्लेषण किया।

सांसों में मौजूद रसायनों की मात्रा की पहचान मिलेगी - इनरायल इंस्टीट्यूट ऑफ ऑफ टेक्नोलॉजी ने प्रोफेसर हैइक ने कहा, उनको टैम ने सांसों में मौजूद रसायन का विश्लेषण दुनिया भर में

कृत्रिम ज्ञान के आधार पर करे काम

नैन इनवेसिव यंत्र कृत्रिम ज्ञान के आधार पर काम करता है। इसे ऑटोफिशियल इंटेलिजेंट नेनोअर नाम दिया गया है। उपकरण में पहले से विभिन्न बीमारियों में सांस में मौजूद रसायनों के संरचना में आने वाले बदलाव के रिकॉर्ड मौजूद होंगे, जिससे मरीज के सांसों में मौजूद रसायनों का मिलान होगा। यह सस्ता भी होगा।

विचार नया नहीं

सांस के नमूनों से बीमारी का पता लगाने के दाये करने वाले उपकरणों के पहले भी प्रदर्शन किए गए हैं। लेकिन अब तक इस परिकल्पना से जुड़ा कोई वैज्ञानिक साक्ष्य नहीं मिले थे। अबतक विकसित तकनीक बहुत छोटे स्तर पर इन्तर्गत किया जा रहा था।

मानवताप्रान्त प्रक्रिया मास स्पेट्रोमेटरी से किया। इसके जरिये सांस में मौजूद रसायनों की मात्रा को जानकारी हासिल की जा सकती है। उन्होंने कहा, अध्ययन के दौरान 17 बीमारियों के मरीजों के सांसों में 13 रसायनों की पहचान की गई, जिनका घनत्व बीमारियों के अनुरूप अलग-अलग था।

बांस से तैयार पट्टी जल्द जख्म भरेगी

नई दिल्ली। भारतीय वैज्ञानिकों ने बांस के सेलुलोज और चांदी के सूक्ष्म कणों से एक अनूठे यौगिक का विकास किया है, जो त्वचा को हुए नुकसान के बेहतर उपचार में सहायक सिद्ध हो सकता है। इससे आने वाले समय में घावों पर ठीक करने वाली पट्टी के विकास का रास्ता साफ होगा।

वर्तमान में जख्म को ठीक करने में प्रयुक्त कपड़ों की सामग्रियों के साथ कई तरह की समस्याएं हैं। वहां तक कि कई तो जैविक कोशिकाओं को संक्रमित कर देते हैं।

हिमाचल प्रदेश के सीएसआईआर इंस्टीट्यूट ऑफ हिमालयन बायोरेसोर्स टेक्नोलॉजी और नई दिल्ली के एकेडमी ऑफ साइंटिफिक एंड इनोवेटिव रिसर्च के अनुसंधानकर्ताओं ने यह उपलब्धि हासिल की है। उन्होंने बांस के पत्तों की दो प्रजातियों से निकाले गए सेलुलोज और चांदी के सूक्ष्म कणों का संश्लेषण कराया। शोध को काबोहाइड्रेट पॉलिमर जर्नल में जगह दी गई है। (एनईसी)

विस्तृत दायरे में अध्ययन

1400 मरीजों से 2011 से 2014 के बीच लिए गए नमूने 17 प्रकार की बीमारियों से ग्रस्त मरीज अध्ययन में हुए शामिल 5 देशों फ्रांस, इजरायल, अमेरिका, चीन और लातविया के थे मरीज 14 विद्वत्त्वा विभाग शोध में थे शामिल

फिनर प्रिंट की तरह है तकनीक : दावा है कि जिस तरह व्यक्ति की पहचान करने के लिए फिनरप्रिंट तकनीक विश्वसनीय है। इसी प्रकार बीमारियों का पता लगाने के लिए सांसों में मौजूद रसायन का विश्लेषण करने की यह तकनीक है। महज सांस की गंध से उपकरण बीमारी का पता लगा सकता है।

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2nd January 2016

बांस से घाव भरने वाली सामग्री बनी

■ नई दिल्ली।

बांस के सेलुलोज और चांदी के सूक्ष्म कणों से वैज्ञानिकों ने एक अनूठे जैविक का विकास किया है, जो चमड़ी को हुए नुकसान के बेहतर उपचार में सहायक सिद्ध हो सकता है। इससे आने वाले समय में प्रतिजैविक गुणों से परिपूर्ण घावों को ठीक करने वाले कपड़ों के विकास का मार्ग प्रशस्त हो सकता है।

वर्तमान में जख्म को ठीक करने में प्रयुक्त कपड़ों को सामग्रियों के साथ कई तरह की समस्याएं हैं। यहां तक कि कई तो जैविक कोशिकाओं को विषाक्त बना देते हैं। पंजाब के सेंटर ऑफ इनोवेटिव एंड अप्लाइड बायोप्रोसेसिंग में वैज्ञानिक सुदेश कुमार ने बताया, घाव को ठीक करने वाले या कपड़े की सामग्री ऐसी होनी चाहिए जो जख्म के आसपास के हिस्से को नमी प्रदान कर सके। साथ ही यह सूक्ष्म जीवाणु संक्रमण को रोकने में भी सक्षम हो और इसे बिना किसी दर्द के घावों पर से हटाना आसान हो।

हिमाचल प्रदेश के सीएसआईआर-इंस्टीट्यूट ऑफ हिमालयन बायोरिसोर्स टेक्नोलॉजी और नई दिल्ली के एकेडमी



बांस में मिलने वाले सेलुलोज और चांदी के कणों से चमड़ी के घाव भरे जा सकते हैं।

ऑफ साइंटिफिक एंड इनोवेटिव रिसर्च के अनुसंधानकर्ताओं ने बांस के पत्तों की दो प्रजातियों से निकाले गए सेलुलोज और चांदी के सूक्ष्म कणों का संश्लेषण कराया। इस अध्ययन का प्रकाशन कार्बोहाइड्रेट पॉलिमर जर्नल में हुआ। ■ भाषा

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NML dedicates HDPS for laboratory scale simulation

Lab Covered: CSIR-NML

3rd January 2016

The Hot Dip Process Simulator (HDPS) facility for laboratory scale simulation of in-line continuous hot dip galvanizing and galvannealing processes was inaugurated today at CSIR-National Metallurgical Laboratory (NML), Jamshedpur.

Dr. Tridibesh Mukherjee, chairman, Empowered Board, Jamshedpur, inaugurated the HDPS simulator. The simulator is procured under the project entitled “Study on the Interface Layer Formation during Hot Dip Galvanizing of Advanced High Strength Steel (AHSS) or Dual Phase Steels for Automotive Applications” jointly sponsored by Steel Development Fund, Ministry of Steel, Govt. of India and Tata Steel Ltd. Jamshedpur.

Dr. N.G. Goswami, acting director, CSIR-NML welcomed the empowered board members, invitees from industries and the project team from CSIR-NML and Tata Steel. He highlighted the genesis of the project proposal and the need to have a hot dip galvanising simulator at CSIR-NML.

Dr. Goswami said, the leading Indian galvanized steel producers are also looking for up-gradation of their process technology for producing materials conforming to very stringent quality specifications for high end applications. The HDPS system installed at CSIR-NML will be able to simulate the hot dip galvanising process in laboratory scale to cater to the demand by the steel and automotive industries.

NML dedicates HDPS for laboratory scale simulation

Lab Covered: CSIR-NML

3rd January 2016

सीएसआइआर-एनएमएल. हॉट डीप प्रोसेस सिम्यूलेटर का उद्घाटन, बोले डॉ टी मुखर्जी

स्टील निर्माण में अग्रणी बनेगा भारत

■ ऑटोमोटिव इंडस्ट्री को उच्च तकनीक में सहयोग को एनएमएल तैयार

लाइफ रिपोर्ट @ जमशेदपुर

बर्माग्राइस स्थित सीएसआइआर-एनएमएल अब स्टील व ऑटोमोटिव इंडस्ट्रीज को उच्च तकनीक में सहयोग के लिए तैयार है. मंगलवार को एनएमएल में नवस्थापित हॉट डीप प्रोसेस सिम्यूलेटर (एचडीपीएस) का उद्घाटन हुआ. एंपावर्ड बोर्ड के चेयरमैन व टाटा स्टील के पूर्व डिप्टी एमडी डॉ टी मुखर्जी ने एचडीपीएस का विधिवत उद्घाटन किया. यहां भारत सरकार के स्टील मंत्रालय व टाटा स्टील के संयुक्त सहयोग से 1293 लाख रुपये की लागत से एचडीपीएस की स्थापना की गयी है. समारोह में मुख्य अतिथि डॉ टी मुखर्जी ने ऑटोमोबाइल उत्पादन के क्षेत्र में एडवांस्ड हाई स्ट्रेन्ज्थ स्टील



की महत्ता पर प्रकाश डाला. एनएमएल में एचडीपीएस की स्थापना को मील का पत्थर बताते हुए उन्होंने कहा कि इससे भारत सरकार की महत्वाकांक्षी पहल 'मेक इन इंडिया' को

गति मिलेगी. भारत ऑटोमोटिव ग्रेड हाई स्ट्रेन्ज्थ स्टील निर्माण के क्षेत्र में बड़े उत्पादकों में से एक बनेगा. एनएमएल में स्थापित यह एचडीपीएस स्टील इंडस्ट्री में एडवांस्ड हाई स्ट्रेन्ज्थ स्टील

की कोटिंग को और अधिक गुणवत्तापूर्ण बनाने में सहायक होगा, जो भारतीय उद्योगों दुनिया के बड़े निर्माताओं की श्रेणी में लाने में सहायक सिद्ध होगा. इससे पूर्व एनएमएल के कार्यकारी निदेशक डॉ एनसी गोस्वामी ने स्वागत भाषण किया. उन्होंने एनएमएल में एचडीपीएस की स्थापना की आवश्यकता व उद्देश्यों से अवगत कराया. टाटा स्टील सरफेस इंजीनियरिंग ग्रुप के हेड डॉ मनोजीत दत्ता ने एचडीपीएस के तकनीकी पहलुओं की जानकारी दी, एचडीपीएस के को-प्रोजेक्ट लीडर डॉ जीके मंडल ने भी कई महत्वपूर्ण जानकारी दी. इस अवसर पर मुख्य रूप से एंपावर्ड बोर्ड के सदस्य व मंत्रालय के डिप्टी इंडस्ट्रियल एडवाइजर एसके भटनागर, भारत सुजुकी के वीपी डी तुकराल, भारी उद्योग विभाग के पूर्व इंडस्ट्रियल एडवाइजर सुशील कुमार, मंत्रालय के पूर्व सलाहकार डॉ एसीआर दास, टाटा स्टील के प्रबंध निदेशक के तकनीकी सलाहकार डॉ टी वेणुगोपालन, एचडीपीएस

के प्रोजेक्ट लीडर व वरीय प्रधान वैज्ञानिक डॉ एलसी पाठक, टाटा स्टील की ओर से प्रोजेक्ट लीडर आर पायस, एनएमएल के डॉ अरविंद सिन्हा, डॉ एके साहू समेत अन्य उपस्थित थे.

क्या है उद्देश्य

कार व अन्य वाहनों के निर्माण में उपयोग में लाये जानेवाले ग्लेबनाइज्ड स्टील का उपयोग किया जाता है. इसे तैयार करने करने के क्रम में इंटरफेस परत को बनाने पर एचडीपीएस अध्ययन करेगा. वाहनों की बाँड़ी को जंक से बचाने के लिए स्टील पर की जानेवाली ग्लेबनाइजिंग (जिंक की कोटिंग) में प्रोसेस पैरामीटर के प्रभावों का अध्ययन किया जा सकेगा.

साथ ही उसे और भी बेहतर, गुणवत्तापूर्ण व प्रभावी बनाने की तकनीक विकसित करने में सहायता मिलेगी. यह राज्य में दूसरा एचडीपीएस है. इससे पूर्व रांची में स्थापित किया जा चुका है.

Source:

Prabhat Khabar

Also Published in:

Avenue Mail, Dainik Bhaskar, Dainik Jagran, India today

Moreover, the simulator will also be available for standard GI/GA coating processes as well as for the complex, highly advanced thermal treatment simulation to cater to the latest research requirements for thermal treatment and coating of AHSS and other steel grades needed by automotive industry.

While delivering his inaugural address, Dr. Mukherjee highlighted the importance of AHSS in the automobile sector and the future prospects of good quality steel products in the world.

He emphasised that “Make in India” initiative of the Govt. of India would push the country to be one of the largest producers of the automotive grade high strength steels.

He said that the HDPS installed at CSIR-NML, Jamshedpur, will help the steel industries in developing good quality adherent coating for advanced high strength steels, which will enable the Indian industries to compete with the reputed manufacturers across the world.

He opined that the installation of the HDPS at CSIR-NML is just a milestone and it requires further efforts from the laboratory as well as the Indian industries to achieve pioneering results in the coming future.

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Source: bit.ly/2j7RYEf

NGRI starts work to identify sink holes in Secunderabad

Lab Covered: CSIR-NGRI

4th January 2016



*NGRI in collaboration with HMWSSB have launched a project to analyse reasons of road damage.
Photo: Surya Sridhar*

Hyderabad-based National Geophysical Research Institute (NGRI) in collaboration with Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) have launched a project to identify road stretches that are vulnerable to sewerage leaks, which cause formation of huge sink holes.

On Tuesday, an initiative to identify such weak points was launched along the four-kilometre Kalasiguda sewerage pipeline, which extends from Garden Restaurant in Secunderabad to Minister Road.

The water board officials have already identified several probable ‘weak’ zones along the Kalasiguda stretch and NGRI researchers through their tests of the underground sewerage pipelines will try to detect and confirm the exact points of leakage of the pipelines in the stretch.

The NGRI team started its work to study the underground pipelines near the huge sink hole that was formed near Kamat Hotel in Secunderabad.

To avert any untoward incident in the future, the water board officials said that NGRI would facilitate identification of weak zones, so that they can be repaired at the right time by the HMWSSB.

Published in:

Avenue Mail **Source: bit.ly/2itwYqv**

Also Published in:

Telangana today **bit.ly/2iTjaGV**

The Hindu **bit.ly/2i8CtNT**

Moderate intensity quake may result in collapse of Odisha's Konark temple!

Lab Covered: CSIR-CBRI

31st December 2016

A moderate intensity earthquake might cause damage to the 13th century world famous Sun Temple in Odisha's Konark, experts opined.

The findings of a study conducted by the Roorkee-based Central Building Research Institute (CBRI) have cast apprehensions over the stability of the structure.

As per reports, the sand filled inside the Jagamohana of the 800-year-old world famous Konark temple has slumped almost four feet than its prior level.

The members of Konark Working Group have raised concerns over the conservation of the Black Pagoda.

“It is experimentally proved that the sand inside the Jagamohana has slumped, besides the beams and some stone blocks are in suspended state. It cannot be ruled out that couple of stones would not have dislodged in the last decade. If an earthquake of 6 or 6.5 magnitude on Richter scale occurs in the area then we cannot say what damage it would cause to the Sun Temple,” Konark Working Group member, NC Pal expressed.

The CBRI had conducted an endoscopic photography of the historic monument to ascertain the condition of the world heritage site's interiors and also to ensure its proper conservation and safety.

The 3-D laser scanning revealed that stones have dislodged from inside and found fallen on the ground. Besides, the iron beam erected to support the structure from inside has also caved in.

“There are four holes measuring around 18 inch width and 12 inch high having two stones in the ceiling. The stones might fall from the top if an attempt is made to widen the holes, which is risky. In view of this, an entry point has to be opened from the western side of the temple as it was in the main temple,” Bijay Kumar Rath, another member said.

Of the three levels inside Jagamohana, the sand level has gone down by two levels. The British era beams have also destabilized. The digitized references have clearly indicated those, they added.

It may be mentioned here that Jagamohana was filled with sand during the renovation of the temple in 1903 under instructions of then Lt Governor of Bengal JA Bourdillon. The four entrances to the structure were sealed off and its inside filled with sand so as to prevent the structure from collapsing.

Notably, the research institute last year had also carried out a 3-D laser scan of the monument using a Ground Penetrating Radar (GPR). Five robotic cameras were inserted to the temple’s interior from four sides through its wall and also from the temple’s top.

The 3-D scan gives a clear, digital picture of the entire layout and structure of the temple.

Meanwhile, an organisation leading a movement for conservation of the edifice has called for immediate attention to its restoration.

“The state government should intervene into the matter immediately and place demands to undertake remedial measures for conservation of the world heritage site,” said Ramakrushna Mohanty, Secretary of Konark Suraksha Samiti.

Published in:

Odishauntimes

Source: bit.ly/2hEIVNP

‘Nexus Conference’ to take place in Mumbai

Lab Covered: CSIR-NEERI

5th January 2016

Keeping in mind the need for stakeholders to deliberate upon measures that need to be adopted to overcome shortage of water, Govardhan Eco Village in association with National Environmental Engineering Research Institute (NEERI) and Shree Halari Visa Oswal Commerce College (SHVOCC) is organising National Eco Conference titled ‘Nexus Conference’ in Mumbai.

The theme of the conference is ‘eco-ethical integrated sustainable solutions for water crisis’. The objective is to pool in ideas on integrated sustainable solutions for the water crisis from renowned speakers, practitioners and leaders and cast them into working solutions for a sustainable and synergistic future for all of us. The conference will be held on January 7th, 2017 at BSE International Convention Hall, Mumbai and will include stimulating discourses, deliberation and dialogue in line with this theme.

The keynote speakers and panelists at the conference include Sushri Uma Bharati Union Cabinet Minister of Water Resources, Babanrao Lonikar Ji Minister of Water Supply and Sanitation, Government of Maharashtra, Rajendra Singh The Water Man of India, H H Radhanath Swami Founder, Govardhan Ecovillage, Madhur Bajaj Vice Chairman and whole-time Director of Bajaj Auto Limited, Rakesh Kumar Director, CSIR-NEERI and several other dignitaries representing the Government, Industry, Academia, as well as environmentalists. The conference is expected to have more than 600 delegates participating from the Government, entrepreneurs, professors, students, environmentalists and activists.

Govardhan Eco Village (GEV) is a model farm community and retreat center, 108 Km South of Mumbai. GEV highlights the importance of spiritual ecology: the need for us to live in harmony with ourselves, nature and the sacred. NEERI is a constituent of Council of Scientific & Industrial Research (CSIR), New Delhi and has a nation-wide presence with its five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai. SHVOCC is affiliated to University of Mumbai. College is imparting education mainly in Commerce and allied field and catering to the needs of students in Bhiwandi area.

Published in:

Free Press Journal

Source: bit.ly/2iYaRvV

Noida-Greater Noida Expressway exit points to be redesigned

Lab Covered: CSIR-CRRI

4th January 2016

Vinod Raput

The four entry/exit points (two on each side) in sectors 108 and 128 on Yamuna Expressway witness large-scale traffic congestion. Officials said the faulty design of the entry/exit points is the reason behind the frequent jams

The chief executive officer of the Noida authority on Wednesday reviewed the design of entry/exit points of the Noida-Greater Noida Expressway near Sector 108 during the morning peak hour to check traffic flow. The CEO said the decision to change the design was taken as commuters were complaining of traffic congestion.

Following a series of accidents on the expressway, the authority, in July 2013, had roped in CRRI to conduct a safety audit. CRRI had submitted a detailed report on ways to make the expressway safer by making changes to the central verge, entry/exit points and greenbelt. However, CRRI's suggestions were not implemented properly and this is affecting traffic flow on the road, officials said.

On December 26, 2016, the CEO had directed the civil engineering department to make some modifications to the design of the entry/exits in consultation with the Central Road Research Institute (CRRI) to ease traffic congestion on the expressway due to faulty design.

The CRRI is inspecting the entry/exit points to suggest changes for reducing traffic congestion.

“We are yet to finalise the design of the entry/exits because CRRI will take one month to submit its report pertaining to the design. Our officials made small changes to the entry/exit points near Sector 108 on the expressway to give temporary relief to commuters. I inspected the design and we will change it once CRRI gives its report,” Agarwal said.

In the inspection, Agarwal observed that there is large-scale traffic congestion on the four entry/exit points (two on each side) in sectors 108 and 128.

Following the safety audit in 2013, the CRRI had also suggested that the authority installs the intelligent traffic management system (ITMS) on the expressway. The authority spent ₹26 crore on the project and it was started in January 2015.

“Traffic congestion on a stretch between Sector 108 and Mahamaya Flyover has become a common feature during the peak hour. I do not think the hi-tech system (ITMS) has made any difference to traffic management on the stretch,” Tikam Singh of Sector 126 said.

Published in:

Hindustan Times

Source: bit.ly/2iKPQ7S

Indigenous herbal offerings poised to become big biz

Lab Covered: CSIR-CIMAP

2nd January 2016

Would the Patanjali Ayurved brand which is making fast forays into the market prove to be a game changer for under-tapped indigenous medicinal and aromatic plants segment? The multitude of ayurvedic products ranging from healthcare and nutrients to cosmetics produced from home-grown resources being aggressively promoted by Patanjali have the markings of giving multinational companies a run for their money.

Though it is too early to gauge the credentials and efficacy of Patanjali products, one major positive that is likely to emerge from the rising popularity of the Patanjali brand is the resultant boost to credibility and marketability of products sourced from Indian medicinal and aromatic plants.

In a recent development, The Central Institute of Medicinal and Aromatic Plants (CIMAP) have been approached by Patanjali Ayurved for sourcing scientifically identified and validated plants. CIMAP is India's premier research institution involved in developing commercially viable varieties of herbs grown in the country in addition to promoting their cultivation among the farmers.

A memorandum of understanding (MoU) is on the anvil between the CIMAP and Patanjali. Disclosing this to The Hans India, Dr. J. Kotesch Kumar, Scientist-in-charge, CIMAP, Hyderabad, informed that Patanjali evinced interest in procuring the plant varieties being developed and promoted by the Institute. "On our part we are prepared to promote the cultivation of various varieties, especially aloe vera and aswagandha and facilitate the procurement in accordance with Patanjali's requirement.

But this could be done only if the company provides market guarantee and assurance.” Such a collaboration assumes significance considering the fact that the lack of a systematic and established supply chain had proved to be a big impediment in promoting growth of herbal plants and products.

Though, something concrete has yet to evolve in terms of collaboration or a tie-up, such an eventuality would definitely provide impetus to the productivity and image of the Indian medicinal and aromatic plants. Speaking about the endeavours of CIMAP in promoting cultivation of these plants among the farmers in Andhra Pradesh and Telangana, Dr. Kotesch said the Centre had introduced' new aswagandha variety known as 'Poshita' in Kurnool and Anantapur in Andhra Pradesh. This variety was sown only on four acres in 2004 when it was introduced.

Now it is being cultivated on 10,000 acres. In Telangana we are introducing the new turmeric variety known as CIM-Pitamber, which was released earlier this year by the Prime Minister. According to Dr Kotesch, one of the major reasons for the farmers not taking up cultivation of these plants is the lack of marketing avenues and support. Telangana, in fact, is ideal terrain for medicinal and aromatic plants, due to its dry and rainfed nature of soil. But, there are not many takers because of lack of awareness about these plants and also non-availability of marketing avenues.

Perhaps, with such campaigns akin to the strategies unleashed by Patanjali to create market presence and demand, and consequently more players jumping into the fray, scientifically produced indigenously sourced and produced herbal offerings can mean big biz not only in the country, but also abroad.

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Hans India

Source: bit.ly/2itkRKh

Dr Anil Koul appointed Director IMTECH

Lab Covered: CSIR-IMTECH

31st December 2016

The Government of India has ordered appointment of Dr Anil Koul as the Director for Institute of Microbial Technology (IMTECH), a non-profit research institute of CSIR, located in Chandigarh.

Dr Anil Koul is a distinguished Belgium-based Indian scientist. He will be the first such Indian scientist to officially return after two decades to the country. Presently, he is a senior Director and head, Respiratory Infectious Diseases Group Janssen Pharmaceutical Companies at Belgium.

He is likely to join the new assignment in mid- January He will work closely with India's Ministry of Science and Technology and with a rank of Additional Secretary, Government of India.

IMTECH is a non-profit research institute with around 300 research scientists focused on microbial research. This appointment stands to enable IMTECH to translate its basic biomedical research into early products and technologies with a greater emphasis on collaborative industrial research.

Dr Anil Koul is an internationally recognized scientist with several publications/ patents. He had his Ph.D. studies at the Max Planck Institute in Germany and in 2004 he joined the Janssen Pharmaceuticals in Beerse.

Dr Koul has been involved in the discovery and clinical development of Bedaquiline -a wonder drug for tuberculosis. It was introduced in the country's TB control programme under Revised National Tuberculosis Control Programme in March this year.

Published in:

Daily Excelsior

Source: bit.ly/2jslN4m