

CSIR in Media



75 Years of

CSIR Touching Lives

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Private sector can't match PGI's talent, says Dr Sahni

CSIR

17th July 2017

Dr Girish Sahni, Secretary, Department of Science and Industrial Research, said, "In the next 10 years, the PGI will help in shaping 20 similar institutes of its kind." He said the talent found in this institute would not be found in private sector.

Dr Sahni was here to give a lecture on the Foundation Day function of the PGI.

While addressing the new resident doctors joining the PGI in the July session for MD/MS/DM/Mch courses, Dr Sahni emphasised on the spirit of unity and team work for entrepreneurship, to do research to create a product beneficial for a common man.

He said the goal had to be from observation to discovery, from discovery to invention, from invention to innovation and finally value creation. "If all doctors, scientists, researchers and the industry work together, we will come up with solutions for various diseases and affordable medical care", said Dr Girish Sahni, who is also Director General, Council of Scientific and Industrial Research.

While appreciating the PGI's contribution to the country, he said the PGI, with its high quality medical care, had been serving the poorest of poor and millions of lives had been touched, saved and transformed.

Earlier Prof Jagat Ram, Director, PGI, introduced the chief guest and informed the audience about the latest developments in the institute. “The institute has many state-of-the-art facilities for patient care which are comparable with any best medical institutes in the world. Our transplant programme has taken a giant leap in recent years,” he said.

He further said, “A few days ago, a team of doctors and support staff conducted the country’s first lung transplant in the public sector in a complex operation spanning over 12 hours.” He said the medical institution was accessible to the lowest strata of society. Many families have generously donated various organs of their deceased loved ones. PGI employees were also honoured on the occasion by the chief guest, Dr Sahni, for outstanding work in their field.

Published in:

[Tribune](#)

PRSC signs MOU with CSIR-CSIO

CSIR-CSIO

17th July 2017



Access to clean water, air and safe food is indispensable to any country or an individual. Yet, to manage these aspects poses great scientific challenge. To address challenges in these domains, The Central Scientific Instruments Organisation (CSIO) on recently signed a Memorandum of Understanding (MoU) with Punjab Remote Sensing Centre (PRSC) for collaboration in the areas of developing sensor-systems and the use of geospatial technology in natural resource management and other areas in order to provide an end-to-end solution to real world issues such as water and food security.

The MoU was signed by Prof R K Sinha, Director, CSIO, Chandigarh and Dr. Brijendra Pateriya, Director PRSC, Ludhiana. The MoU signing ceremony was attended by scientists from both the institutions. The lead coordinating scientists Dr. Babankumar Bansod from CSIO and Dr R K Setia from PRSC stated that the purpose of the MoU is to collaborate and share resources for academic and research purposes in the area of development and validation of sensors for management of water and agricultural (including soil and crop) resources, the use of geospatial technology and spectroscopic techniques in natural resource management and other areas. This will lead to develop a decision support system for helping farmers to increase crop productivity, and providing near real-time information about water quality by fusion of remote sensing technology, data analytics and sensor based data aggregation.

The scope of the MoU also involves sharing of expertise, domain knowledge and available facilities, publication of research papers in international journals, the exchange of staff for research programmes and jointly writing books in the areas listed or in any other area of mutual interest.

Published in:

PSU Connect

Fluctuation in rain affecting India's weather pattern: NIO scientist

CSIR-NIO

18th July 2017

Erratic rain this season has left many wondering when the showers are likely to intensify. Some days there is active rain with intense showers while on others prolonged breaks call for a humid day. This fluctuation of intense rain and prolonged breaks is affecting the rain pattern in India, said Ramesh Kumar, chief scientist at National Institute of Oceanography, Goa.

He was speaking at Museum of Goa (MoG) on Sunday on 'Weather and Climate of India'. Kumar stated that one of the factors for prolonged breaks this season is due to moisture transfer moving away from the peninsular area of India during the monsoon.

"The temperature has warmed by almost one degree celsius in the past 57 years. This is a substantial increase which has resulted in more moisture coming out in to the eastern equatorial Indian Ocean. This is one of the reasons for the prolonged breaks in monsoon," he said.

Elaborating further he explained that within a monsoon cycle there are several active and break spells. Of 122 days (June 1 to Sept 30) it does not rain every day in the same manner. Some days heavily; this condition is called active monsoon condition. On other days, there is no rainfall on most part of the subcontinent, except Tamil Nadu and the foothills of the Himalayas. Such a condition is called break in monsoon condition.

Studies by NIO reveal that this erratic pattern started in the past few decades, and has continued ever since.

Kumar further added that the prolonged break is an unfavourable weather condition. We require spatial and temporal distribution of rainfall throughout the season for a stable climate. "The peak monsoon period is from July to August wherein 61% of rainfall occurs. We can hope that the rain showers are continuous during this period so that there is some stability in the pattern," he added.

Published in:

[TOI](#)

CSIR

16th July 2017

Kendriya Vidyalaya Sangathan inks MoU with CSIR



Kendriya Vidyalaya Sangathan and Council of Scientific and Industrial Research have joined hands by signing an MoU. The MoU was signed by KVS Commissioner Santosh

Kumar Mall and CSIR DG Dr. Girish Sahni in the presence of Union HRD Minister Prakash Javadekar and Minister for Science and Technology Dr. Harsh Vardhan.

Published in:

Hindustan Times, Page 20

Amar Ujala, Page 7

Vaigyanik Drishtikon

CSIR-IHBT

11th July 2017

आइएचबीटी पालमपुर में जिज्ञासा कार्यक्रम का शुभारंभ

संवाद सहयोगी, पालमपुर : हिमालय जैवसंपदा प्रौद्योगिकी संस्थान (आइएचबीटी) में सोमवार से 14 जुलाई तक जिज्ञासा कार्यक्रम का आयोजन किया जा रहा है। जिज्ञासा छात्रों व वैज्ञानिकों का परस्पर संपर्क कार्यक्रम है। यह वैज्ञानिक एवं औद्योगिक अनुसंधान परिषद और केंद्रीय विद्यालय संगठन में छह जुलाई को एक समझौते के तहत आयोजित किया जा रहा है। जिज्ञासा की पहल सीएसआइआर-आइएचबीटी की ओर से प्लेटिनम जुबली समारोह के एक भाग के रूप में हुई है। इस कार्यक्रम में विद्यार्थियों के लिए आवासीय कार्यक्रम, वैज्ञानिक एक शिक्षक और शिक्षक एक वैज्ञानिक के रूप में, प्रयोगशाला गतिविधियां और ऑनसाइट परीक्षण, वैज्ञानिकों की ओर से स्कूल का दौरा, विज्ञान और गणित क्लब, व्याख्यानमाला, छात्रों के लिए शिक्षा कार्यक्रम, विज्ञान प्रदर्शनियां, शिक्षक कार्यशाला, टिकरिंग लेबोरेट्रीज व राष्ट्रीय बाल विज्ञान कांग्रेस की परियोजनाएं आदि



आइएचबीटी पालमपुर में आयोजित जिज्ञासा कार्यक्रम में भाग लेते विद्यार्थी • जागरण

शामिल हैं। कार्यक्रम का शुभारंभ संस्थान निदेशक डॉ. संजय कुमार ने किया जबकि केंद्रीय विद्यालय पालमपुर के प्रधानाचार्य ललित कुमार विशेष तौर से शामिल रहे। कार्यक्रम में वैज्ञानिक डॉ. ओपी शर्मा ने मुख्य वक्ता के रूप में व्याख्यान दिया।

मुख्य अतिथि निदेशक डॉ. संजय कुमार ने बताया कि सप्ताह तक चलने वाले इस कार्यक्रम में 11वीं कक्षा के छात्रों को जैव प्रौद्योगिकी, जैव सूचना विज्ञान, प्राकृतिक उत्पाद और सिंथेटिक रसायन शास्त्र के क्षेत्र, अंतरराष्ट्रीय स्तर पर मान्यता प्राप्त

वनस्पति संग्रहालय, सुदूर संवेदन और मानचित्रण सुविधाएं, एनिमल हाउस सुविधा, न्यूट्रास्यूटिकल के लिए पायलट प्लांट, सुगंधित तेल और हर्बल निष्कर्षण जैसी अत्याधुनिक प्रयोगशालाओं का भ्रमण करवाया जाएगा।

स्कूल स्तर के विशेष प्रयोग होंगे डिजाइन

संस्थान के वैज्ञानिकों की ओर से स्कूल स्तर के विशेष प्रयोगों को डिजाइन किया जाएगा, ताकि बच्चों को नवीनतम वैज्ञानिक तकनीक और वैज्ञानिक उपकरणों के कामकाज करने के लिए प्रशिक्षण दिया जा सके। इसका उद्देश्य छात्रों में वैज्ञानिक दृष्टिकोण को विकसित करना है।

जिज्ञासा पैदा करेगी वैज्ञानिक दृष्टिकोण

जिज्ञासा कार्यक्रम के अंतर्गत आइएचबीटी विद्यार्थियों में नवीनतम वैज्ञानिक तकनीकों, हैंड ऑन ट्रेनिंग, प्रतिष्ठित वैज्ञानिकों के व्याख्यानों से वैज्ञानिक दृष्टिकोण विकसित करेगा। छात्रों को नवोन्मेषी परियोजनाओं को लेने और विज्ञान को करियर के रूप में अपनाने के लिए भी प्रेरित किया जाएगा।

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Dainik Jagran

Also Published in:

Punjab Kesari
Amar Ujala
Dainik Jagran

Platinum Jubilee 1942-2016



महिलाओं को बड़ी राहत : ब्रेस्ट कैंसर से बचाएगी 'सहेली' और 'छाया'

CSIR-CDRI

14th July 2017

महिलाओं के लिए डबल फायदे वाली खबर। गर्भ निरोधक दवा सेंटक्रोमॉन अब स्तन कैंसर के खिलाफ भी कारगर साबित होगी। केंद्रीय औषधि अनुसंधान संस्थान (सीडीआरआई) की रिसर्च में सेंटक्रोमॉन को ब्रेस्ट कैंसर के तीसरे और चौथे चरण के इलाज में काफी प्रभावी पाया गया है। इस रिसर्च के बाद सीडीआरआई ने दवा में मामूली तब्दीली के बाद बाजार में उतारने का फैसला किया है। फिलहाल विकसित फार्मूले के साथ दवा की बिक्री के लिए ड्रग कंट्रोलर से इजाजत मांगी गई है।

सहेली और छाया के नाम से लोकप्रिय है सेंटक्रोमान

गर्भनिरोधक दवा के तौर पर सेंटक्रोमॉन को लखनऊ स्थित केंद्रीय औषधि अनुसंधान संस्थान (सीडीआरआई) में ही विकसित किया गया था।

सीडीआरआई के निदेशक डॉ. मधु दीक्षित ने बताया कि सहेली और छाया के नाम से मशहूर सेंटक्रोमॉन दवा में वैज्ञानिकों ने एंटी कैंसर एजेंट को पहचाना है। इस पहचान के बाद सेंटक्रोमॉन का ब्रेस्ट कैंसर से पीड़ित कुछ महिलाओं पर टायल किया गया और नतीजे सकारात्मक हासिल हुए।

डॉ. दीक्षित ने दावा किया कि पीड़ित महिलाओं में तीसरे-चौथे चरण का कैंसर होने के बावजूद काफी सुधार नजर आया है। गौरतलब है कि सेंटक्रोमॉन बाजार में 'सहेली' के नाम से उपलब्ध है, जबकि 'छाया' के नाम से इस दवा का सरकारी स्तर पर मुफ्त वितरण किया जाता है। पिछले वर्ष इस दवा को राष्ट्रीय फैमिली प्लानिंग प्रोग्राम में शामिल किया गया है।

स्टेरायड मुक्त है सेंटक्रोमान, महिलाओं को नहीं करती नुकसान

केंद्रीय औषधि अनुसंधान संस्थान (सीडीआरआई) द्वारा विकसित गर्भ निरोधक दवा सेंटक्रोमान पूरी तरह से स्टेरायड मुक्त है। स्टेरायड मुक्त होने के कारण बतौर गर्भ निरोधक इस्तेमाल करने पर सेंटक्रोमान महिलाओं को नुकसान नहीं करती है। गौरतलब है कि मानव निर्मित स्टेरायड के ज्यादा इस्तेमाल से हृदय रोग होने के साथ-साथ लीवर और किडनी फेल होने का खतरा रहता है। सीडीआरआई ने इस दवा को बाजार में उपलब्ध कराने के लिए हिंदुस्तान लेटेक्स लिमिटेड और टोरेंट फार्मास्यूटिकल्स को लाइसेंस दिया गया है।

Published in:

[Patrika](#) Dainik Jagran

Global rice processing facility to come up in Mysuru

CSIR-CFTRI

18th July 2017

Rice milling and processing may soon get a new dimension with the Mysuru-based Central Food Technological Research Institute (CFTRI), a premier CSIR laboratory, in the process of establishing a state-of-the-art global rice processing facility on its premises here.

It will be Asia's first institution where the best practices of rice milling with a focus on dealing with by-products, mainly bran, to prevent its waste, will be taught.

The institute aims to create skilled manpower in the area of rice processing with the new facility, which is similar to International School of Milling Technology (ISMT) that started functioning over three decades ago.

Annual training

According to CFTRI, around 600 working professionals and entrepreneurs will be trained annually at the Global Rice Processing facility. Paddy growers will also be trained as part of Skilling India.

One of the key visions of the institute has been to create a sustainable agriculture sector through many innovative products and services by supporting the livelihood of marginal farmers and rural entrepreneurs in the country with the help of its expert faculty and over six decades of R and D efforts.

Ram Rajashekar, director, CFTRI, told The Hindu that rice milling becomes unfinished if bran and other components are not utilised. Bran is rich in oil and fibre and our idea is to make bran industrially viable, imparting the know-how to the people in the milling industry, he explained.

Prof. Rajashekar, who has been nominated as chairman of the South Asian Regional Standards Organisation (SARSO) which has its headquarters in Dhaka, Bangladesh, described the effort on rice processing as an ‘academic’ and ‘industrial’ venture. SARSO is a Specialised Body of SAARC.

After China, India is the second largest rice producer in the world with about 106 million tonnes of paddy produced annually. “Imagine the volume of bran rice milling generated in the country with such a large production of paddy. If 10% of bran was processed, it will have generated a lot of revenue,” he explained.

Flour milling industry

CFTRI hopes to develop the global rice processing centre along the lines of ISMT, which offers regular courses, and was established as a joint Indo-Swiss venture, and the Roller Flour Millers Federation of India project during 1981 to serve the needs of flour milling industry in India and other developing countries with regard to training in flour milling technology.

Qualitative change

People from countries such as Bangladesh, Cambodia, Ghana, Kazakhstan, Mongolia, Nepal, Nigeria, Oman, The Philippines, Sri Lanka, Syria, United Arab Emirates and Vietnam, have been trained at ISMT and many of them have served in various roller flour mills in India and also in their respective countries. “There has been a qualitative change in the working of these mills as per the feedback received from the milling industry,” CFTRI sources said.

Published in:

[The Hindu](#)

CM: Tenders for Bainguinim, Verna waste plants by Sept

CSIR-NEERI

18th July 2017

Chief minister Manohar Parrikar on Monday said that National Environmental Engineering Research Institute (NEERI) will conduct the environmental impact assessment for the Bainguinim and Verna solid waste treatment plants and that both the projects would be tendered by September.

Speaking at corporation of the city of Panaji, Parrikar urged CCP to pass a resolution and hand over the land to the Goa waste management corporation as soon as possible.

"NEERI has been appointed to prepare the environmental assessment report and in another two months they will conduct a public hearing. By September, tendering will start for the plant at Bainguinim and Verna. So, maybe, by December

2018, the plant will start," Parrikar said.

The Bainguinim waste management facility will cater to garbage from municipal areas in North Goa together with waste generated by the city and part of Ponda. The facility is proposed to be set up with funds from the Union ministry of urban development along with a contribution from the state government under the Swachh Bharat Mission.

The state government in 2006 had issued a notification for land acquisition at Bainguinim and in 2008, land was awarded measuring 1.75 lakh sqm to CCP. In a recent meeting, Parrikar asked CCP to hand over the land to the solid waste management corporation.

Parrikar also informed the councilors that the garbage treatment facility behind Heera petrol pump was being completed with discussions to introduce a new technology for decomposition of biodegradable waste.

"It is a new technology that does not require power, it just uses triple membrane cover which causes a reaction which leads to high temperature due to which the decomposition increases and in 16-18 days the waste is turned to compost. It can handle around 5 tonnes of garbage per day," Parrikar said.

Published in:

[TOI](#)

Indian scientists suspect genetic diseases could be linked to the tradition of marrying within caste

CSIR-CCMB

19th July 2017

The occurrence of genetic diseases in certain subpopulations in India and other countries in South Asia is well known. Indian scientists suspect that this could be due to genetic isolation caused by endogamous marriages over generations.

Endogamous marriages — meaning people marrying within a subpopulation based on caste, gotra, language or culture — lead to reduced genetic variation. They are different from marriages among close relatives (consanguineous marriages) — a practice also prevalent in parts of South India.

In genetics, the phenomenon of a small number of ancestors giving rise to many descendants is known as 'founder event' or a population

bottleneck. A study of anthropologically different subpopulations in South Asia has revealed that many of them are a result of strong 'founder events'. In each of such groups, large stretches of DNA originates from a common founder in the last about 100 generations.

There is less genetic variation because these subpopulations have lived in genetic isolation despite co-living with other groups for centuries due to various factors including caste. Such populations are vulnerable to recessive genetic diseases (in which an offspring gets disease-causing genes from both parents). This risk, researchers say, is very different from that due to marriages among close relatives.

The study, led by scientists at Hyderabad-based Centre for Cellular and Molecular Biology (CCMB), appeared in scientific journal Nature Genetics on Tuesday. Scientists analysed samples from over 2800 individuals from over 275 distinct South Asian populations belonging to various social and linguistic groups from India, Pakistan, Nepal, Sri Lanka, and Bangladesh. They developed an algorithm to quantify impact of ‘founder events’ in each group based on stretches in DNA shared from a common founder over generations.

“We found that 81 out of 263 unique South Asian groups, including 14 groups with estimated census sizes of over a million, have a strong founder event,” said Dr Kumarasamy Thangaraj, who led the study along with David Reich of Harvard Medical School.

These large population groups with founder events include Gujjar (Jammu and Kashmir), Baniyas (Uttar Pradesh), Pattapu kapu (Andhra Pradesh), Vadde (AP), Yadav (Puducherry), Kashtriya Aqnikula (Andhra Pradesh), Naga (Nagaland), Kumhar (Uttar Pradesh), Reddy (Telangana), Kallar (Tamil Nadu), Brahmin Manipuri (Manipur), Arunthathiyar (Tamil Nadu) and Vysya (Telangana).

Researchers have highlighted the problem through example of Vysya population which has size of more than three million. The Vysyas have about 100-fold higher rate of a metabolic disorder called Butyrylcholinesterase (BChE) deficiency compared to other groups. Such people are highly sensitive to anesthesia administered prior to surgery.

“The next step would be to identify specific recessive diseases among various subpopulations and identify genes responsible for them,” Dr Thangaraj told India Science Wire.

The research can have significant public health applications, as has been done with some population groups like Ashkenazi Jews, Finns, Amish, Hutterites, Sardinians, and French Canadians in the West. Once recessive genetic diseases specific to different groups are mapped, preventive steps like prenatal testing, premarital counseling and screening can help decrease burden of such diseases in communities.

The team of researchers came from Columbia University; Broad Institute of Harvard and Massachusetts Institute of Technology; Manipal University; Centre for Human Genetics, Bangalore; Mangalore University; Fetal Care Research Foundation, Chennai; Amity University, Noida; Genome Foundation, Hyderabad; Anthropological Survey of India, Kolkata; and Birbal Sahani Institute of Paliosciences, Lucknow. The research was funded by Department of Science and Technology (DST), Department of Biotechnology (DBT), Indian Council of Medical Research (ICMR).

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[First Post](#)