





## 06 TO 10 FEBRUARY 2023



Compiled by Science Communication and Dissemination Directorate (SCDD), CSIR, Anusandhan Bhawan, New Delhi



CSIR can play a lead role especially in industrial innovation collaboration through joint technology development and upscaling of each other's Intellectual Property (IP) for commercialization: Dr Jitendra Singh CSIR-CLRI, NCL, CCMB, NAL, IHBT 07<sup>th</sup> February , 2023





Argentina Minister of Science, Technology & Innovation of Argentina, Mr Daniel Filmus accompanied by a high-level delegation, called on Union Minister of Science and Technology and Earth Sciences Dr Jitendra Singh here today and discussed bilateral collaboration between the two countries.

The Argentina Minister also sought India's support to deploy technologies for implementation by industry and facilitating the entrepreneurs in Argentina.

Dr Jitendra Singh said, CSIR would be very keen to connect with the Industries from Argentina and work towards implementation of the technologies/products/processes in Latin American Nations with governmental support. He said, CSIR is among the global R&D leaders and has intrinsic strengths to provide S&T expertise in the development process through effective international collaboration.

Dr Jitendra Singh also recalled Prime Minister Narendra Modi's meeting with Argentina President Mauricio Macri on the sidelines of G20 in 2016 at Hangzhou.





# Dr Jitendra Singh said, the CSIR can play a lead role, especially in industrial innovation collaboration through joint technology development and upscaling of each other's Intellectual Property (IP) for commercialization.

Dr Jitendra was pleased to note that CSIR and National Council of Scientific and Technical

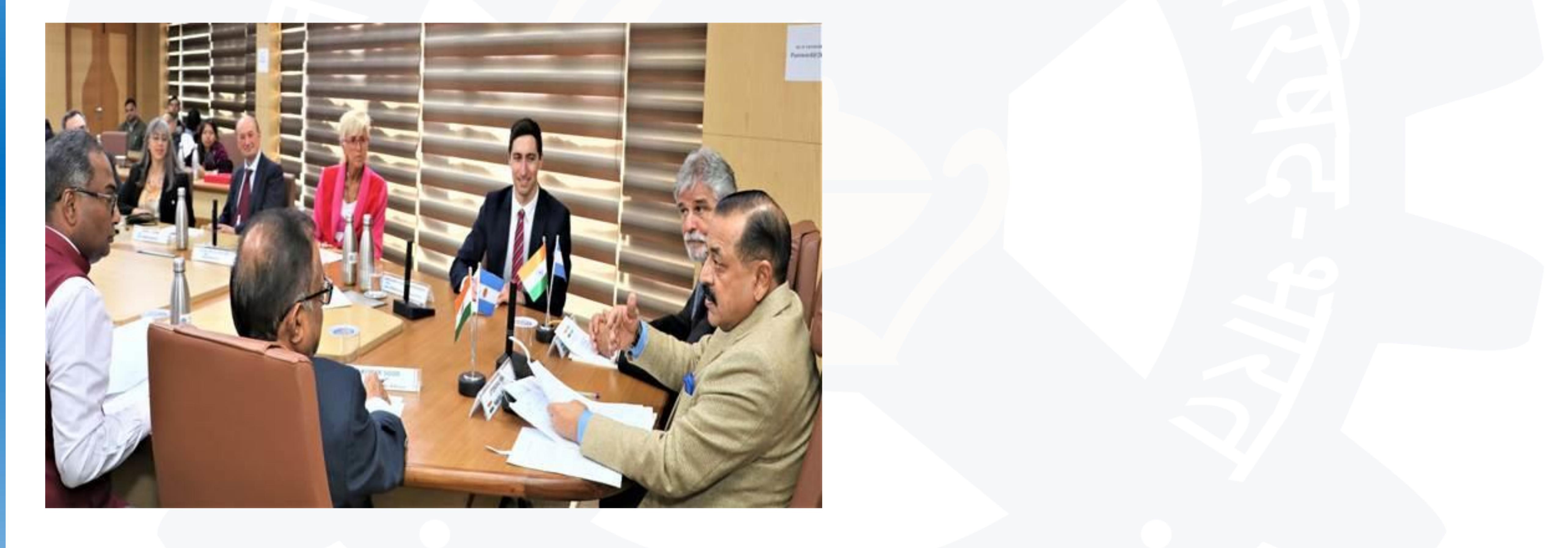
Research (CONICET) of Argentina had signed a cooperation agreement way back in 1985 which was renewed in 2009. Two joint R&D projects were executed by their institutes under inter-governmental programme between DST, India and the Ministry of Science, Technology and Productive Innovation (MINCyT) of Argentine on a) Exploring microbial diversity in traditional fermentations from India and Argentina and its potential for bioethanol production (CSIR-Central Leather Research Institute, CSIR-CLRI) during 2015-18) and b) Developing and implementing chemogenomics platform for aiding drug discovery for tropical infectious diseases" (CSIR-National Chemical Laboratory (CSIR-NCL) during 2016-19).

Dr Jitendra Singh said that, CSIR welcomes strengthening collaboration with Argentina for co-development and deployment of joint programs especially focused on promoting in-house development in industrial sectors such as Biotechnology (including plant biotechnology and food technologies); Nanotechnology (including nanomaterials); Healthcare (Therapeutics, using both modern science and traditional knowledge, Diagnostics, Vaccines and Pharmaceuticals); Sustainable (Green) Energy and Environment; Marine science and Oceanography; Mining and Minerals; Aerospace technologies; Electronics and instrumentation; and Chemicals, Leather and Petrochemicals.

Dr Jitendra Singh informed his Argentinian counterpart Mr Filmus that Council of Scientific and Industrial Research (CSIR), with world-class expertise and facilities, is one of the largest industrial R&D organizations in the world with 37 multi-disciplinary R&D institutes located across India. With its state-of-the-art expertise, capacities and capabilities CSIR could contribute effectively towards Research and Innovation Collaborations, Technology Partnerships, Research Infrastructure Development & Sharing, and Capacity Building., the Minister added.



CSIR's Technology Incubators [Venture Center at CSIR-National Chemical Laboratory (NCL), Atal Incubation Centre at CSIR-Centre for Cellular and Molecular Biology (CCMB), Aerospace Incubation Centre of CSIR-National Aerospace Laboratories (NAL), Incubation Centre of CSIR-Institute of Himalayan Bioresource Technology (IHBT) and CSIR-Indian Institute of Toxicology Research] are successfully contributing in India's innovation development with active participation of industry, especially start-ups. CSIR can host science parks', incubators and accelerators' residents from Argentina in its incubators and facilitate its incubators' residents to access such facilities in Argentina. Also, CSIR could organize specialized entrepreneurship development programmes/ training courses focused specifically for technological updates and sharing incubator management experiences.





Pib





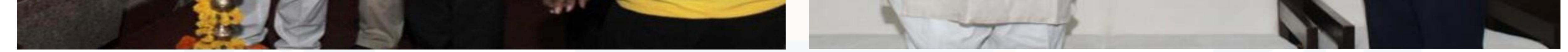
### Need to create awareness of road safety and noise pollution control







## रिवल भारतीय संयोजकों की कार्यशाला माननीय श्री. नि अध्यक्षा- डॉ. अतुर सहयोग- र



JanAkrosh organized a Workshop on Road Safety and Noise Pollution Control in association with CSIR-NEERI on February 4 and 5, 2023 in the NEERI Auditorium. The workshop was inaugurated by Nitin Gadkari, Minister of Road Transport and Highways, Government of India.

Dr. Anil Laddhad, President of JanAkrosh, Ravindra Kaskhedikar, Secretary, JanAkrosh and Dr. Pawan Kumar Labhasetwar, Chief Scientist and Head, of Water Technology and Management Division, CSIR-NEERI were prominently present on this occasion.

Addressing the participants of the workshop who came from across India, Gadkari praised the efforts of JanAkrosh being made for road safety and noise pollution control for the last 11 years. He expressed concern over 5 lakh accidents every year and 400 accidental deaths per day resulting in a loss of 3.10 percent GDP. He informed that India's road network is the second largest in the world.

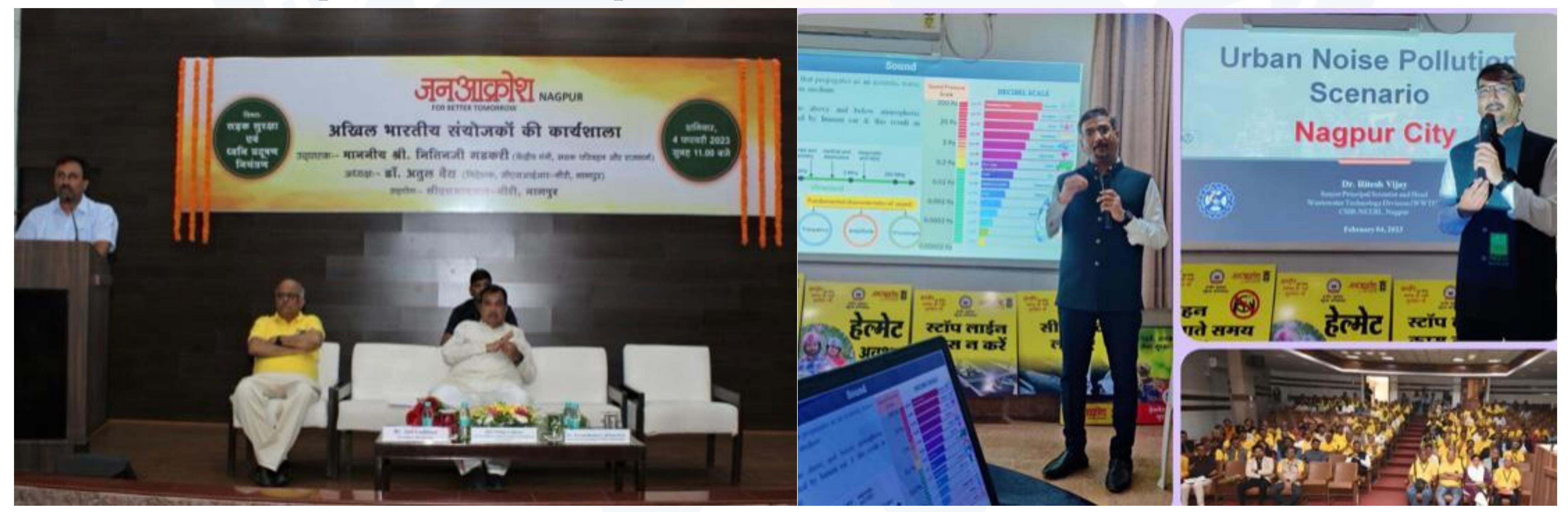
He urged the general public for serious behavior and commit to road safety and noise



**CSIR** pollution control. He also advised the Institutions of India to create more awareness of road safety and noise pollution control. He appealed to celebrities to extend help for behavioral changes the people. He mentioned that his ministry has extensively worked on road and transport engineering.

He emphasized the need to develop a syllabus on road safety and noise pollution control through such workshops. Green fuel and green transport are the need of the hour, he added. Gadkari advised CSIR-NEERI to come up with such solutions which could be incorporated into the policy. He informed that the Nag river project will be initiated shortly. He opined that the eyes of the drivers should be examined at tolls to minimize road accidents.

Dr. Laddhad gave an overview of the workshop. He said that JanAkrosh will reach 2 lakh students to spread awareness for road safety and noise pollution control. Dr. Labhasetwar briefed about the contributions of CSIR-NEERI to noise pollution control. Anil Joshi, JanAkrosh conducted the proceedings. During the two-day event, the participants discussed various measures to be taken for road safety and noise pollution control in their respective states. The participants thanked the team of JanAkrosh, Nagpur for organizing such an event which created an operational roadmap for them.



### Published in:

The Live Nagpur





### Pune: Scientist Syed G. Dastager receives prestigious awards for this **contribution in understanding microbial diversity and more**

CSIR-NCL



Syed G. Dastager, a Scientist from CSIR-National Chemical Laboratory (CSIR-NCL), Pune, has received the AMI- Prof. B. N. Johri Award from the Association of Microbiologists of India in recognition of his significant contribution towards understanding microbial diversity, and NASI-Scopus Young Scientist Award to recognise India's most promising



researchers working in the area of environmentally sound sustainable development and are contributing to protecting our planet and conserving its natural resources.

### **Research on microorganisms**

Dastager completed his M.Sc. and Ph.D. in Microbiology from the Department of Studies and Research in Microbiology, Gulbarga University, in 2002 and 2006, respectively. He has done post-doctoral work at Korea Research Institute of Bioscience and Biotechnology, Daejeon, Korea. He joined CSIR-NCL in August 2012 and started working at National Collection of Industrial Microorganisms (NCIM).

His group research mainly emphasizes the crucial role that microorganisms are currently playing and are likely to continue to play in future as microbial cell factories for the production of bio-based ingredients for the biotechnological use. His group has described more than 60 novel species of Actinomycetes/Actinobacteria, interestingly these newly described species harbours a huge and so far, almost untapped "hidden" biosynthetic potential in their genomes.

More than 130 research papers, several awards



He has to his credit more than 130 research papers in peer-reviewed international journals and 10 Indian and US patents. He has received several awards including INSA Visiting Scientist Award, and Young International Scientist of the Chinese Academy of Sciences. He has been the Associate of Karnataka Science and Technology Academy. He also serves on the editorial board of Microbiotechnology, a section within Frontiers in Microbiology, Frontiers in Bioengineering and Biotechnology and Frontiers in Environmental Science and has served as an associate editor for the journals International Microbiology, and Microbiological Research in recent past.











## **CSIR-NEERI** holds a training programme on IPRs and **Patents/Designs filing**





CSIR-National Environmental Engineering (CSIR-NEERI) Institute Research organised a training programme on Intellectual Property Rights (IPRs) and patents/designs filing on 8 February 2023 NEERI, Auditorium. This the 1**n** programme was organised in collaboration with Rajiv Gandhi National Institute for Intellectual Property Management



(RGNIIPM, Nagpur) in alignment with the Govt. of India's initiative – National Intellectual Property Awareness Mission (NIPAM). The objective of the programme was to create an IPR awareness among Researchers. Dr. Pankaj P. Borkar, Dy. Controller of Patents & Designs, RGNIIPM was the Resource Person.

Dr. Atul N. Vaidya, Director, CSIR-NEERI inaugurated the training programme. Shri Kishore Pantawane, RGNIIPM was also present on this occasion. In his inaugural address, Dr. Vaidya emphasized on the importance of the patent drafting and documentation required in filing and securing the Intellectual Property Rights (IPRs).

Dr. Pankaj P. Borkar, Dy. Controller of Patents & Designs, RGNIIPM conducted the training session and shared details pertaining to various types of IPR, patentable and non-patentable inventions, requirements and procedures for filing the IPR, importance and benefits of IPR filing, etc. The participants were benefitted from the training programme by knowing the procedure how to get due recognitions for their inventions.

Dr. Sushant B. Wath, Principal Scientist and IPR Coordinatorconducted the proceedings and





### briefed about the IPR status of CSIR-NEERI and gave an overview of the training session and its objectives to all the participants.vEr. PrateekD. Dwivedi, Technical Officer, proposed vote of thanks at the end of the session.











### **MoU Singed between CSIR-IMMT Bhubaneswar and OUAT** Bhubaneswar

CSIR-IMMT



Bhubaneswar: CSIR-Institute of Minerals and Materials Technology and Odisha University of Agriculture & Technology (OUAT) have inked a Memorandum of Understanding on Monday for enabling technology collaborative research, development and transfer.

This MoU is aimed to catalyse knowledge



exchange and translation of ideas from laboratory to industries through intervention of science & technology powered by CSIR-IMMT InTEC (Innovative Technology Enabling Centre) and IMMT-DSIR-CRTDH (Common Research & Technology Development Hub).

The MoU is also aimed to nurture joint research pursuits between both the premier organizations on developing technologies related to sustainable and modernized agricultural methods and innovative products and processes. The works covered under the MoU includes technologies for advanced CO2 sequestration, 3rd generation biofuel production and advanced plasma based postharvest techniques for improved shelf-life, germination and yield.

Prof. Garikapati Narahari Sastry, Director CSIR-IMMT and Prof. Sanjay Kumar Das, Dean College of Agricultural Engineering and Technology, OUAT were present in the signing event.

Published in:



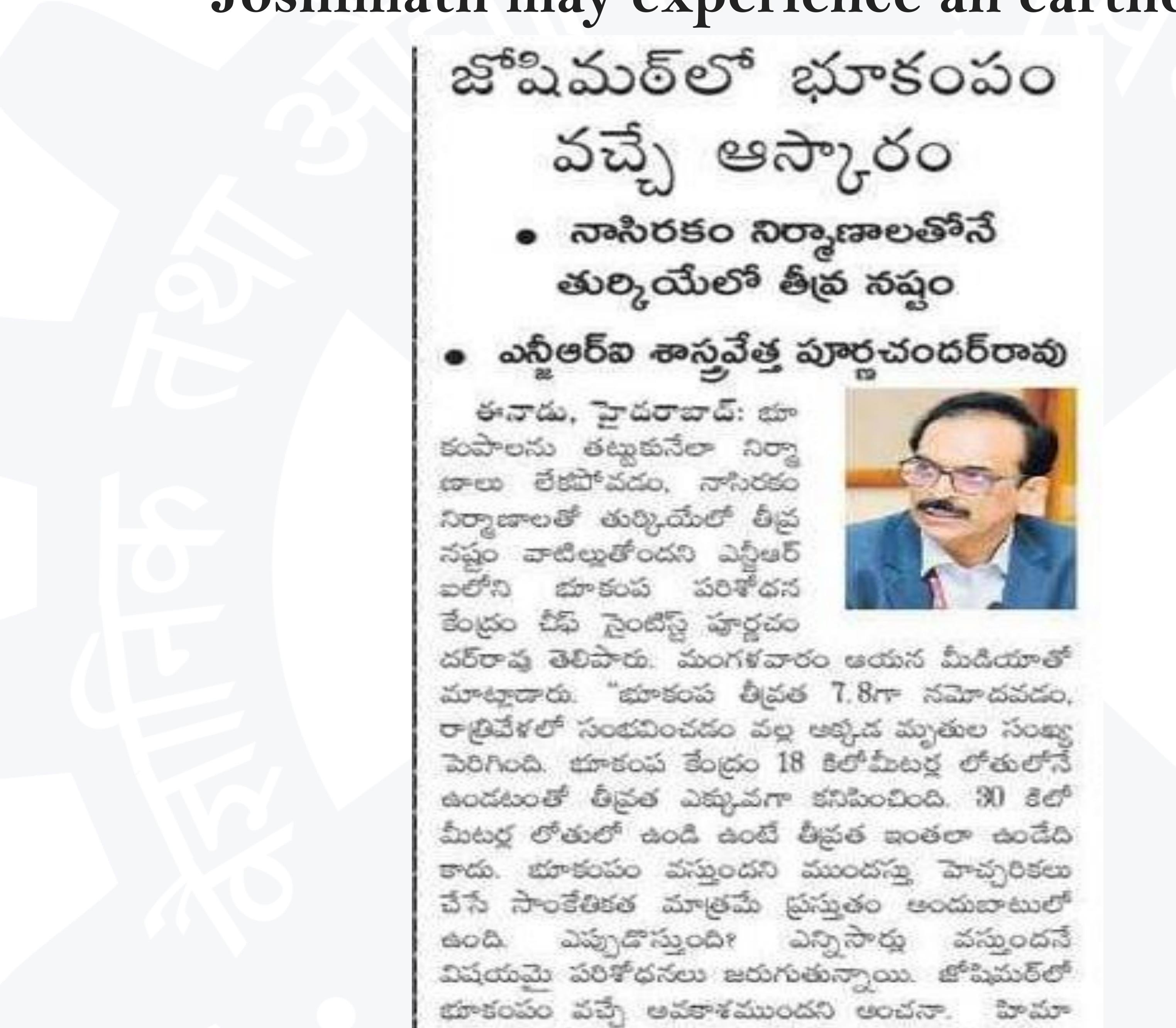




### CSIR-NGRI

08<sup>th</sup> February, 2023

Joshimath may experience an earthquake.



**Published in:** 

Eenadu

లయాల చుట్నా పక్కల ప్రాంతంలో ఎక్కువ భూకం పాలు వచ్చే అవకాశం ఉంది. 1897, 1905, 1934, 1950లో అక్కడ తీవ్ర భూకంపాలు సంభచిందాయి. 1934 తర్వాత నేపాల్, ఉత్తరాఖండ్ ప్రాంతాల్లో పెద్ద భూకంపం సంభవించలేదు. మున్ముందు ఆ ప్రాంతా ల్లోనూ భూకంపాలొచ్చే ఆస్కారముంది. భూకంపాల తీవ్రతను తట్టకునేలా ప్రత్యేక నిర్మాణాలపై ప్రభుత్వం ప్రమాణాలను నిర్దేశించింది. కొందరు వీటిని పట్టించుకో వదం లేదు. భూకంపాలను తట్టకునేలా రెట్రోఫిట్టింగ్ ద్వారా పాత భవనాలను మరింత దృధంగా చేసే ఆవ కాశం ఉంది" అని పూర్ణచందర్రావు వివరించారు.





### **CSIR-NEERI**





गया। कार्यशाला का उद्घाटन केंद्रीय मंत्री नितीन है। कार्यशालाओं के माध्यम से सड़क सुरक्षा व गडकरी ने किया। इस अवसर पर प्रमुख रूप से ध्वनि प्रदूषण पर पाठ्यक्रम विकसित करने की जनआक्रोश के अध्यक्ष डॉ. अनिल लद्धड, सचिव आवश्यकता पर जोर दिया।



Dainik Bhaskar





### With NIO's breakthrough, industry can use collagen from jellyfish





Panaji: Scientists at the National Institute of Oceanography (NIO), Goa, have found a way to tap the state's marine life for collagen. Up until now, India has been largely dependent on China for its collagen requirements in the skincare and pharmaceutical industry.

The caliporea species of jellyfish from

FROM THE SOURCE **TYPES OF EXTRACTIONS** Pepsin enzyme extraction and acid enzyme TYPES OF COLLAGEN Liquid collagen. Dialysis is done to retain the collagen PROPERTIES Anti-ageing, wound healing MEDICAL APPLICATIONS Used in SPF sunscreens, hydrogels, outer coating of capsules, band-aids

The collagen is dried at 4C to keep it from degrading Purification is done using the chromatographic technique

which collagen is being extracted for research have been sourced from Betul beach in South Goa and Caranzalem beach in North Goa.

"We can reduce our dependence on China by generating collagen from marine sources like jellyfish, prawn, mackerel and crabs. We can also extract collagen from sea urchin," said Shambhavi Naik, project associate, NIO, who is one of the researchers working on the project. "Jellyfish may be a nuisance to fishermen who often toss them back in the sea when they get entangled in their nets, however we can extract value-added products from them which can be useful for their anti-ageing properties and can be used as a nutraceuticals," she said.

She and her colleagues are currently calculating the SPF 30 to 50 values of the collagen.

Naik was presenting her team's work at the institute's One Week One Lab Campaign wherein the institute is showcasing the technology and innovations in its laboratories to the public from February 6 to 11. In this event, each of the 37 premier institutes of CSIR spread across the country will showcase their exclusive innovations to the people of India, one after the other every successive week.





"A lot of the research by CSIR is not reaching entrepreneurs and industries due to which they are not being converted into products. Through this event, we are making various industry people aware of the various technologies that the NIO has in biotechnology as well as marine instrumentation," said NIO director, Sunil Kumar Singh.

He added that the NIO is developing a technology to develop bioplastics from seaweed and can provide information on its toxicology, biodegradability and other essential data to industries that wish to venture in this space.

"It is imperative to know whether the bioplastics are environment-friendly or not. The NIO carries out environmental impact studies and can help industries with such data," he said.







## Govt. Provided Financial Aid to Train Farmers for Preservation, **Advancement, and Management of Medicinal Plants**

CSIR-CIMAP, IIIM, NBRI

07<sup>th</sup> February, 2023

The National Medicinal Plants Board (NMPB), Ministry of Ayush has provided financial support in the form of projects to a number of institutes and organisations to help them organise awareness campaigns, educational trips, and capacity-building activities (seminars, conferences, workshops, etc.) as part of the Central Sector Scheme (CSS) for the preservation, advancement, and sustainable management of medicinal plants.

This information was provided by Minister Sarbananda Sonowal in a written reply in Rajya Sabha today.

With a budget of Rs 3079.116 lakh, NMPB has supported 126 projects for various IEC activities to inform a wide range of stakeholders, including farmers, about different aspects of medicinal plants, such as conservation, cultivation, Post-Harvest Management, and marketing, from the financial year 2017–18 to 2021–22, the statement said.

The Directorate of Medicinal and Aromatic Plants Research (DMAPR), Anand, Gujarat, is also given project-based support under the aforementioned programme for the creation of a training module and facilitator's guide for good agricultural practices and good collection practices for medicinal plants.

In addition, the Council for Scientific & Industrial Research (CSIR) is educating farmers about good agricultural practices (GAP) and global warming through its constituent laboratories, including the CSIR-Central Institute of Medicinal & Aromatic Plants (CSIR-CIMAP), Lucknow; the CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu; and CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow, the minister told.

By making special efforts to create enhanced agrotechnologies, high-yielding varieties, and





## processing technologies of medicinal and aromatic plants, CSIR-CIMAP is fostering activities based on medicinal and aromatic plants in various regions of the nation.

By implementing numerous awareness programmes and skill development programmes on the production, primary processing, and marketing elements of medicinal and aromatic plants, extra efforts are also being made to spread technology among farmers and business owners, the statement added.









### **CSIR-IICT** MoU with University of Ladakh





CSIR-Indian Institute of Chemical Technology (IICT) and University of Ladakh have signed a Memorandum of Understanding for collaborative research on extraction and isolation of medicinal plants that grow in high altitude on Tuesday.

The pact is for joint study on climate change, energy, biodiversity, rare medicine plants, introduction of green-house etc. Under the MoU, students of Ladakh, specially from department of chemistry and other related departments, would undertake their project work at CSIR-IICT using the R&D facilities. Students will be visiting IICT for three months based on the scheme for north-east, J&K and Ladakh regions.

CSIR-IICT Director D. Srinivasa Reddy said scientists would jointly work with the university faculty on deployable IICT technologies to improve the livelihood opportunities of people of Ladakh. Both the teams would engage in collaborative work on several areas including societal i.e. waste to wealth, green farming, nano-membrane based water purification technologies etc.

IICT was particularly interested in the extraction and isolation of bioactive compounds from the medicinal plants that grow in the high altitude zones, he said. University of Ladakh Vice-Chancellor S.K. Mehta, Rgistrar Ashok Sharma and senior faculty Riyaz M K Khan were from

### University of Ladakh were present, said a press release.

### **Published in:**

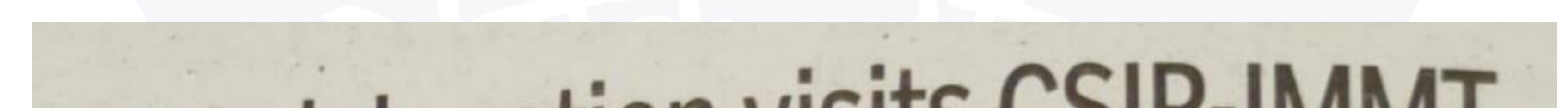






07<sup>th</sup> February, 2023

### CSIR-IMMT



# ISA delegation visits CSIR-IMMT

### POST NEWS NETWORK

Bhubaneswar, Feb 6: International Seabed Authority (ISA) secretary general Michael William Lodge visited Monday CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT) here with an ISA delegation comprising Marie Bourrel McKinnon, chief of staff and head of strategic planning unit, Jose Dallo Moros, director, Sonakshi Mishra, program management officer, and Madhumita Kothari, senior advisor, coordinated by Sandip Kumar Mukhopadhyay scientist, Ministry of Earth Sciences (MoES). ISA and MoES exchanged polymetallic nodules (PMIN) exploration extension contract February 1 in. the presence of Union minister Jitendra Singh, minister of State (independent charge) Earth

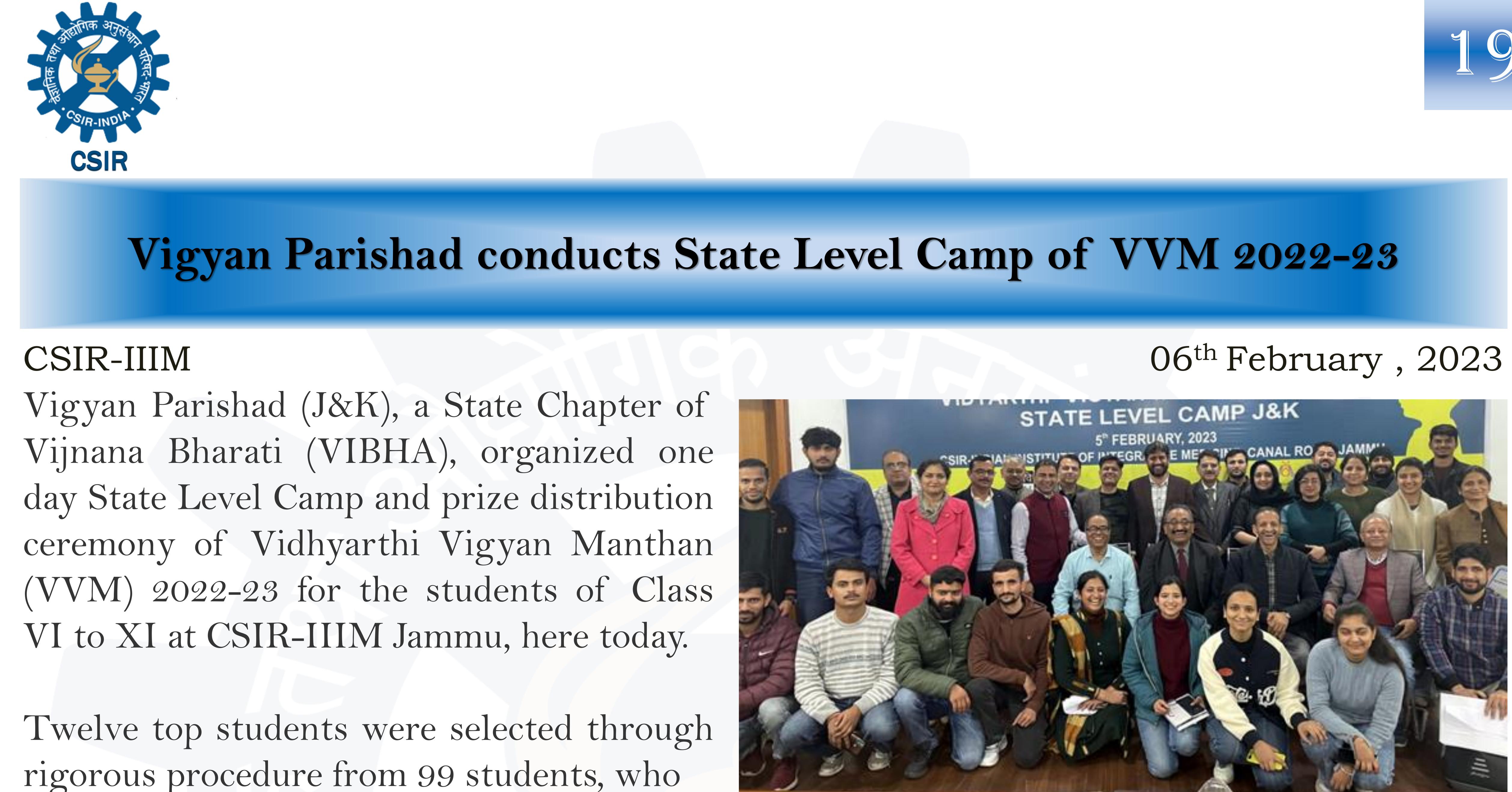
Sciences and secretary M Ravichandran. This contract was initially signed March 25 2002 for a period of 15 years, which later was extended twice for 5 years period. during 2017 and 2022. "Polymetallic nodules present in the deep sea floor contain metals copper, nickel, cobalt and manganese, which are essential for India's growth, particularly electric vehicles as India does not have any exploitable land based ores. In 2021, the MoES launched the Deep Ocean Mission to support the develop-

ment of its blue economy," said a ministry official.

. The secretary general and the ISA delegation visited various departments at the institute. G Narahari Sastry, director, CSIR-IMIT explained that the institute is also understanding potentials, opportunities and possibilities.

### Published in:

Statesman, Pioneer, Times Of India



were initially shortlisted from more than 1000 registered students at the preliminary stage, for their onward participation in National Level Talent Search Camp.

The programme was conducted by Vigyan Parishad J&K team, comprising of Prof Rajni Kant (President), Prof Pawanesh Abrol (Vice President), Dr Parveen Kumar Lehana (Vice President), Samir Vohra (Org Secretary), Dr Dhiraj Vyas (Secretary), Er Deepak Byotra (Jt Secretary), Pankaj Gupta (Treasurer), Tinny Sawhney (State VVM Coordinator), Vikas Langer, Ajay Verma, Dr Uday Pratap Singh, Social Media Incharge, Rakesh Chobber, Academic Coordinator of VVM, and Vijay Sharma, Hon Secretary IETE, Jammu sub centre. The programme was presided over by President Vigyan Parishad J&K, Prof Rajni Kant, who apprised the audience about the National Level Competitive Examinations which are available for those students who are willing to take up Science as a career. He also conveyed that the VVM examination has, in order to felicitate young budding scientists, continued with a practice of awarding students for their first, second and third rank with a cash prize of Rs 5000, Rs 3000 and Rs 2000 respectively, for each class, along- with mementos and certificates.

An exposition of various National funding agencies was also made and the students were





apprised of the opportunities these agencies offer to the young budding scientists. Dr Brajesh Pandey National Controller Examination VVM, during his interaction with the audience, informed about the working principle of VVM at National Level and motivated the participating students to work hard for the development of the Nation and for its selfreliance.

Dr Dhiraj Vyas, Sr Principal Scientist CSIR-IIIM conveyed the message of Dr D S Reddy, Director CSIR-IIIM for the programme highlighting the value of Science in our lives and encouraging the students to do science for the betterment of this Nation.

Jyoti Sharma conducted proceedings of the event and Samir Vohra, Organising Secretary VIBHA J&K, presented the formal vote of thanks. The function was witnessed by the participating students, their parents, teacher coordinators/evaluators, along with the well











### **CSIR** develops new variety of peppermint



06<sup>th</sup> February, 2023

The Council of Scientific and Industrial Research (CSIR) in Lucknow has released a newly developed variety of peppermint (Mentha piperita) 'CIM-surass' that has over 70 per cent menthol component.

A room freshener herbal vaporizer 'Aero-Clean' and a booklet titled 'Cultivation, Processing, and Marketing of Suitable Aromatic Crops for North-Eastern Regions of India' to provide information on aromatic plants to the farmers of northeast has also been released.

CSIR Director General, N. Kalaiselvi, said, "CSIR is transforming the lives of common people

### through its technologies."

Appreciating the efforts of Central Institute of Medicinal and Aromatic Plants (CIMAP)- a frontier plant research laboratory of CSIR- she said that during CIMAP's 'Kisan Mela', value-added planting material is made available to the farmers that helps in increasing farmers' income.

"The main objective of organising this scientist, entrepreneur and farmer meet is to become an accessible medium to make CIMAP's research available to the public," said CIMAP

### Director Prabodh Kumar Trivedi.

### Published in:





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