# CSIR in Media



CSIR in Media on 26<sup>th</sup> to 31<sup>st</sup> July 2019









### Control learning workshop in IIT Mandi to address AI issues

CSIR-CSIO 31st July, 2019

Indian Institute of Technology Mandi in collaboration with Control Society is organising a five-day workshop on 'Learning and Control' from 22 to 26 July. The aim of the workshop is to address the existing need for a sound analytical foundation for Machine Learning (ML) and Artificial Intelligence (AI) with Control Theory. The workshop is jointly sponsored by IIT Mandi, Control Society, and Council of Scientific and Industrial Research (CSIR) India.

The workshop on 'Learning and Control' is a platform to discuss current advances in the field of Machine Learning and Artificial Intelligence. The objective is to enhance the knowledge of participants who want to become researchers and expert users of Machine Learning and Control Methodologies, the workshop is designed with a focus on senior B. Tech students, research scholars and junior faculty from engineering institutes and colleges.

Speaking about the significance of this workshop, Dr. M. Vidyasagar, President, Control Society, said, "Presently, the whole world is consumed with Artificial Intelligence. The workshop on 'Learning and Control' will provide an exposure of some of the basic Artificial Intelligence concepts to the participants. The hands-on training sessions and open discussions after the lectures are the highlights of this workshop. This workshop will help participants in gaining knowledge of a rapidly increasing field in all engineering disciplines.

The Control Society, which organises Indian Control Conference, an annual event, is organising this workshop for the first time and observing such a good response from the participants. We are looking forward to plan more such workshops in the future."

Produced by Unit for Science Dissemination, CSIR, Anusandhan Bhawan, 2 Rafi Marg, New Delhi



The participants include faculties, research scholars and senior B. Tech students from reputed colleges and universities across the country, including IIT Mandi, IIT Delhi, IIT Madras, IIT Kharagpur, IIT Roorkee, IET Lucknow, SRM University Amaravati and Council of Scientific and Industrial Research - Central Scientific Instruments Organization (CSIR-CSIO). The workshop on Learning and Control will help the participants get familiar with research challenges in the broad areas of learning and control.

Speaking about the benefits of this workshop, Dr. Tushar Jain, Workshop Coordinator, and Assistant Professor, School of Computing and Electrical Engineering, IIT Mandi, said, "This workshop is first-of-its-kind conducted at IIT Mandi, which focuses on the integration of Machine Learning and Control Systems and brings researchers from industry and academia on the same platform. Machine learning is a rapidly increasing field in all engineering disciplines with numerous applications such as natural language processing, medical diagnosis, etc. The main idea behind this integration is to enable the agent to learn how to react in the environment, possibly based on large data, to achieve the long-term rewards from that environment.

This workshop is expected to cultivate the basic concepts of reinforcement learning through a coordinated set of lectures and hands-on demos. Seeing the list of participants, which mostly include professors and post-graduate students from institutes of national importance, this workshop gives a unique platform to initiate collaborative multidisciplinary research."

#### Published in:

Hindustan Times



### **CECRI** to make EV batteries; invest ₹100-cr

CSIR-CECRI 31<sup>st</sup> July, 2019

Central Electrochemical Research Institute to upgrade Chennai facility

The Tamil Nadu-based Central Electrochemical Research Institute (CECRI), a research institute under the Council for Scientific and Industrial Research, has decided to set up a factory to produce batteries for electric vehicles.

It plans to invest ₹100 crore to set up the unit at its campus in Taramani, Chennai. This is a marked departure for the research body that has developed technologies, on its own or as a sponsored initiative, and licensed out the know-how. Now, nudged by V K Saraswat, Member, NITI Aayog, CECRI has decided to manufacture a product on its own. The funds for the plant, however, will come from CSIR.

CECRI developed lithium-ion based cells a few years ago. However, its efforts to licence out the technology were not successful. Some companies evinced interest in buying its technology, such as the Raasi Energy group, but nothing came of it. Since then, the market for lithium-ion batteries has opened up with many entrepreneurs bringing in electric two/three-wheelers.

The Centre is pushing for e-mobility, with incentives and tax sops. Second, CECRI itself has come up with improved cells (cells are made into batteries). At a meeting in Chennai in March, Saraswat wanted CECRI to join hands with the private sector for the manufacturing plant. There was talk of the Tiruchi-based Hi-Energy Batteries chipping in with some money.

But in view of the Centre's emphasis on EVs and Make in india, it was decided that CECRI would not wait for a private partner's funds.

Produced by Unit for Science Dissemination, CSIR, Anusandhan Bhawan, 2 Rafi Marg, New Delhi



Instead, CSIR itself will put in the money. The CSIR has the funds. Though not all its institutes are income generating, some, such as the Central Institute of Mining Fuel and Research, Dhanbad, make up for the rest. At its Chennai campus, CECRI already has a small manufacturing unit, which can produce 100 cells a day. The capacity of this plant will first be raised to produce 1,000 cells a day, in about nine months.

Then, in two years, the plant will be able to produce 14,000 cylindrical cells a day, Chief Scientist S Mohan, who is in-charge of the Taramani unit, told *BusinessLine*on Monday. That will correspond to 100 MWhr of storage capacity.

Mohan said there was good demand from the industry. Many small e-vehicle-makers (mainly of e-rickshaws, e-scooters and e-bikes) had evinced interest in buying batteries from CECRI. He said CECRI could beat Chinese players on prices. While prices are ruling at \$220/kW, CECRI can sell for \$190.

CECRI is also in the process of getting technical help from Fraunhofer Institute of Germany to improve battery performance and with the manufacturing unit. An MoU is expected in a few months.

#### Published in:

Business LIne

#### CSIR-CSMCRI

30<sup>th</sup> July, 2019

સેન્ટ્રલ સોલ્ટ ઈન્સ્ટીટ્યૂટ દ્વારા વિકસાવેલ ઉપકરણ રાજસ્થાન-લક્ષદીપમાં કાર્યરત

# સોર ઊર્જા પર આધારિત 'સોલાર સ્ટીલ' અશુદ્ધ પાણીને બનાવી દે છે પીવાલાયક

સૌર ઉર્જાના સામાન્ય સિદ્ધાંત-ઉપયોગથી આકર્ષિત છાત્રો : ઈન્સ્ટીટ્યૂટની મુલાકાત લીધી



(HICHOIS)

ભાવનગરના સેન્ટ્રલ સોલ્ટ એન્ડ મરીન કેમિકલ્સ રીસર્ચ ઈન્સ્ટીટ્યૂટ પર સૌર ઊર્જા પર આધારિત 'સોલાર સ્ટીલ' નામક જે ઉપકરણ સૌર ઉર્જાને સંલગ્ન ઉપકરણ છે, તે જે આજે આવ્યું હતું. વિદ્યાર્થીઓને વિકસાવવામાં આવ્યું છે તે અશુદ્ધ આશુદ્ધ પાણીને પીવાલાયક પાણીમાં સૌર ઉર્જાનો સિદ્ધાંત, તેમનું સામાજિક પાણીને પીવાલાયક બનાવે છે. હાલ તે રૂપાંતરિત કરે છે. આ આખું ઉપકરણ રીતે મહત્વ અને તેમના ઉપયોગો રાજસ્થાન અને લક્ષદીપમાં કાર્યરત છે. એ સૌર ઉર્જા ઉપર કાર્યરત છે અને વિશે છાત્રોને માહિતગાર કરાયા હતા.

સ્ત્રોતનો સીધો ઉપયોગ કરવા માટે કાર્યરત છે.

અમુક ઉર્જા સ્ત્રોતને લગતી મુશ્કેલીઓ આ સૌર ઉર્જા દ્વારા હલ કરી શકાય છે. ૭૦ વિદ્યાર્થી અને વિદ્યાર્થીનીઓ

સ્ટીલ' વિકસાવવામાં આવ્યું છે. જે સામેલ છે. આ કાર્યક્રમનું ત્રીજું સુપ છે હાલમાં સૌર ઉર્જા સ્ત્રોત એ ખુબજ આ પ્રકારના ઉપકરણનો ઉપયોગ વિદ્યાર્થીઓને આ લાઈવ મહત્વ પૂર્શ ઉર્જા સ્ત્રોત છે. જે મુખ્યત્વે કુદરતી આક્ત તેમજ ઉર્જાના ડેમોસ્ટ્રેશન પણ બતાવવામાં આવ્યું પરંપરાગર અને અખૂટ ઉર્જા સ્ત્રોત છે. બચાવ માટે કરવામાં આવે છે. આ તેમજ સોલાર ડ્રાઈંગ મશીનના જેથી આપણને પૂરતા પ્રમાણ માં પ્રકારના ઉપકરણ જે મુખ્યત્વે સામાન્ય સિદ્ધાંત, તેનું બંધારણ તેમજ ઉર્જાનો સ્ત્રોત મળે છે. માટે આ ઉર્જા રાજસ્થાન રાજ્યમાં અને લક્ષ્યદ્વીપમાં તેના કામ વિશે સંપૂર્ણ માહિતી અપાઈ

કોઈ બીજા સ્વરૂપમાં ઉર્જા પુરી પડે છે. વિદ્યાર્થીઓને ડો.ભૂપેન્દ્ર મરકમ દ્વારા શકાય છે.

આપવામાં આવી હતી. આ કાર્યક્રમમાં સોલ્ટ ઈન્સ્ટીટ્યૂટ દારા 'સોલાર તેમજ વિદ્યાલયના ૧૨ શિક્ષકો

વિશેષ કહેવામાં આવ્યું કે આ અનુરૂપ ઉપકરણને આ વિશે વિસ્તૃત માહિતી સોલ્ટ ઉપકરણથી માછીમારોને ખુબજ મદદ વિકસાવવામાં આવે છે. આ ઉપકરણ ઈન્સ્ટીટ્યૂટ દ્વારા ચાલી મળે છે આ સાધનના ઉપયોગથી વધુ સૌર ઉર્જાનો ઉપયોગ કરીને આપણને રહેલ'જિજ્ઞાસા' કાર્યક્રમમાં આવેલ પડતો ઉર્જાનો વ્યય પણ થતો અટકાવી

Published in: Sandesh



# NGT sets up panel to inspect, furnish report on waste unit near Kanakapura Road

CSIR-NEERI 30<sup>th</sup> July, 2019

Running against time to get clearance for reopening Mittaganahalli landfill as its Bellahalli landfill is almost full, the Bruhat Bengaluru Mahanagara Palike (BBMP) is now facing the ire of National Green Tribunal (NGT) over the Lingadeeranahalli waste processing unit off Kanakapura Road, which a petitioner has alleged is illegal. NGT's principal bench has constituted a four-member committee, directing it to submit a report on the unit in the next two months.

The panel consists of one senior scientist each from the regional office of ministry of environment, forests and climate change (MoEF) in Bengaluru, Central Pollution Control Board's regional office in the city, CSIR, NEERI Nagpur and Karnataka State Pollution Control Board. The plant has a capacity to dispose of 200 metric tonnes of waste. MoEF will be the nodal agency to coordinate the inspection and submission of the report. NGT's judicial member Justice K Ramakrishnan said in his direction: "The committee will inspect the site and submit the report on the matter within two months.

The next date of hearing is on October 23 and the committee shall submit the report to this tribunal before that by email." NGT was hearing a petition filed by Bengaluru resident Jayaram Gowda, who alleged that the waste management plant was set up in a place without meeting set criteria. He claimed though there was no environmental clearance, the project proponent had proceeded with the construction work.

Gowda told the tribunal that by the time environmental clearance was granted, the plant was fully operational, which made it clear that both the green nod and consent to operate were illegal. In spite of the prohibitory orders passed by the tribunal, garbage dumping



continues in the area, he said. Gowda also said the plant is situated on the boundary of BM Kaval reserved forest and near Sompura Lake and a residential area. "The unscientific manner in which garbage is being dumped, without complying with solid waste management rules, is causing environmental problems and health hazards," he argued. Counsel for BBMP, on the other hand, submitted that the plant was established on the basis of Karnataka high court directions. The Palike also claimed the plant is not operating now, while Gowda's counsel disputed it.

#### Published in:

The Times of India



#### CSIR-IHBT

30<sup>th</sup> July, 2019

# Savour wine-flavoured, ready-to-drink tea soon



Officials of the CSIR-Institute of Himalayan Bioresource Technology, Palampur, and New Delhi's Camelia Beverages sign a pact. PHOTO: RAVINDER SOOD

#### PALAMPUR, JULY 29

The CSIR-Institute of Himalayan Bioresource Technology, Palampur, and Camelia Beverages, New Delhi, signed an agreement for commercial production of value-added diversified tea products.

As per agreement, the institute will provide technical knowhow for making tea-flavoured wine and ready-to-drink (RTD) tea

products to the company.

"The tea-flavoured wine and the RTD tea are high-end value-added products developed at the CSIR-IHBT, Palampur, after strenuous research for years. These tea products will enhance the income of tea planters and consumers will be benefited from these products as they are known for their anti-oxidant properties. This move is

expected to boost the tea industry," he said.

Camelia Beverages is a 100 per cent women-owned company and is equipped with strong marketing network, will establish the manufacturing units in Sikkim and has plans to market the products in metro cities as well as abroad. The products are expected to be launched in a year. — OC

#### Published in:

The Tribune

CSIR-IHBT

30<sup>th</sup> July, 2019

# रेडी टू ड्रिंक टी और टी-वाइन में अब कांगड़ा चाय का जायका

सीएसआईआर ने लंबे शोध के बाद ईजाद की एंटी ऑक्सीडेंट से भरपूर ड्रिंक बनाने की तकनीक

जायके के लिए मशहर कांगड़ा चाय से अब कोल्ड ड्रिंक और टी-वाइन भी बनेगी।

सीएसआईआर-आईएचबीटी ने चाय से बनने वाले रेडी दू ड्रिंक टी और टी-वाइन का फार्मूला तैयार किया है।

सीएसआईआर के साथ दिल्ली की कंपनी मैसर्स कैमेलिया बीवरेजेस प्राइवेट लिमिटेड का

समझौता हो गया है। समझौते के तहत तकनीक देगी और कंपनी इसका बड़े पैमाने पर दिल्ली की एक निजी कंपनी से करार, अगले साल से बाजार में मिलने लगेंगे दोनों उत्पाद

उत्पादन करने के बाद कीमतें तय करेगी। बताया

जा रहा है कि अगले एक साल में यह उत्पाद बाजार में आ सकते हैं। जानकारी के अनुसार सीएसआईआर पिछले कई वर्ष से इन उत्पादों को लेकर अनुसंधान में जुटा हुआ था। सीएसआईआर के वरिष्ठ वैज्ञानिक डॉ. आरके सूद और निदेशक संजय

कुमार का कहना है कि चाय से बनने वाले इन सीएसआईआर इस कंपनी को दोनों उत्पादों की उत्पादों में एंटी ऑक्सीडेंट होंगे। लिहाजा यह उत्पाद सेहत के लिए भी अनुकूल होंगे। रेडी टू

रेडी दू ड्रिंक टी और टी-रोजगार में वाईन उत्पादों को कांगड़ा मिलेगी मदद चाय की पत्तियों से तैयार

किया गया है। लेकिन इस तकनीक से यह उत्पाद किसी भी चाय पत्ती से तैयार किए जा सकते हैं। इन उत्पादों के व्यावसायिक स्तर पर उत्पादन और खपत होने से चाय के बागानों से जुड़ी अर्थव्यवस्था व रोजगार दोनों के लिए मदद मिलेगी।

ड्रिंक टी में मिठास के लिए चूंकि स्टीविया डाला जाएगा, ऐसे में इस चाय को मधुमेह के मरीज भी पी सकेंगे। वहीं चाय से बनने वाली टी-वाइन में एंटी ऑक्सीडेंट समेत अल्कोहल होगी, जिससे यह वाइन अन्य वाइन के मुकाबले सेहत के ज्यादा मुफीद होगी। इसमें दस से 12 प्रतिशत अल्कोहल होगा।

#### Published in:

Amar Ujala



CSIR-NBRI

30<sup>th</sup> July, 2019

# वरिष्ठ वैज्ञानिक डा. प्रबोध को भारतीय राष्ट्रीय विज्ञान अकादमी की फेलोशिप

**लखनऊ।** राष्ट्रीय वनस्पति अनुसंधान संस्थान, लखनऊ के वरिष्ठ प्रधान वैज्ञानिक तथा एरिया कोऑर्डिनेटर, आणुविक जीव विज्ञान एवं जैव प्रौद्योगिकी



विभाग डा. प्रबोध कुमार त्रिवेदी को भारतीय राष्ट्रीय विज्ञान अकादमी (आईएनएसए) की प्रतिष्ठित फेलोशिप (एफएनए)-2019 के लिए चुना गया है। आईएनएसए ने फसल सुधार के लिए बुनियादी वैज्ञानिक अनुप्रयोगों, विशेष रूप से पौधों और पर्यावरणीय जैव प्रौद्योगिकी में द्वितीयक मेटाबोलाईट्स की पाथवे इंजीनियरिंग के क्षेत्र में प्रमुख

उपलब्धियों के क्षेत्र में डा. त्रिवेदी के उत्कृष्ट योगदान की सराहना की है। भारतीय राष्ट्रीय विज्ञान अकादमी भारत में विज्ञान को बढ़ावा देने में महत्वपूर्ण भूमिका निभाने एवं मानवता के हित के लिए वैज्ञानिक ज्ञान का उपयोग करने के साथ-साथ वैज्ञानिक अनुसंधान में उत्कृष्टता को मान्यता देती है तथा पुरस्कृत करती है। डा. त्रिवेदी औषधीय रूप से महत्वपूर्ण पादप अणुओं एवं जैव प्रौद्योगिकी के जैव संशलेषण में शामिल पाथवे की इंजीनियरिंग के क्षेत्र में तथा पर्यावरणीय जैव प्रौद्योगिकी में काम कर रहे हैं।

#### Published in:

Rashtriya Sahara



#### CSIR-IMMT

30<sup>th</sup> July, 2019

# ଆଇଆଇଏମ୍ର ବାଷିକ ସାଧାରଣବୈଠକ



#### • ଭୁବନେଶ୍ୱର, ପିଏନଏସ:

ଇଣ୍ଡିଆନ ଇନଷ୍ଟିଚ୍ୟୁଟ ଅଫ ମେଟାଲସ (ଆଇଆଇଏମ) ଭୁବନେଶ୍ୱର ଚାପ୍ସରର ବାଷିକ ସାଧାରଣ ପରିଷଦ ବୈଠକ ସଭାପତି ଡ. ଆର. ଭିମାରାଓଙ୍କ ସଏସଆଇଆର-ଅଧ୍ୟକ୍ଷତାରେ ଆଇଏମଏମଟି ପରିସରରେ ଅନୁଷ୍ଠିତ ହୋଇ ଯାଇଅଛି । ଉକ୍ତ ଉତ୍ସବରେ ମୁଖ୍ୟଅଡିଥି ରୂପେ ପି.ସି. ଆଇଓସିଏଲ) ଏବଂ ସମ୍ମାନନୀୟଅତିଥି

ଭାବେ ଆଇଏମଏମଟିର ନିର୍ଦ୍ଦେଶକ ଯୋଗ ଦେଇଥିଲେ । ଏସ କସ ଏହି ଅବସରରେ ଆଇଏମଏମଟିର ପୂର୍ବତନ ମୁଖ୍ୟ ବୈଜ୍ଞାନିକ ଡଃ ଏଲ.ବି. କେ.ଏନ.ରଥଙ୍କୁ ମଧ୍ୟ ତାଙ୍କର ଜୀବନ ଶୁକ୍ଲାଙ୍କୁ ହାଇତ୍ରୋ ମେଟାର୍ଲିକି ଏବଂ ବ୍ୟାପି ଗବେଷଣା ପାଇଁ ସମ୍ମାନିତ ବାଓମିନେରାଲ କ୍ଷେତ୍ରରେ ସଫଳ ଗବେଷଣା ପାଇଁ ଆର.ପି. ଦାସ କରାଯାଇଥିଲା । ଆଇଏମଏମଟିର ବରିଷ ବୈଜ୍ଞାନିକ ଡଃ ଶିଶିର ଟେକ୍ରୋଲୋଜିରେ ସଫଳ ଗବେଷଣା ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ ।

ପାଇଁ ଆଇଆଇଏମ ଭୁବନେଶ୍ୱର ଆଓ୍ଠାଡରେ ଚାପୁର ସନ୍ନାନତ କରାଯାଇଥିଲା । ଏହି ଅବସରରେ ତ. କରାଯାଇଥିଲା ।

ଉକ୍ତ ସଭାରେ ଅନୁଷ୍ଠାନର ମେମୋରିଆଲ ସମ୍ମାନରେ ସମ୍ମାନିତ କୋଷାଧ୍ୟକ୍ଷ ଦୀପକ ନାୟକ ବାଷିକ ବିବରଶୀ ଆୟବ୍ୟୟର ପଦାନ କରିଥିଲେ । ଚାପୁର ସେକ୍ଟୋରୀ ଡଃ ଚୌବେ (କାର୍ଯ୍ୟନିର୍ବାହୀ ନିର୍ଦ୍ଦେଶକ, ମନ୍ତୀଙ୍କୁ ଥର୍ମାଲ କ୍ୟାରିଅର କୋଟିଂ ଏ.କେ. ଚୌବେ ସଭା ପରିଚାଳନା ଓ

#### Published in:

Pragativadi



## Goa govt asks CSIR-NIO to study pollution in water bodies

CSIR-NIO

29<sup>th</sup> July, 2019

The Goa government has directed CSIR-National Institute of Oceanography (NIO) to study the quantum of pollution in all water bodies in the state, including rivers, the Legislative Assembly was told on Monday. Environment Minister Nilesh Cabral said the CSIR-NIO has been entrusted with the task of studying the pollution levels, which will gauge the quantum of pollution.

Responding to a calling attention motion tabled by GoaForward Party (GFP) MLA Jayesh Salgaonkar, Cabral said a committee would be formed under Chief Minister Pramod Sawant to demarcate boundaries of all the rivers. "Once the boundaries are demarcated, all the illegal constructions along the river banks would be demolished," he said.

The minister said strict action would be taken against residential and commercial units that have been releasing sewage in rivers..

#### Published in:

Devdiscourse



## Public talk on Smashing protons-big bang, higgs and dark matter

CSIR-NCL 29<sup>th</sup> July, 2019

PUNE: A public talk on the topic 'Smashing protons - Big Bang, Higgs & dark matter!' will be held at Indian Institute of Science Education and Research Pune. The public talk will be held on August 31 and has been organized by Exciting Science Group under their 'Popular Science Talk' section, which is their way to make scientific topics easier for common people. The talk will be given by Seema Sharma, who is an Associate professor at Physics department in the Indian Institute of Science Education and Research and who is also a member of the Compact Muon Solenoid (CMS) experimental collaboration at European Organization for Nuclear Research (CERN).

The talk will be held between 10 am - 11:15 am at New Lecture Hall, Smt Indrani Balan Science Activity Centre, IISER Pune, Pashan road. 'The Large Hadron Collider (LHC) at the CERN in Geneva is the most powerful accelerator which smashes protons traveling almost at the speed of light. The outcome of these collisions is recorded by giant cameras, like the CMS detector. In this talk, the speaker will explain how LHC and CMS make up the most advanced microscope to study the fundamental building blocks of the universe around us, and help us finding laws of nature governing their interactions,' said the official release about the topic. The event has been supported by IISER Pune, CSIR-NCL, Venture Center, Forbes Foundation, Nag Foundation and Praj Foundation. Registration is free and on a first-come-first-serve basis.

#### Published in:

The Times of India



### 48 Kendriya Vidyalaya, Chakardharpur students visit CSIR-NML

CSIR-NML

28<sup>th</sup> July, 2019



A group of 48 students of Std. IX & XI from Kendriya Vidyalaya, Chakardharpur and research scholars this morning under the aegis "Jigyasa programme", recently launched by Ministry of Human Resource research environment and simultaneously inculcate interest towards science among

school students and further pursue carrier in the science stream. The students were thrilled to visit the laboratory and interact with the working group. The programme was scheduled for five hours, Dr P.N. Mishra, Principal Scientist, initiated the programme with welcome address and introduced students with the members of "Gigyasa programme" and further discussed about natural resources like minerals, ores and rocks. Contribution of CSIR-NML towards the utilization of natural resources. Dr. S.K. accompanied by two teachers Rano Mandal, Chief Scientist and coordinator of Marandi and Ajit Kumar visited at CSIR- the programme discussed about National Metallurgical Laboratory, fundamentals of science and its various Jamshedpur and interacted with scientists branches to inculcate interest towards science among students and request students to pursue science as carrier for further study. His thought provoking speech inspire to Development, Government of India with students and faculties. Dr. Anjani Kumar Council of Scientific & Industrial Sahu proposed the vote of thanks. Further, Research. The objective of the S.N. Hembram, Sr. Technical Officer programme is to provide exposures of arranged a laboratory visit programme and they have visited at Analytical Chemistry Centre, Materials Testing and Evaluation

Produced by Unit for Science Dissemination, CSIR, Anusandhan Bhawan, 2 Rafi Marg, New Delhi



division and Electronic Waste Units. Students visited creep testing units of MST Division and knew about fatigue, creep, fractures prevailing in different types of industrial components. They get exposure of different machine like Servo Hydro Testing Machine, Servo Electrical Machine and furnace. A live demonstration was arranged at analytical chemistry division with conventional as well as non-conventional methods applied in chemical analysis. Students asked number of questions and get suitable reply. Miss. Soni Jha has interacted with students and explained the various scientific activities performed by this unit to carried out the R&D support services for the laboratory.

Students has shown a keen interest in the Electronics Waste Unit and get opportunity to know about the process for extraction of metals from electronic waste and they also visited another area of waste management & utilization unit and visually observed the product made up of fly ash and other waste materials like paving block and tiles used for infrastructure development purposes.

They further visited at Mechanical Testing Unit and know about forging, shaping and rolling machine, wire Drawing Machine, Trolly furnace chamber operated at 1200° centigrade. Dr.G.K. Mandal has nicely explained all the R&D activities of this unit. Teachers and students requested for their next visit to the laboratory for gain more knowledge. Teachers expressed their view and was satisfied to know about the consistent effort and research emphasis given in various sectors for the ultimate development of India. They gave sincere their thanks to Director, CSIR-NML for providing such nice opportunity to visit the premier National laboratory.

#### Published in:

The Avenue Mail

CSIR-NML

28<sup>th</sup> July, 2019

# एग्रिको की एनएमएल कॉलोनी में पौधरोपण

जमशेदपुर। एग्रिको स्थित एनएमएल कॉलोनी में शनिवार को पौधरोपण किया गया। कार्यक्रम के तहत विभिन्न प्रकार के फलदार तथा छायादार वृक्षो के पौधे रोपे गए। इनमें आम, संतरा, अमरूद, हरसिंगार, मौलश्री, आंवला, अनार, बादाम, चीकू, लीची, गंधराज आदि शामिल थे। इस अवसर पर एग्रिको एनएमएल कॉलोनी वेलफेयर समिति के उपाध्यक्ष डॉ. अरविंद सिन्हा, एनके सिंह, डॉ. पुरुषोत्तम कुमार शामिल थे।

Published in: Hindustan



## 'CSIR committed to serve society'

CSIR-CSMCRI, CECRI

27th July, 2019



Shekhar C. Mande, Secretary, Department of Scientific and Industrial Research and and Industrial Research (CSIR) has said CSIR, the country's premier research and development organisation was committed technological solutions to various problems. Addressing after inaugurating the 'Seaweed seedling production facility' at the CSIR-CSMCRI Marine Algal Research Station, Mandapam, near here the facility to produce seaweed seedlings for free distribution to the local

beneficiaries was great example of the social commitment, the CSIR had towards the society. The facility would provide employment opportunity to the people of this region, especially women from the fishing community, he said and exuded confidence that the technology partners would scale up the capability of the facility to benefit many more people. Pointing that CSIR had been at the service of the nation since 1942, he said this was the first publicly funded organisation Director General, Council of Scientific in the area of science and technology and had been offering science and technology solutions. The indelible ink being used in elections in the country was developed at the to the society in offering science and CSIR laboratory he said. The anti-corrosion technology developed at CECRI in Karaikudi was the best in the world, he said. Addressing the function, Collector K Veera Raghava Rao said the facility would go long way in protecting the livelihood of the fisher folk in on Friday, he said the establishment of the region and help them to augment their family income. This was the best example of research activities being taken to the field to



benefit people, he said. Seaweed cultivation was one of the best livelihood opportunities for the women folk, he added. K. Easwaran, Scientist in-charge, Marine Algal Research Station, said the facility had the capability to produce ten lakh seedlings of two species – Gracilaria edulis and Kappaphycus in a cycle, lasting about 75 days. Presently about 650 people were engaged in seaweed cultivation using bamboo rafts and they faced problems in getting the seedlings, he said.

Amitava Das, Director, CSIR-CSMCRI, Bhavnagar, Prateep K. Singh, Director, Central Institute of Mining and Fuel Research, Dhanbad and N. Kalaiselvi, Director, CECRI, Karaikudi were among others present on the occasion.

#### Published in:

The Hindu



## After four-year ban, experts okay with farming along Yamuna

CSIR-NEERI 26<sup>th</sup> July, 2019

After four years of a ban on cultivation on the Yamuna floodplain, the panel appointed to monitor the pollution of the river has recommended that farmers may be allowed to grow crops and vegetables but with regular and constant watch on the metal content and pesticides levels present in the harvested produce. The recommendation of the committee comprising former Delhi chief secretary Shailaja Chandra and retired expert member BS Sajwan came after the report of the study carried by scientists at National Environmental Engineering Research Institute (CSIR-NEERI) said, "The farmers may be asked to maintain or provide relevant details with respect to their land under cultivation, type of crops grown, quantity and source of water used, type and quantity of fertilisers, pesticides or any other substance used for different crops in different seasons.

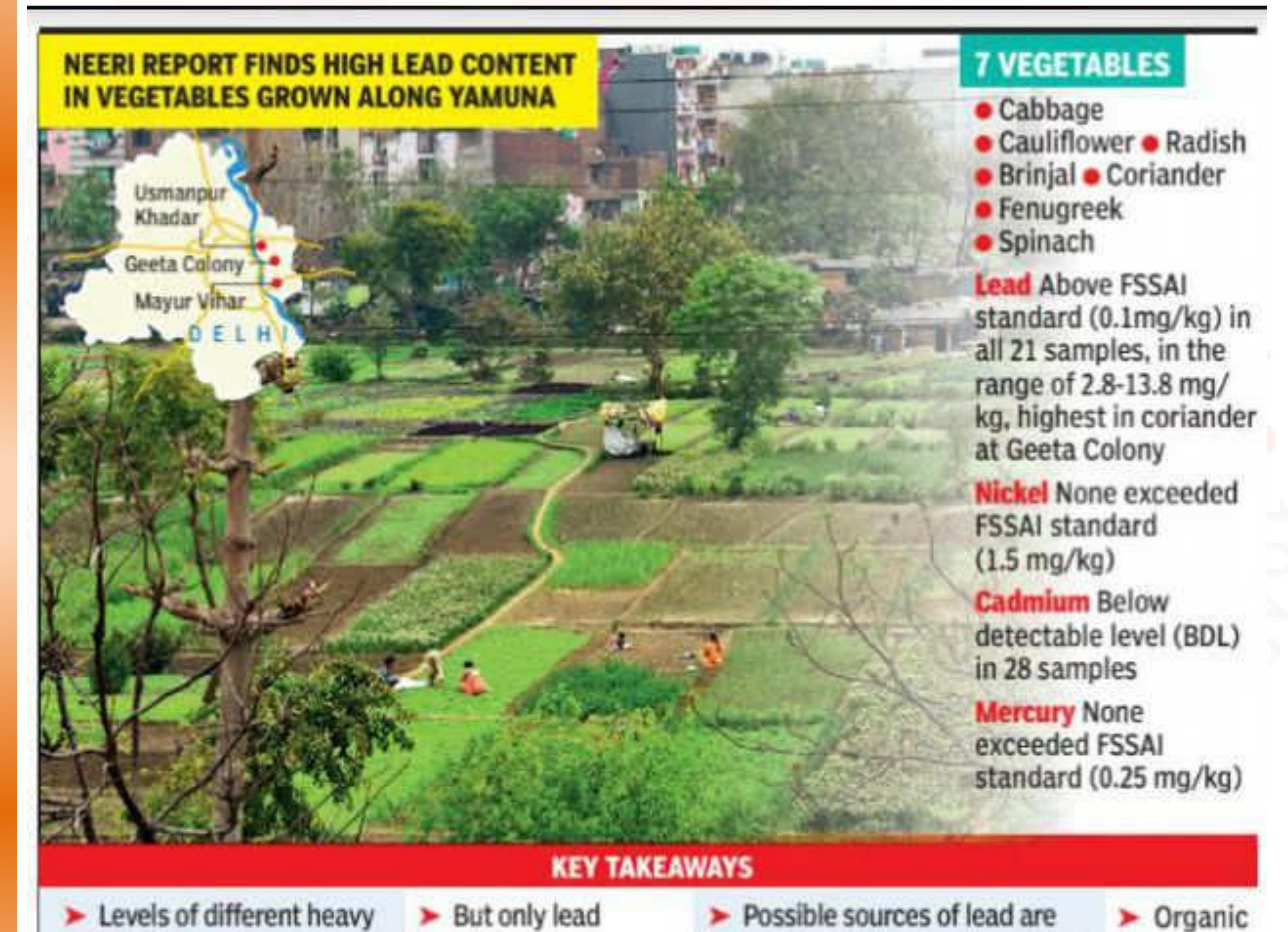
At the same time, metal or pesticide contents present in the vegetables sold in different areas of Delhi, and also grown under organic farming needs to be analysed periodically, to ascertain that levels of metals and pesticides are within the safe limits of human consumption." The study, 'Metal Content in Vegetables, NEERI Study (2019)', analysed data from three locations — Usmanpur Khadar, Geeta Colony and Mayur Vihar — and seven vegetables — cabbage, cauliflower, radish, brinjal, coriander, fenugreek and spinach. "Though the levels of metals present in the vegetables were found within FSSAI limits (except for lead), monitoring and testing of heavy metals in vegetables as well as soil and irrigation water along with water of river Yamuna should be carried out by authorities on a regular basis," the report said. Prolonged consumption of food with unsafe concentrations of heavy metals can lead to disruption of biological and biochemical processes in the body. Heavy metal toxicity can lower energy levels, damage the functioning of the brain, lungs, kidney and liver, damage blood composition, and even cause cancer.



metals higher along Yamuna

compared with reference site

(Kharkhoda village)



levels found

exceeding FSSAI limit

in most samples

industries dealing in automobiles,

pesticides, lead-processing units

battery, paint, polythene,

farming

may also

be explored



"Possible sources of lead are industries dealing in automobiles, battery, paint, polythene, pesticides and lead processing unit. Various usages of lead based compounds may be potential source of lead. Farmers should also be made aware of adverse effects associated with excess use of certain pesticides, insecticides, chemical fertilisers, irrigation water (if contaminated) during cultivation. Organic farming may also be explored or encouraged in these areas," the NEERI report said, adding that the findings were being submitted to NGT with a request to direct Central Pollution Control Board to undertake such studies periodically to allay public apprehensions about health-related aspects of vegetables grown on the floodplain. Food Safety and Standards Authority of India (FSSAI), an autonomous body established under the Union health ministry, and CPCB too have together conducted tests on the vegetables and fodder grown on the banks of the Yamuna. "The result of the FSSAI study on summer vegetables will be available by July," the second interim report of the monitoring committee said. NGT had banned growing of vegetables on the floodplain in 2015. "This direction shall be strictly adhered to till the Yamuna is made free and restored to its natural wholesomeness," the order of January 13 of that year said. After meeting the two-member monitoring panel last year, Delhi government had agreed to run a campaign to dissuade people from eat produce grown on the floodplain "as this leads to entry of toxins in the food chain".

#### Published in:

The Times of India



CSIR-CMERI

25<sup>th</sup> July, 2019

# सीएसआईआर-सीएमईआरआई में पौधारोपण

दुर्गापुर. सीएसआईआर-सीएमईआरआई ने बुधवार को पौधारोपण कार्यक्रम आयोजित किया. विभिन्न प्रजाति के 103 पेड़ लगाये गये. उद्घाटन निदेशक प्रो (डॉ) हरीश हिरानी, पुलिस उपायुक्त (ईस्ट) अभिषेक गुप्ता और प्रभागीय वनाधिकारी मिलन कांतिमंडल ने पेड़ लगा कर किया. लगाये गये पेड़ों में आम, अमरूद, हरिताकी, आंवला, बेरी आदि शामिल हैं. संस्थान विकसित ग्रीन और इकोलांजी से संबंधित तकनीकों के बारे में चर्चा की गई. डॉ हिरानी ने कहा कि संस्थान आरएंडडी गतिविधियों के माध्यम से ग्रीन और हेल्दी इकोलांजी बनाने की दिशा में अग्रसर है. पौधारोपण कार्बन फुटप्रिंट को कम करने, वन आवरण को बेहतर बनाने और पर्यावरण और प्रदूषण के खिलाफ प्रभावी काउंटर करने में सफल होगा. इससे स्वस्थ जल तालिका विकसित करने में मदद मिलेगी. कर्मचारियों ने व्यक्तिगत स्तर पर इस तरह के वृक्षारोपण का संकल्प लिया,श्री गुप्ता और श्री मंडल ने डॉ हिरानी के प्रयासों की सराहना की और उनसे भविष्य में इस तरह की गतिविधियों को प्रोत्साहित करने का आग्रह किया. श्री गुप्ता ने सुझाव दिया कि लगाये गये पेड़ों को परिधीय संरक्षण मिले.

Published in:

Prabhat Khabar



#### CSIR-CMERI

24<sup>th</sup> July, 2019

# Tree Plantation Ceremony held



DURGAPUR, JULY 24/--/CSIR-CMERI, Durgapur organized a Tree Plantation Ceremony today whereby 103 trees of various species were planted. The Plantation Ceremony was inaugurated by Prof.(Dr.) Harish Hirani, Director, CSIR-CMERI, Durgapur. Shri Abhishek Gupta, IPS, Deputy Commissioner of Police, Asansol-Durgapur, Shri Milan Kanti Mondal, Divisional Forest Officer planted a Tree each. Among the trees planted there were Mango, Guava, Haritaki, Amla, Berry etc. An engaging discussion about the Green and Ecology related technologies developed by CSIR-CMERIalso took place between Dr. Hirani and the visiting guests. Prof.(Dr.) Harish Hirani, Director, CSIR-CMERI, Durgapur, expressed his gratitude to Shri Abhishek Gupta. Deputy Commissioner of Police, Asansol-Durgapur and Shri Milan KantiMondal, Divisional Forest Officer for gracing the occasion and inspiring the society for such a just cause. Dr. Hirani during the inauguration stated that CSIR-CMERI, Durgapur, through its activities is dedicated towards creating a Green and Healthy Ecology.

This plantation of Trees will help in reducing the Carbon Footprint, improving the Forest Cover and developing a healthy Water Table for the area and its vicinity besides being an effective counter force against environmental pollution. All the employees of the Institute pledged to undertake such plantation exercises on an individual level wherever they can and also to inspire the members of the society. Shri Abhishek Gupta and Shri Milan Kanti Mondal both appreciated the efforts of Dr. Hirani to undertake such plantation exercises on a regular basis and urged him to further encourage such activities in future. Shri Abhishek Gupta suggested that the planted trees should be provided with a peripheral protection to protect it from stray animals. Shri Milan Kanti Mondal promised to extend his support for CSIR-CMERI whenever required. Shri Mondal also promised to provide a Rudraksha Tree sapling for CSIR-CMERI, which is unique for Durgapur. Shri Pradyumna Kumar Sahu, Scientist, assisted the arrangement of the plantation exercise and the safe-keeping of the plant saplings provided by ShriM.K. Mondal and his department. (EOIC)



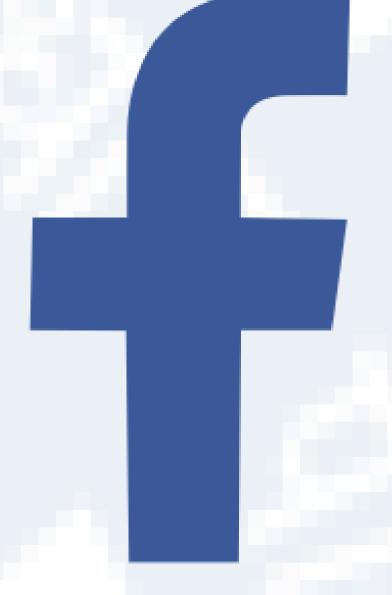
#### Please Follow/Subscribe CSIR Social Media Handles



CSIR INDIA



CSIR IND



CSIR India

CSIR IN MEDIA