

# CSIR IN MEDIA



CSIR

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**Union Minister Dr. Jitendra Singh says, Prime Minister Shri Narendra Modi has always been encouraging and forthcoming in sharing inputs on futuristic technology's blend with traditional knowledge, for a greater good**

CSIR-NIScPR

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



Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh today said that Prime Minister Shri Narendra Modi has always been encouraging and forthcoming in promoting blend of futuristic technology with traditional knowledge, for a greater good.

Addressing the first-ever 'International Conference on Communication and Dissemination of Traditional Knowledge (CDTK - 2023)' as Chief Guest here, Dr. Jitendra Singh called for optimum mix of traditional knowledge in tandem with advanced scientific research using modern tools and technology. He said that providing access to everyone to the Traditional Knowledge Digital Library (DGTL) is an indication that integration of knowledge with technology can help the common man to a great extent.

The Union Minister also released SVASTIK (Scientifically Validated Societal Traditional Knowledge of India) Brochure, Popular Science Book and Indian Journal of Traditional Knowledge Azadi Ka Amrit Mahotsav Issue. The two-day International Conference is being



organised by the CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi. The Union Minister noted that in the last 8 years, under leadership of Prime Minister Modi, indigenous resources like oceans, are now being given top priority through a number of initiatives, which focus on integrating traditional knowledge and modern scientific research. He cited examples of Deep Sea Mission, carried out in the Indian Ocean (Traditionally known as Hind Mahasagar), Purple Revolution, to promote cultivation of lavender using latest technology, resulting in generation of huge employment opportunities for local Kashmiris.

Dr. Jitendra Singh, while congratulating CSIR-NIScPR for hosting first-ever Conference of this scale and theme, noted that India has the largest and richest pool of knowledge, written, spoken and applied. He said, proving this, the biggest challenge is how to utilize this knowledge to its optimum best. Dr. Singh said that this can be done by finding an optimum balance between the two, which needs integration and a thoughtful process. He said that this is the best time for India to take a lead in this field in the world, as under PM Modi, the country has been receiving never-before kind of support for science, technology and research. Dr. Jitendra Singh said that, guided by PM Modi, India was able to develop four Covid-19 vaccines while the whole world was struggling to make even one and contributed to the global fight against Covid-19 by providing vaccine to several countries, under 'Vaccine Maitri' initiatives, highlighting India's belief in traditional and human values. He said that when traditional knowledge becomes at stake, then it is picked up very quickly and pooling of resources along with integration gives us an edge in modern times.

Speaking on the occasion, Dr. Kalaiselvi, DG, CSIR and Secretary, DSIR said that we are living in a golden period which is celebrating science and scientific research and credit for this goes to Prime Minister Modi, for encouraging start-ups and researchers through various schemes. The two-day Conference on 14th and 15th February, 2023, is being attended by over 200 participants from 22 states in India and countries like the United States, Canada, Switzerland, Qatar and Turkey.

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## HAL inks pact with CSIR lab for design of fin and rudder for LCA-Tejas

CSIR-NAL

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

Hindustan Aeronautics Limited (HAL) has signed a Transfer of Technology (ToT) agreement with CSIR-National Aerospace Laboratories (NAL) for the design know-how, production and commercialisation of composite fin and rudder assemblies for the Light Combat Aircraft (LCA) - Tejas at Aero India here.



With the signing of the technology transfer for fin and rudder, the defence PSU can directly produce these composite parts for the series production of LCA Mk1A aircraft meeting the initial requirement of Indian Air Force squadrons, NAL said in a release on Wednesday.

Tejas is an indigenous 4.5 generation, all-weather and multi-role fighter aircraft for the IAF.

Over the last three decades, CSIR-NAL has developed many critical technologies for the Light Combat Aircraft (LCA) Tejas and continues to support this major national programme, NAL said.

It said Advanced Composites Division (ACD) of CSIR-NAL has pioneered the design and development of composite structures for LCA using innovative and cost-effective manufacturing technologies, including co-curing.

The laboratory further said it has played a pivotal role in the development of the composite components for LCA-Tejas which includes fin and rudder, wing spars, wing fuselage fairings, fairing blocks, centre fuselage components and under-carriage doors.



The co-curing technology developed by CSIR-NAL has resulted in reducing the weight and also part counts that has improved the structural efficiency by minimising the number of mechanical joints, it said, adding that this has resulted in more than 20 per cent savings in cost and 25 per cent reduction in weight of LCA-Tejas.

(Only the headline and picture of this report may have been reworked by the Business Standard staff; the rest of the content is auto-generated from a syndicated feed.)

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## CSIR-DG Kalaiselvi to participate in UoH symposium

CSIR

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

CSIR director general N. Kalaiselvi, Scientific Adviser to Defence Minister G. Satheesh Reddy and other eminent scientists from various scientific institutions and universities are to participate in the two-day symposium on “Electronics for Self-Reliance” on February 16 and 17 at Dr. Zakir Hussain lecture hall complex, University of Hyderabad.

The event is being organised by the Centre for Advanced Studies in Electronics Science & Technology (CASEST) under School of Physics, UoH, in collaboration with National Academy of Sciences, India (NASI) Hyderabad chapter and Academy for Science, Technology and Communication (ASTC).

Director-General, Electronics & Communication Systems (ECS), DRDO, B. K. Das will be inaugurating and delivering the ASTC- A. S. Rao memorial lecture on “Leveraging defence R&D for Atmanirbhar Bharat”, while former IIT-Delhi Director V. Ramgopal Rao Pillay will deliver the key note address on “ India Semiconductor Mission: How can academia leverage this opportunity?” said a press release.

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## Tata Steel signs MoU with CSIR-CBRI for sustainable mining solutions

CSIR-CBRI

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

Tata Steel and Central Building Research Institute (CBRI), a constituent establishment of the Council of Scientific and Industrial Research (CSIR), have signed an MOU to collaborate on research, academic growth, and sustainable solutions in mining. The MoU was signed by D B Sundara Ramam, Vice President Raw Materials, Tata Steel and Prof. R. Pradeep Kumar, Director CBRI in



Jamshedpur in the presence of S. K. Negi, Chief Scientist CBRI, Dr Ajay Chourasia, Chief Scientist CBRI, Ashish Pippal, Scientist, CBRI, Atul Kumar Bhatnagar, General Manager Ore, Mines & Quarries, Tata Steel and other senior officials from Tata Steel and CBRI.

Talking about the development, D B Sundara Ramam said: “The collaboration with CBRI is a significant step towards our commitment to sustainable mining practices. We are excited to work with their experts to drive innovation and find new ways to ensure the wellbeing of communities in the areas we operate. The MOU will pave the way for innovative and scientific research in mining.” Under the agreement, CBRI will provide scientific inputs to Tata Steel on slope stability analysis and control measures in mining areas, as well as affordable and sustainable green housing technologies for the rehabilitation and resettlement of families in mining areas. Additionally, the partnership will include technical training and workshops on geotechnical understanding and other scientific areas related to mining. CBRI, located in Roorkee, Uttarakhand, is responsible for generating, cultivating, and promoting building science and technology in India as a constituent establishment of CSIR.

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[Avenuemail](#)



## CSIR-NGRI organizes 34th ISMAS 2023 Symposium in Hyderabad

CSIR-NGRI

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

CSIR-National Geophysical Research Institute (CSIR-NGRI), a constituent research laboratory of the Council of Scientific and Industrial Research (CSIR) on Wednesday organized here the four-day 34th Indian Society of Mass Spectrometry (ISMAS) 2023 Symposium on “Mass Spectrometry” in association with the Indian Society of Mass Spectrometrists (ISMAS), Mumbai.

Prof Avinash Chandra Pandey, Director, IUAC, New Delhi who inaugurated the Symposium highlighted the varied and rising applications of Mass Spectrometry and the need to extend these facilities to young researchers. He also reiterated about developing skills among the new generation to meet the next generation challenges.

Convenor of the Symposium Dr D Srinivas Sarma briefed about the contents of the program, stating that 15 sessions have been planned to facilitate good scientific interactions among the delegates.

Earlier, in his welcome address, Dr Prakash Kumar, Director, CSIR-NGRI informed about various mass spectrometers housed at CSIR-NGRI, and their applications in unravelling the research issues in Earth System Sciences.

The symposium will deliberate discussions on the Instrumentation and Application of Mass Spectrometry in various fields like Nuclear Sciences, Earth, Ocean & Environmental Sciences, Nanomaterial, Biomolecules and there will exclusive sessions on self-reliance (Atma Nirbhar Bharat) in Mass Spectrometry. Over 150 Researchers from various organisations across the country have attended the symposium.

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[Uni India](#)



## Kerala Firm Turns Waste Sand into 4000 Eco-Friendly, Low-Cost Bricks Everyday

CSIR-NIIST

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

Someone once said that “One man’s trash is another’s treasure,” and setting yet another example of how, is the Kerala government undertaking Autokast Ltd, a ferrous foundry manufacturing unit. As per a 2021 report by The Hindu, the company generates 700 tonnes of foundry waste sand every month. They have innovated a technique that will help convert sand into



bricks that can be used by the construction sector. This was developed by the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) at Pappanamcode in Thiruvananthapuram, Kerala.

“A team from CSIR-NIIST, the technology partner of the project, is expected to visit Autokast Ltd this week. They will make 3,000 bricks in our presence as part of transferring the technology. We will pay a fee for using their technology,” said V K Praviraj in a 2022 report to The Hindu.

The manufacturing unit is built with a capacity to produce 4,000 bricks per day. While initially, the production will be around 1,500 bricks per day, the unit will reach its full capacity over a period of time, the report says. “The bricks made from silica sand are eco-friendly and we expect the product will be well received by the market,” said an official of Autokast Ltd.

### Why Silica bricks?

A common issue that growing economies like India deal with is the rising population and subsequent damage to the environment to meet the demands of said population.



A research paper by Mckinsey & Company titled Environmental and Energy Sustainability: An approach for India predicts “the building construction sector in India would grow at a rate of 6.6% per year till the period 2030 since 80% of India is yet to be built”.

The constant growth in the construction industry is bound to increase demand for construction materials, especially bricks. To meet this demand, the foundry industries indulge in mass production leading to mass waste generation.

“The disposal of waste sand in the environment, typically in landfills, causes direct contamination of soil due to metals. It may also contaminate the groundwater resources and surrounding superficial environment,” the paper states.

The Mckinsey & Company report also suggests that the penetration of toxic materials in the soil and especially groundwater can lead to water-borne diseases.

“Studies show that WFS (waste foundry sand) can be used in the manufacturing of clay bricks. Recycling of foundry sand residuals as aggregates in the manufacture of red clay bricks and tiles was studied. Clay bricks were prepared with 10%, 20%, 30%, 40%, and 50% of WFS. It was reported that the best results were obtained in samples with 30% and 40% WFS,” the report observes.

As per Autokast Ltd, as well as research around the subject, Silica bricks are more eco-friendly and save tonnes of WFS from being dumped in landfills.

A Science Direct research paper suggests that the process of making bricks involves combining clay-sand mixtures, forming bricks, and drying and firing the bricks. They are most commonly used as refractories as the bricks are “low cost, have high creep resistance and cause low pollution”.

On a path of setting an example for other manufacturing units to save the environment one



silica brick at a time, the project was undertaken as part of the ‘Waste to Wealth’ research programme of the Council of Scientific and Industrial Research (CSIR).

The Hindu report states, “The cement bonding and compression moulding technique can produce high-strength bricks that meet the IS 1077 standards, and they can be produced in aesthetically appealing colours to suit interior designing requirements, according to NIIST scientists.”



## NIIST to hold start-up conclave and millet food festival

CSIR-NIIST

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

The National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, an institute under the Council of Scientific and Industrial Research, will organise a start-up conclave to explore the possibility of incubating start-ups on its campus.

“The Kerala Startup Mission has indicated its interest in providing financial and infrastructural support for implementing new projects,” Dr. C. Anandharamakrishnan, Director, NIIST, said here on Wednesday.

He was addressing a function at which Dr. N. Kalaiselvi, Director General, CSIR, and Secretary, Department of Science and Industrial Research (DSIR), unveiled the new logo and revamped website of the NIIST.

“The start-up conclave will be held as part of the ‘One Week One Lab’ (OWOL) programme, which will also feature a one-week-long Millet Food Festival at the NIIST,” Dr. Anandharamakrishnan added.

Speaking on the occasion, Dr. Kalaiselvi said the support offered by the State for R&D activities would provide further impetus to the institute for developing linkages to other State-owned developmental sectors. “This will, in turn, make the common man aware of the institute’s technological initiatives,” she noted.

Dr. Kalaiselvi also lauded the efforts of the NIIST in securing the State’s support for its novel initiatives and activities, including in coir and rubber research.

**Published in:**

[The Hindu](#)



## वैज्ञानिकों ने किया गुजरात के केंद्रीय व नवोदय विद्यालयों का भ्रमण



### भावनगर

छात्रों के लिए सुनियोजित अनुसंधान प्रयोगशाला आधारित शिक्षा पर ध्यान केंद्रित करने और

विद्यार्थियों में विज्ञान के प्रति आकर्षण व वैज्ञानिक प्रवृत्ति उत्पन्न करने के उद्देश्य से भावनगर स्थित सीएसआईआर-केंद्रीय नमक व समुद्री रसायन अनुसंधान संस्थान (सीएसएमसीआरआई)

के वैज्ञानिकों द्वारा 6 से 8 फरवरी 2023 के दौरान जिज्ञासा परियोजना व भारत सरकार द्वारा 75<sup>वें</sup> स्वतंत्रता वर्ष के दौरान मनाये जाने वाले आजादी के अमृत महोत्सव के अंतर्गत

गुजरात के 10 केंद्रीय विद्यालयों (राजकोट, जामनगर, भुज व गांधीधाम) तथा जवाहर नवोदय विद्यालय (जामनगर) का भ्रमण किया गया। छात्रों के संग परस्पर संवाद करके उन्हें सूक्ष्मदर्शिकी, जल विश्लेषण, रिवर्स आस्मोसिस, अल्ट्रा फिल्टरेशन जैसी जल शुद्धिकरण की आधुनिक तकनीक और उनके महत्व के बारे में विस्तार से समझाया गया। संस्थान के वरिष्ठ वैज्ञानिक व पीआरओ डॉ. केबी पाण्डेय ने सूचित किया कि छात्रों

को संस्थान द्वारा किये जाने वाले विभिन्न शोध कार्यों के बारे में भी जानकारी दे उन्हें विज्ञान में अपना कैरियर बनाने के लिए प्रेरित किया गया। डॉ. डूंगर राम चौधरी, प्रधान वैज्ञानिक व सीएसआईआर - जिज्ञासा परियोजना अन्वेषक ने बताया कि इस कार्यक्रम में अंशुल यादव, डॉ. गोपालाराम भादू शामिल थे और लगभग 800 छात्रों तथा 30 शिक्षकों ने भाग लिया व लाभान्वित हुए।



## Advanced Management Development Program On Mineral And Material Innovations For Sustainable Future At CSIR-IMMT Bhubaneswar

CSIR-IMMT

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

An Advanced Management Development Program (AMDP) on “Mineral and Material Innovations for Sustainable Future” sponsored under ESDP scheme of Ministry of MSME, is being organized by School of Enterprise Management, National Institute for Micro, Small and Medium Enterprises (ni-msme) (An organization of Ministry of MSME, Govt.



of India & ISO 9001:2015 Certified), Hyderabad in association with CSIR-IMMT (Council of Scientific and Industrial Research, Ministry of Science and Technology, Government of India), Bhubaneswar from February 13 -18, 2023 at Shanti Swarup Bhatnagar Hall of CSIR IMMT Bhubaneswar.

Inaugurating the event and Dr G Narahari Sastry, Director, CSIR-IMMT said, “I have realised the innovation of entrepreneurship in the current situation for sustainable development. There are several challenges in the world, opportunities are really very high for the young generation.

India has come in a long way in past 75 years, one of the most formidable nations in the world to make its own mark in the modern development. This type of initiative will help us people who have some small ideas to take them to the logical end.

I am sure that this one-week program will help you to explore what are you can do. You already have some ideas and if you have an idea it is a very good place for you to see that how



your idea can be taking shape in the form of product or start-up or if you want to really get some support what are support required and possibility are there and I am very happy to see the eminent judges CSIR-IMMT and other resource persons will be very happy to interact with you and clear any doubt you have and most importantly I feel that every one of us who wanted to achieve something in life should have a clarity in our thinking and should have a go.

We should try to know what we want to do in life in a larger perspective, in a medium perspective and in short term perspective.

I am sure this training program will give you a lot of information on the available resources technologies and how do you make an idea work." The major objective of this residential intensive training program (conducted in offline mode) is to connect science and technological innovations for entrepreneurial sector and attended with about 60 participants including Entrepreneurs, aspiring technologists from various R&D Institutes and Universities from different parts of the country.

The program includes theory and practical sessions, interactions, demonstrations, lab visit and a field / industrial visit spanning over six full days, wherein the participants get a very insightful knowledge on the practical aspects of Mineral and Material Innovations.

V Swapna, Associate Faculty (ni- msme) & Programme Director addressed the participants briefing about ni-msme activities.

Dr A K Sahu, Chief Scientist and Dr T Pavan Kumar, Senior Scientist were among the other who played key role in fruitful conduct of this program.

Inaugural event was being graced by about 200 invitees including the program participants, making it a great beginning.

**Published in:**

[Odisharay](#)



## Singapore-based investor joins Osmania-TBI as adviser

CSIR-CCMB

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

Osmania University on Sunday revealed that Dr Anand Govindaluri, distinguished alumni and also an investor in Singapore, has been onboarded officially as a member of the advisory board of Osmania Technology Business Incubator (Osmania-TBI).

Dr Govindaluri is a leading angel investor and venture capitalist based in Singapore. He also owns the investment firm Govin Holdings Pte. Ltd. He attended the recent Global Alumni Meet in January and volunteered to support his alma mater, especially with respect to the ideas from students and faculty members as well as startups emerging out of Osmania-TBI.

Around 40 startups are expected to benefit from this association in the next few years, said Osmania-TBI Director Prof Srinivasulu Chelmala. The advisory board is headed by Vice Chancellor D Ravinder and includes prominent academics and domain experts like Dr Ramjee Pallela, Chief Operating Officer (COO), Atal Incubation Centre of CSIR-CCMB, Dr Vijay Kumar Devarakonda, President, Alumni Association, University College of Engineering, Varla Bhanu Prakash Reddy, Founder, EdifyPath and Board Member, TiE Hyderabad, and Prof Srinivasulu Chelmala, Director, Osmania Technology Business Incubator.

**Published in:**

[New Indian Express](#)



## India rated among top 5 accreditation systems in world: Report

CSIR-NPL

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

India has been placed at the fifth position out of 184 countries in terms of its accreditation system, according to the recently released Global Quality Infrastructure Index (GQII) 2021. The GQII ranks 184 economies on the basis of their quality infrastructure (QI). India's overall QI system ranking continues to be tenth. According to the index, India was ranked 21st in terms of metrology and ninth in standardisation. The report was released in December 2022. "We are proud that India is rated among the top five accrediting systems in the world...We anticipate that India will pave the way for more collaborations aimed at creating resilient systems of high-quality infrastructure," the Quality Council of India (QCI) said in a tweet. The report said geographically, the top 25 are mainly located in Europe, North America, and Asia-Pacific, with some exceptions, such as India (10th), Brazil (13th), Australia (14th), and Turkey (16th). While QCI is the national body for accreditation, Bureau of Indian Standards (BIS) is the main body for formulation of standards and the Council Of Scientific And Industrial Research – National Physical Laboratory (CSIR–NPL) for the metrology system.



CSIR-CSMCRI

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

# भारतीय कलेंडर का वैज्ञानिक आधार : डॉ. अरविंद



भावनगर। 'भले ही ग्रेगोरियन कलेंडर, भारतीय कलेंडर की तुलना में आज ज्यादा चलन में है परंतु इसका न तो कोई ठोस वैज्ञानिक आधार है और न ही कोई तर्क। वहीं भारतीय कलेंडर की हर तिथि, घटना और महीने की वैज्ञानिकता है' ये बातें सीएसआईआर-केन्द्रीय नमक व समुद्री रसायन अनुसंधान संस्थान (सीएसएमसीआरआई), भावनगर में विश्व हिन्दी दिवस के उपलक्ष्य में 10 फरवरी को आयोजित आयोजित एक समारोह में भारतीय

राष्ट्रीय विज्ञान अकादमी, नई दिल्ली के कार्यपालक निदेशक डॉ. अरविंद रानाडे ने कहीं। बतौर मुख्य अतिथि, समारोह में अपने ऑनलाइन सम्बोधन में डॉ. रानाडे ने कहा कि भारतीय कलेंडर के दिन, महीने आदि के नाम में भी तारतम्यता तथा वैज्ञानिक दृष्टिकोण है वहीं ग्रेगोरियन कलेंडर की शुरुआत, हर महीने में दिनों की भिन्न संख्या का कोई वैज्ञानिक अथवा तार्किक पक्ष नहीं है। नयी पीढ़ी को भारतीय राष्ट्रीय कलेंडर के बारे में जानकारी एवं जागरूकता

होना बहुत ही आवश्यक है। भारतीय राष्ट्रीय कलेंडर से काल गणना कर भविष्य की जानकारी भी प्राप्त की जा सकती है। समारोह के संयोजक डॉ. कान्ति भूषण पाण्डेय, वरिष्ठ वैज्ञानिक एवं पीआरओ ने बताया कि संस्थान के निदेशक प्रो. कन्नन श्रीनिवासन के लगातार मार्गदर्शन सीएसएमसीआरआई कालानुक्रम में लगातार हिन्दी कार्यान्वयन एवं संस्थान की शोध-गतिविधियों को आम-जन मानस में सरल हिन्दी भाषा पहुंचाने में अग्रणी रहा है।





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