# CSIR in Media



News Bulletin

1<sup>st</sup> to 10<sup>th</sup> April 2019







#### CSIR-NEERI

9<sup>th</sup> April, 2019

Printed from
THE TIMES OF INDIA

#### Nagpur's 1st waste management park at Neeri

TNN | Apr 9, 2019, 01.01 PM IST



NAGPUR: On its 61st foundation day, the National Environmental Engineering Research Institute (Neeri) dedicated the first-of-its-kind 'Waste Management Park' to the city.

Conceptualized by Neeri director Rakesh Kumar and Atya Kapley, head of director's research cell, the park has been built in partnership with Anasuya Kale Chhabrani and Shefali Dudhbade of NGO Swachh Association. It was inaugurated on Monday morning by Shekhar Mande, director general of Council of Scientific and Industrial Research (CSIR) and other dignitaries.

Aimed at creating mass awareness about importance of reuse, recycle and segregation of waste, the park itself is an exemplary of 'best out of waste'. All the eye-catching artefacts have been prepared from discarded items from Neeri's campus. "We have re-used various scrap items to create the park. Our intention is to educate public on the different types of waste and how to segregate them," said Kapley.

Whether it's a water fountain created from a waste laboratory sink, a walking bridge built with discarded water pipes, artefacts made from scrapped iron or flower beds made from broken slides and discarded timber – every attractive thing inside the park comes from waste.

The park has an exhibit area inside a hut which highlights what citizens can do to reduce waste generation. "Using one bamboo toothbrush is equivalent to four tooth brushes, one reusable bag is the same as using 170 plastic bags, one metal straw is equal to using 540 plastic straws," a board states.

As per the information displayed in the park, an average person generates 500-grams to one kilogram of solid waste daily. Another exhibit area provides detailed information about wet, dry, hazardous and e-waste.

Neeri is aiming at expanding the park by building more informative huts. The institute also plans to keep it open for the general public.

#### Published in:

The Times Of India



### Study of AYUSH drugs must involve domain expert, says AYUSH advisory

#### CSIR-IGIB



The Ministry of Ayurveda, Yoga Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) has issued an editors of medical and scientific journals. It advisory on April 2 asking all non-AYUSH is not clear how the Ministry would be able researchers and institutions to "involve to enforce this on editors, particularly editors appropriate expert/institution/research of international journals. council of AYUSH" while carrying out any According to the advisory, research papers "scientific study, clinical trial or intervention" and scientific studies on AYUSH drugs and using AYUSH drug or treatment. The treatments have been "published by noninvolvement of AYUSH experts is also AYUSH scientists/researchers with needed for "vetting of the publication" [that unfounded statements and conclusions to arises from the research for its "outcomes and findings". Though the note is an advisory researchers in modern medicine, it concludes with, "are urged to take note of the

8<sup>th</sup> April, 2019 advisory for compliance" thus making it mandatory to involve an expert for carrying out research on AYUSH systems of medicine.

#### Enforcement issue

The advisory has been issued in order to "protect [the] public image of AYUSH" and to "prevent incorrect, arbitrary and and ambiguous statements and conclusions about

> damage the credibility and sanctity of the whole system". It says that such studies have been carried out by non-AYUSH researchers without involving qualified AYUSH experts.



#### 'Cannot jeopardise AYUSH potential'

Further, "arbitrary statements and unfounded conclusions in the scientific studies and research publications related to AYUSH" cannot be allowed to jeopardise the potential and scope of AYUSH in public healthcare and distract or dissuade people from resorting to AYUSH. "I am quite disturbed by this notification. If such curbs are placed on researchers and research journals, it has a bad portend," says Subhash C. Lakhotia of Banaras Hindu University, Varanasi. He has been working to understand the mechanism of action of some standard Ayurvedic rasayanas. "If we want to get results as desired by AYUSH ministry or AYUSH practitioners, then that is not research," asserts the professor.

#### A knowledge black box

While he concurs that it is desirable to involve AYUSH experts in a study, he is peeved that it is now being made mandatory. "How can the Ministry insist that every study should involve an expert? It should be left to the choice of the researchers," he says. He believes that the need of a domain expert would be context-dependent and should not be a mandatory requirement in every case. The domain expert has to be a collaborator rather than a monitor, says Prof. Lakhotia.

According to him, Ayurveda as currently practiced remains a black box. Unless people from other fields contribute to its understanding, it will only worsen the situation. "The way Ayurveda has been practiced is not evidence-based but largely remains experience-based. Only good quality, unbiased research can provide the evidence for or against what has been believed. Results of such studies may even change some of the basic principles. Any domain of knowledge has to remain dynamic and results/opinions contrary to the so-called established view must not be rejected and taken as damaging the credibility," explains Prof. Lakhotia.



#### Different views

However, Dr. Mitali Mukerji, scientist at the Institute of Genomics and Integrative Biology (CSIR-IGIB) who has been studying the principles of Ayurveda for over a decade says it is essential to collaborate with an Ayurveda expert while carrying out a scientific study. Taking a closer scientific look at Ayurvedic medicine using modern technologies should be in the interest of all stakeholders — patients and doctors and researchers - says the researcher. "I have gained much by collaborating with Dr. Bhavana Prasher an Ayurveda expert and scientist at IGIB," shares Dr. Mukerji.

"Any research work on Ayurveda drug or treatment should involve an Ayurveda expert. A domain expert is necessary. What is wrong in that?" questions Dr. Samir K. Brahmachari, former Director General of the Council of Scientific & Industrial Research (CSIR) and founding Director CSIR-IGIB.

#### Published in:

The Hindu

7<sup>th</sup> April, 2019



#### Students of Al-Kabir Polytechnic visits NML

CSIR-NML



Mechanical Engineering Diploma, III year personnel at the R&D Laboratory. Dr. A.K. from Al-Kabir Polytechnic, Jamshedpur accompanied by two faculties Prof. Tejpal of thanks. S.N. Hembram, Sr. Technical Singh and Sumit S. Minz visited CSIR- Officer helped students for a lab. National Metallurgical Laboratory, visit. FizanAlam was astonished to know Jamshedpur and interacted with scientists and first time about NML and minutely observed research scholars this morning under the the R&D activities related to proper use of aegis of Jigyasa-CSIR-NML School minerals and ores for making metals and Interactive programme. The students were alloys applied as components in various thrilled to visit the laboratory and interact industries. Mr Ashraf Khan and Devbrato with the working group. The programme was scheduled for three hours, which comprised views in a similar way. Students visited creep testing units of Materials Testing & overview of Indian Science an Technology, Documentary film show on

exposure of modern laboratory and research environment. Dr. P.N. Mishra, Principal Scientist, welcome to students and briefed about the programme, discussed an overview of NML, its contributions towards the gainful utilization of natural resources and also defined development of science & technology in Indian perspectives, discussed Jamshedpur: A batch of 37 students of the role played by of diploma holder Sahu, Sr. Technical Officer extend the vote

Das were impressed and expressed their

Evaluation Division and gain knowledge

about fatigue, creep, fractures prevailing in

CSIR and NML, laboratory visit to gain an



different types of industrial components. Students get exposure of the different machine like Servo Hydro Testing Machine, Servo Electrical Machine and Furnace. Mr Arshad Jamal was impressed to observe the Asia second largest creep testing facilities and its contribution for the solution of the industrial problem. JavedShakilAmaanand Ankur Kumar Raut also expressed similar view. Ashish Sharma and AbdulZakir Hussain expressed that this visit was useful to them and enhance their knowledge. Faiz Ahmed and Md. Amin Uddin inspire and developed their interest in research field. Altaf Ansari expressed that the NML visit has inspire him to increase the thinking process.

K. Gaurav Kumar and Brijesh Kumar Singh were impressed to observe the Waste Management & Utilization activities through NML documentary film. The product that made up of slag and fly ash observed at NML Museium. They appreciated NML efforts for taking good step to minimizing pollution through R&D efforts.

It was also observed that the students and faculties appreciated the facilities available at Engineering Workshop. They gained working knowledge of different kind of machine like lath machine, Shaper Machine, Semi AutomaticBandsaw Machine, Pillar Drilling Machine, Hydraulic Surface Grinding Machine, Universal Milling Machine etc.

#### Published in:

Avenue Mail



### Indian Navy signs MoU with Council of Scientific and Industrial Research (CSIR)

CSIR



Scientific and Industrial Research (CSIR) and noted some of the futuristic technology today inked a MoU to undertake joint being developed, which could be used for research and development of advanced enhancing operational availability and technologies for the Indian Navy. This will be combat capabilities of Naval platforms. He a collaborative arrangement between labs of emphasised on the necessity of such CSIR, the Indian Navy and Indian industry. partnerships between the armed forces and The Memorandum of Understanding was world class National Institutions like CSIR signed by Vice Admiral GS Pabby PVSM, which would allow Indian Navy to leapfrog AVSM, VSM Chief of Materiel of Indian towards latest technologies as well as jointly Navy and Shri Shekhar C Mande, Secretary engage under 'Make in India', and other DSIR and Director General, CSIR. The event innovative programmes of our Government. was attended by Directors of Seven CSIR Signing of this MoU would form the Labs, Flag Officers and Heads of foundation for exchange of ideas and Directorates of Indian Navy and eminent development of new technologies in the scientists from distinguished CSIR Labs.

5<sup>th</sup> April, 2019 The MoU provides a formal framework for interaction between Indian Navy and CSIR. It would facilitate joint R&D activities in diverse fields of Mechanical, Electronics, Communication, Computer Science, Propulsion systems, Metallurgy and Nanotechnology. Speaking on the occasion, Vice Admiral GS Pabby congratulated CSIR for its yeoman service to the nation in the New Delhi: The Indian Navy and Council of field of Scientific Research and Development future, he added.



Shri Shekhar C Mande complimented the joint efforts and emphasised that defence remain a priority area for CSIR with an aim towards indigenisation and self-reliance in advanced technologies.

Some of the immediate projects to be progressed under this MoU include development of alternative desalination technologies, installation of wireless MEMS based sensors for remote operation, Residual Life Assessment studies of Gas Turbine Generator blades to improve reliability.

#### Published in:

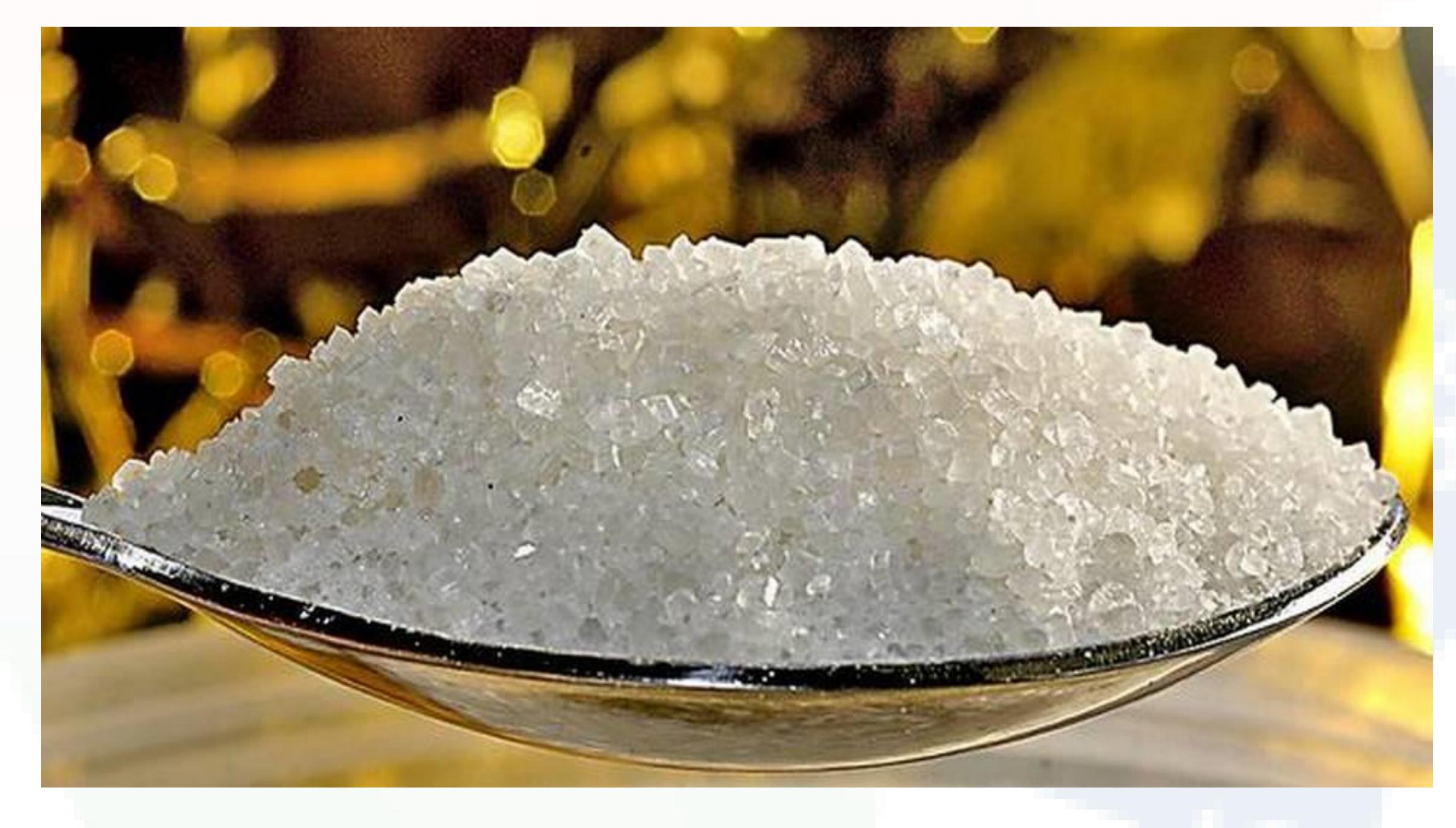
Indian Education Diary



#### Sweet wonder: sugar as protein!

#### CSIR-CCMB





What if sugar was protein and not as sufficient funding to scale it up. sugar?

and has now got substantial funding to set interacting with the media. up a big unit in England.

"The idea has been incubated for 1.5 years at Selection process our centre. It is one of the two startups Dr. Mishra said the selection process for the Rakesh Mishra said on Tuesday.

#### No royalty claim

Being a government-funded institution, the CCMB would not claim any royalty from the firms when they become successful apart from taking a small fee, but going forward, the business development wing could think of some ways to generate revenue, he said.

AIC provides state-of-the-art lab facilities for young entrepreneurs with bright ideas and

unhealthy as the normal carbohydrate "It has been a rewarding experience for us. While we are a lab involved in basic research, A biotech start up incubated by the Atal the incubation centre helps us take forward Incubation Centre (AIC) of Centre for an innovative idea from a youngster. In a Cellular and Molecular Biology (CCMB) has way, we are fulfilling our responsibility in managed to derive such sugar from a plant taking biotech closer to the market," he said,

which we have nurtured and those are slated proposals submitted is a pretty stringent to become big. We have currently about 15 procedure with 15 senior scientists as well as biotech startups at the AIC working on five to six external experts evaluating the improving their models," CCMB director ideas to filter them, scan through the presentations before zeroing in on the



probable experiments which could be incubated. "It is a day-long process and absolutely impartial with no scope for favouritism," he affirmed.

#### AIC turns one

The AIC will be celebrating its first anniversary later this month with the director general of Council of Scientific and Industrial Research (CSIR) Shekar Mande scheduled to attend the event.

#### Published in:

The Hindu



#### CSIR-CIMFR

3<sup>rd</sup> April, 2019

# वाश्वक सस्टनाबालटा सबस बड़ा चुनाताः डा सारस्वत

सीएसआईआर-सिंफर के 73वें स्थापना दिवस समारोह में पद्मभूषण डॉ वीके सारस्वत ने बताईं भविष्य की चुनौतियां

एजकेशन रिपोर्टर धनबाद

तकनीकी मुद्दों को एकीकृत करती है। इसमें भविष्य की समस्याओं के समाधान की कोशिश होती है। ये बार्ते पद्मभूषण और नीति आयोग मंगलवार को सीएसआईआर-सिफर के 73वें स्थापना दिवस समारोह में बतीर मुख्य अतिथि कहीं। उन्होंने कहा कि देश में सचना एवं संचार प्रीद्योगिकी, जैव प्रीद्योगिकी, नैनो जिनोमिक्स, माइक्रो-इलेक्ट्रॉनिक्स, पदार्थ परीक्षण, सुदूर करते हुए जीआईएस, इंस्ट्रमेटिशन मॉडलिंग, सोमेटिक एंब्रियोजेनेसिस, आइसोटोप मार्किंग, 3डी प्रिटिंग जैसी टेक्नोलॉजी पर विशेष कार्य औषधियां बनाना, मस्तिष्क की रिवर्स किए जा रहे हैं। भविष्य की चुनीतियां इंजीनियरिंग, न्युक्लियर आतंक को होंगी- सौर ऊर्जा को किफायती रोकना, स्पेस को स्रक्षित करना, बनाना, पयुजन के जरिए ऊर्जा वर्चअल रियलिटी को वर्धित करना, प्रदान करना, कार्बन सिक्वेस्ट्रेशन उन्नत वैयक्तिक शिक्षा प्रदान करना प्रणालियों को विकस्ति करना, आदि। मौके पर संस्थान निदेशक डॉ नाइट्रोजन साइकिल का प्रबंधन, पीके सिंह, मुख्य वैज्ञानिक डॉ वीके सभी को साफ-स्वच्छ, निर्मल जल सिंह, डॉ चंद्र नाथ धोष आदि मौजूद देना, शहरी अवसंरचना का सुधार, थे।



स्थापना दिवस समारोह में बोलते पद्मभूषण और नीति आयोग के सदस्य डॉ वीके सारस्वत।

#### टेवनोलॉजी का कॉमर्शियलाइजेशन जरूरी, 2020 में दूसरी हरित क्रांति की उम्मीद

डॉ सारस्वत ने कहा कि पीएम मोदी हमेशा समाज हित में शोध की सलाह देते हैं। तकनीकी विकास को इंडस्ट्री के जरिए आम लोगों तक पहुंचाने के लिए इसका कॉमशियलाइजेशन जरूरी है। परमाणु ऊर्जा, सीर ऊर्जा, संचार आदि के क्षेत्रों में आमुल-चूल विकास और परिवर्तन हो रहे हैं। साल 2020 में दूसरी हरित क्रांति की उम्मीद है। मिसाइल के क्षेत्र में भी भारत ने अभृतपूर्व

उन्नत स्वास्थ्य इन्फोर्मेटिक्स, बेहतर

प्रगति की है। इंजीनियरिंग के कुछ प्रतिकृत प्रभाव भी पड़ रहे हैं। खाद्य, वायु, जल में मौजूद विषेले पदार्थों से मानव का सामना हो रहा है। परिवहन, विनिर्माण, तापन और शीतलन के लिए ऊजों की मांग बढ़ रही है। पेट्रोल धात् फॉस्फोरस जैसे गैर-नवीकरणीय संसाधनों का हास हो रहा है। आवास, खाद्य उत्पादन और आर्थिक गतिविधियों के लिए भूमि की मांग बढ़ रही है।

#### निदेशक ने गिनाई संस्थान की उपलब्धियां

संस्थान के निदेशक डॉ सिंह ने पिछले एक वर्ष की संस्थान की उपलब्धियां गिनाई। कहा कि कई बड़े सम्मेलन हुए, नई दिल्ली में अंतरराष्ट्रीय सम्मेलन हुआ। पहली बार धनबाद में फरवरी में ही डायरेक्टर कॉन्फ्रेंस हआ, जिसमें सीएसआईआर सभी 38 प्रयोगशालाओं के निदेशक, सीएसआईआर के नीति-निर्माता शामिल हुए। अगस्त 2018 में दो-दिवसीय अखिल भारतीय राष्ट्रीय संगोष्टी हुई। हमारे वैज्ञानिकों डॉ राजशेखर सिंह और डॉ अरुण कुमार सिंह का राष्ट्रीय भूविज्ञान पुरस्कार के लिए चयन हुआ। जो हमारे लिए गौरव की बात है।

#### भूमि पूजन के साथ हुई समारोह की शुरुआत



सिंफर में भूमि पूजन करते निदेशक और अन्य।

स्थापना दिवस पर सबसे पहले सिंफर की परंपरा के अनुसार सुबह 8:45 बजे निदेशक आवास के समीप भूमि पूजन किया गया। समारोह में बीआईटी सिंदरी के निदेशक डीके सिंह, संस्थान के पूर्व निदेशक डॉ टीएन सिहं, डॉ. अमलेन्द्र सिन्हा आदि मौजुद थे।

#### एयर स्ट्राइक आतंकियों को नुकसान पहुंचाने के लिए था

समारोह के पहले डॉ सारस्वत ने मीडिया से बातचीत में कहा कि देश की जीडीपी करीब 7 प्रतिशत रही है। धीरे-धीरे हम विकस्ति देशों की श्रेणी में आ रहे हैं। आत्मरक्षा के मामले में भी हम आत्मनिर्भर हुए हैं। सर्जिकल स्ट्राइक या एयर स्ट्राइक पर सवाल उठानेवालों को तकनीकी जानकारी नहीं है। हमारी रणनीति आतंकियों को नुकसान पहुंचाने की थी, न कि सिविलियन को। डॉ सारस्वत ने कहा कि कि मिशन शक्ति पर पिछली सरकार पर दोषारोपण नहीं किया। 2011-12 के दौरान यह सरकार के समक्ष प्रस्तुत किया गया था, लेकिन परिक्षण के लिए फंड नहीं मांगा गया था। उन्होंने कहा कि कोयला उत्पादन में प्रदूषण नियंत्रण के नॉर्म्स का पालन होना चाहिए। देश में बढ़ते ई-कचरे पर काम चल रहा है, आईटी मंत्रालय भी गंभीर है। गैसीफिकेशन प्लांट के साथ मेथनॉल बनाने के लिए प्लांट बनाने का निर्णय सिंफर ने लिया है।

#### Published in:

Prabhat Khabar



#### CSIR-CSMCRI

3<sup>rd</sup> April, 2019

## ભાવનગરના સન્ટ્લ સાલ્ટ ઇન્સ્ટેટિયૂટમા સી-વીડ ખેતી અને પ્રોસેસીંગ ટેકનોલોજી વિષય પર બિનનિવાસી તાલીમ યોજાઈ

દુનિયામાં ૧૧.૭ અબજ ડોલરનું ટર્નઓવર છે તે સી-વીડની ખેતી પર મૂકાતો ભાર

ભાવનગરની સેન્ટ્રલ સોલ્ટ એન્ડ મરીન કેમિકલ્સ રીસર્ચ ઈન્સ્ટીટ્યૂટ (સી.એસ.એમ.સી.આર.આઈ.)માં ટેકનોલોજી વિષય પર બિનનિવાસી તાલીમનું આયોજન કરવામાં આવ્યું હતું. જેમાં ૨૫ સહભાગીઓએ તાલીમ પાપ્ત કરી હતી.

યુનાઇટેડ નેશન્સના ફૂડ એન્ડ ઓ ગે નાઇઝેશન એચીકલ્ચર સીવીડ અનુસાર વેકલ્પિક આજીવિકાના ઘણા બધા સંકળાયેલા દક્ષિણપૂર્વ એશિયાના વાણિજિયક લણણી ૩૧.૨ મિલિયન (એસઈએ-સીપીટી) માં કૌશલ્ય દેશોમાંથી એક બનશે.

ખેતીમાં નોંધપાત્ર પ્રગતિ કરવામાં સાથે નવા સીમાચિત્ન પર પહોંચ્યું છે. કાર્યક્રમનું આયોજન કર્યુ હતું. જેમાં આવી છે. ત્યાં સમાન આર્થિક મહત્વની અન્ય કેટલીક સીવીડ સી.એસ.આઈ.આરની લેબોરેટરી સી. વિવિધ ક્ષેત્રના પચીસ સહભાગીઓ



લાવવા માટે પ્રયત્નો કરવામાં આવી તાજેતરમાં સીએસઆઇઆર સંકલિત પ્રોત્સાહન આપવામાં આવે છે. ભારત રહેલ છે. એફ.એ.ઓ.ના ૨૦૧૮ના કૌશલ્ય પહેલ હેઠળ 'સીવીડ ખેતી હવે સીવીડ્સના વ્યાપારી ખેતીમાં આંકડા અનુસાર સીવીડ્સની અને પોસેસિંગ ટેકનોલોજી ટન વર્ષ -૧ ઉત્પાદન સાથે ૧૧.૭ વિકાસ કાર્યક્રમ' વિષય પર ત્રણ જો કે, કપ્પાફ્કિકાસ આલ્વારેજિની અબજ ડોલર કરતાં વધુ બજાર મૂલ્ય દિવસની બિન-નિવાસી તાલીમ આ ખેતીનો લાભ લોકોને મળે તે માટે ઉદ્યોગો, એકેડેમિયા વગેરે જેવા વ્યાપારી ખેતીની મર્યાદા હેઠળ તેમને એસ.એમ.સી.આર.આઈ. દ્વારા ભાગ લીધો હતો.

#### Published in:

Sandesh



#### CSIR-IITR

3<sup>rd</sup> April, 2019



लखनऊ। पर्यावरण और मानव स्वास्थ्य विषय पर वैज्ञानिक शोध आईआईटीआर लखनऊ और ब्रैडफोर्ड यूनिवर्सिटी यूके एक साथ काम कर रहे हैं। इसी संदर्भ में यूके से बायोमेडिकल साइंसेज की वैज्ञानिक प्रो. डायना एंडरसन ने आईआईटीआर के निदेशक डॉ. आलोक धवन और उनकी टीम से मुलाकात की। प्रो. एंडरसन लोरेटो कॉन्वेंट और सीएमएस में भी छात्रों और फैकल्टी से मिलीं। उनका कहना है कि ब्रैडफोर्ड यूनिवर्सिटी लगातार वैश्विक सहयोग से विज्ञान के क्षेत्र में शोध के प्रोत्साहन के लिए काम कर रही है।

#### Published in:

Amar Ujala



#### CSIR-IHBT

2<sup>nd</sup> April, 2019



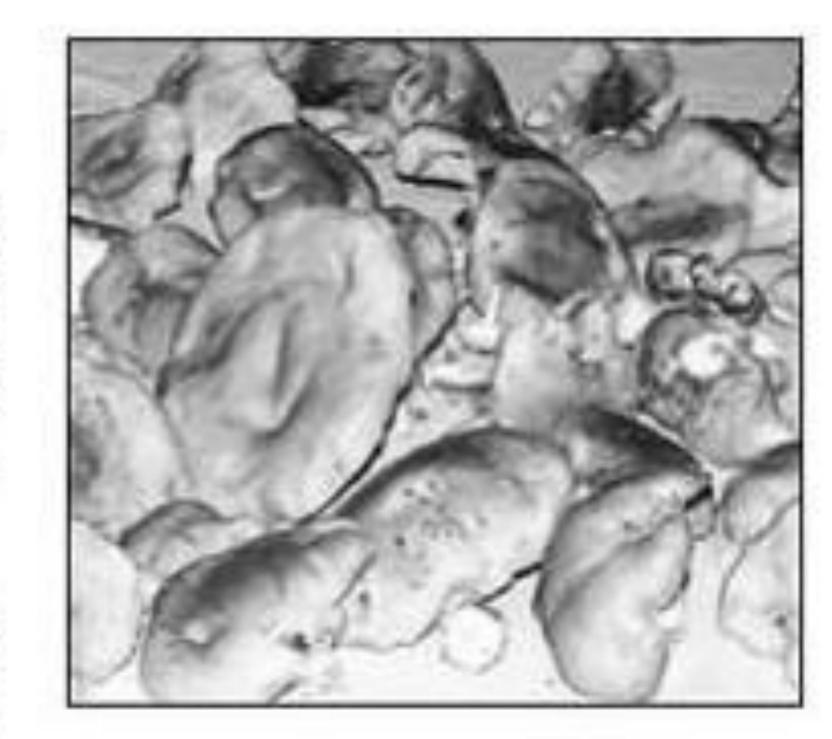
आईएचबीटी की लैब में तैयार किए विशेष स्टाके मशरूम, सब्जी सहित अन्य उत्पादों में भी किया जा सकेगा उपयोग

## स्टाके मशरूम से पूरी होगी अब विटामिन-डी की कमी

अमर उजाला ब्यूरो

पालमपुर(कांगड़ा)। विटामिन-डी की कमी को अब स्टाके मशरूम पूरी करेगा। शोध के दौरान स्टाके मशरूम में बड़ी मात्रा में विटामिन-डी की मात्रा पाई गई है।

यह स्टाके मशरूम देश के प्रतिष्ठित संस्थान सीएसआईआर-



स्टाके मशरूम को सब्जी के रूप में लैब में तैयार किया है। विटामिन-डी खा सकते हैं। वहीं जिसे मशरूम तैयार किए हैं। इसे आईएचबीटी की कमी को पूरा करने के लिए पसंद नहीं हैं, वह इसे कैप्सूल, जल्द मार्केट में भेजेगा।



आईएचबीटी के निदेशक डॉ. संजय कुमार ने कहा कि विटामिन-डी की कमी को पूरा करने के लिए आईएचबीटी ने स्टाके मशरूम तैयार किया है। इसके खाने से विटामिन-डी की कमी पूरी होती है। संस्थान इस मशरूम को बड़े पैमाने पर मार्केट में लाने के लिए किसी कंपनी का इंतजार कर रहा है। इस संबंध में कई कंपनियों से बात चल रही है।

टॉफी, चाकलेट या इसका सूप के रूप में भी सेवन कर सकते हैं। इसके प्रोडक्ट भी आईएचबीटी ने

हालांकि, स्टाके मशरूम बड़े जंगलों में भी पाया जाता है, लेकिन आईएचबीटी के शोध के मुताबिक

सात से आठ माह का समय लगता है। वहीं, आईएचबीटी ने इस मशरूम को अपनी लैब में दो माह में तैयार किया है। भारत में लोग विटामिन-डी की कमी से जुझ रहे तकनीक को लिया है, लेकिन हैं। विदेशों सहित देश में अमीर लोग संस्थान चाहता है कि हिमाचल से विटामिन-डी की कमी को पूरा करने के लिए समुद्र के किनारे या बड़े मंहगे होटलों में सन बाथ भी करते एक कंपनी से बात चल भी रही है। हैं लेकिन, आम आदमी के लिए इस स्टाके मशरूम का इस समय बाजार इसमें अधिक विटामिन-डी नहीं मंहगी प्रक्रिया को वहन करना में करीब ढाई हजार रुपये एक होती। जंगलों में इसे तैयार होने में मुश्किल है। ऐसे में विटामिन-डी की किलो का मूल्य है।

कमी को पूरा करने के लिए स्टाके मशरूम प्रभावी विकल्प बन सकता है। पुणे (महाराष्ट्र) और नार्थ ईस्ट की एक कंपनी ने इसकी कोई कंपनी इस तकनीक के लिए आगे आए। इस संबंध में ऊना की

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