

## In the News

# CSIR Initiates the “One Week One Theme” Campaign



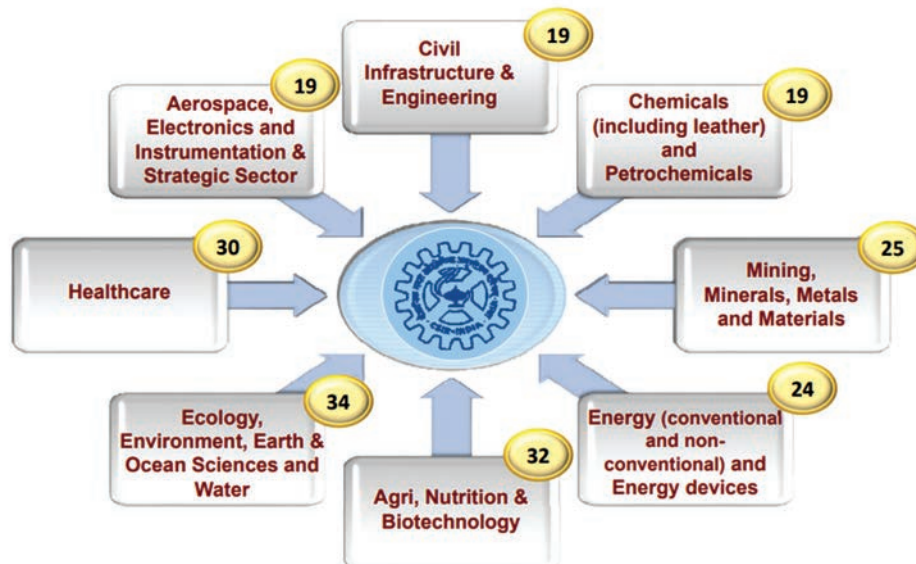
After the successful conduct of the “One Week One Lab” programme by all CSIR laboratories in 2023, Hon’ble Dr Jitendra Singh, the Minister of State (Independent Charge) for Science and Technology and Vice President of CSIR launched the “One Week One Theme” (OWOT) campaign by unveiling its logo on 24 June 2024 at India Habitat Centre, New Delhi. Built on the achievements of the “One Week One Lab”, “One Week One Theme” is the brainchild of Dr Jitendra Singh to bring together the efforts of CSIR labs working on similar themes/projects. This will

help reduce the overlapping of work, making the best use of the resources.

The main objective of the “One Week One Theme” programme is to highlight the innovative approaches and technological developments of all CSIR labs. The weeklong activities under OWOT focus on each of the eight themes of CSIR. Over the years, CSIR has undertaken various initiatives to transform laboratory research into marketable, value-added technologies and products. One of these initiatives involves a thematic approach to use multidisciplinary talent

## CSIR Theme Directorates - Leveraging strengths and opportunities

Bringing complementary skills together for addressing unified goals



*The “One Week One Theme” programme aims to highlight the innovative approaches and technological developments of all CSIR labs.*

and infrastructure to address specific challenges in identified sectors. The roadmap of each theme emphasises its remarkable contributions to public, private, strategic, and societal benefits.

Mentioning the main objective of the “One Week One Theme”, which is to make everyone aware of the progress and advancements in all CSIR labs, Dr Jitendra Singh, during his address, said that this will benefit citizens by providing new employment opportunities and will also empower stakeholders through integration and collaboration with the industry.

Emphasising the importance of the “One Week One Theme” initiative, Dr Jitendra Singh said that when we embark on such campaigns, we also get an opportunity to explore the unexplored and explore further the lesser explored. He added that this adds value because we have already saturated the many popular avenues.

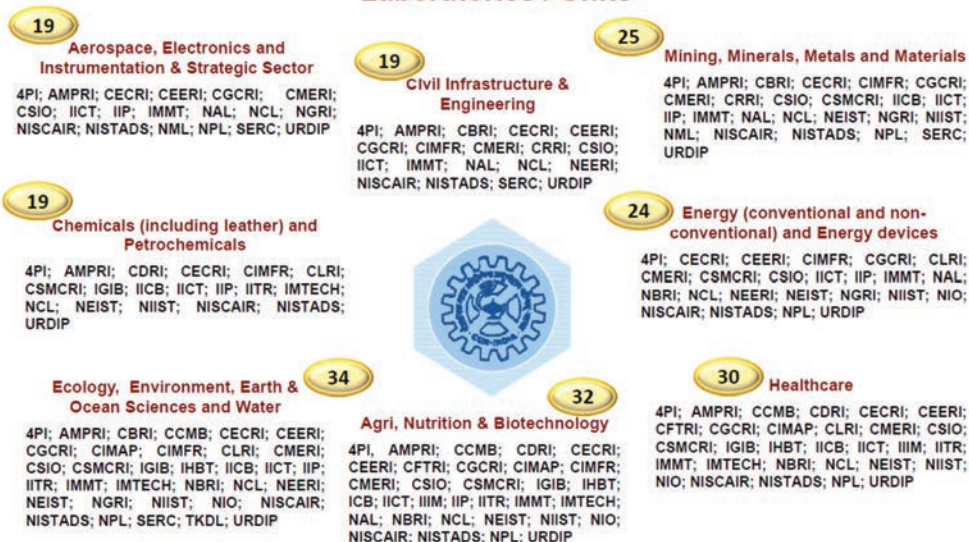
Concluding his remarks, the Minister expressed faith

in the scientific community for its potential to contribute to the economy, emphasising the availability of technological resources in our country. He further mentioned that such initiatives fill us with pride, fostering knowledge and commitment.

Recalling “One Week One Lab” during her welcome address, Dr N Kalaiselvi, DG, CSIR, said that it was a grand success in which all CSIR labs celebrated the lab-centric events and showcased the technologies, products, processes, modules, prototypes, etc. not only to industry but also to the general public and also to the industries for a week. In a briefing about the OWOT, she said it was lab-centric last time; however, this year, it is a theme-centric celebration, during which various teams of CSIR labs will celebrate it together.

She further said that “One Week One Theme” is one platform where CSIR can demonstrate and showcase team spirit instead of just saying to work as a team under thematic areas.

## CSIR Theme Directorates and Participating Laboratories / Units



### Bringing complementary skills together for addressing unified goals

During the programme, around twenty-four technologies were transferred. Besides, products were launched, and MoUs were signed.

Prof. Ramancharla Pradeep Kumar, Director, CSIR-CBRI, proposed the vote of thanks.

On the same day, CSIR-National Chemical Laboratory (CSIR-NCL), Pune, the nodal institute for the Energy and Energy Devices (EED) theme, kickstarted the “One Week One Theme” along with other sister CSIR laboratories, which continued till 28 June 2024.

In his welcome remarks, Dr Ashish Lele, Director, briefly highlighted the CSIR’s work in the Energy and Energy Devices theme, focusing on Hydrogen technologies, Next Gen batteries, Biofuels, Solar harvesting and storage, and coal-based fuels. Dr (Mrs) N Kalaiselvi, Director General, CSIR, New Delhi, in her message, spoke about the initiative of ‘One Week One Theme’ and highlighted the cutting-edge technologies being developed in EED theme in various CSIR labs.

Chief Guest Dr Surya Moganty, Head of Technology at L&T Energy, delivered a keynote address titled “Energy Transition: From Materials Perspective” and inaugurated the exhibition at the ‘One Week One Theme’ programme.

Following the inaugural session, two major technical sessions featured prominent experts sharing their insights on cutting-edge technologies. Along with this, student outreach activities were in progress in parallel with the above events. As part of OWOT, the participatory CSIR labs under the theme directorate EED carried out various activities from 24 to 28 June 2024.

Similarly, as part of the OWOT campaign, the participatory CSIR labs under specific theme directorates are conducting weeklong activities, which will continue throughout the year, with the OWOT campaign set to conclude in December 2024.

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## Visit of Hon'ble Vice-President of India, Shri Jagdeep Dhankhar to CSIR-NAL



Hon'ble Vice-President of India Shri Jagdeep Dhankhar visited CSIR-National Aerospace Laboratories (CSIR-NAL), Bengaluru, along with his wife, Dr (Mrs) Sudesh Dhankhar; Hon'ble Governor of Karnataka Shri Thaawarchand Gehlot and Hon'ble MP Rajyasabha, Shri Lehar Singh Siroya on 27 May 2024.

Dr N Kalaiselvi, Secretary, DSIR & DG-CSIR, and Dr Abhay A Pashilkar, Director, CSIR-NAL, welcomed the delegation at the HAL Airport

Viewing Gallery. The Flying Display of the Hansa-NG at the Viewing Gallery, HAL Airport, showcased the agility and capabilities of this indigenous aircraft. Spectators were treated to a stunning precision flying demonstration, highlighting the technological advancements in Indian aviation. The two-seat, all-composite HANSA 3 aircraft was successfully designed, certified, and produced at NAL. The subsequent success of HANSA Next Generation (NG) is a testament to NAL's growing capability. Recently certified, HANSA NG boasts an all-glass cockpit, bubble canopy, and a fuel-efficient engine leading to excellent endurance. Hansa-NG will be an excellent aircraft for flight training by Indian Flying Clubs and other customer applications like bird reconnaissance at airfields, cadet training, coastal surveillance, and hobby flying.

The Vice-President took a keen interest in Hansa-NG's





commercialisation plans and promised full support from his office to achieve them.

After witnessing the spectacular flight of Hansa-NG, the delegation had the opportunity to explore the state-of-the-art 1.2m Trisonic Wind Tunnel at NAL's Belur Campus. This facility plays a crucial role in aerodynamic research, offering insights into aircraft behaviour at high speeds. This facility is an engineering marvel for its time, capable of providing vital, strategic, and secure experimental aerodynamic data. Over the years, CSIR-NAL scientists have developed novel and advanced wind tunnel testing techniques that contribute immensely to every Indian aerospace programme led by CSIR, DRDO, HAL, and ISRO. Every Indian aerospace vehicle, whether the MiG, Su-30 or Tejas aircraft or the Gaganyaan, Chandrayaan and Mangalyaan space vehicle, has graduated from the NAL wind tunnel. The Hon'ble Vice-President initiated and witnessed a blowdown (test) on a test model at Mach number 2.0. He appreciated the efforts and congratulated the team for meeting the complex test requirements.

The showcase of NAL Technologies at GJAH, NAL, Belur Campus, provided a comprehensive overview of the institution's contributions to aerospace innovation. The display highlighted NAL's expertise and capabilities, from advanced materials to cutting-edge propulsion systems.

Carbon fibre is a strategic material in aerospace applications and needs to be developed indigenously. NAL has successfully developed standard-grade carbon fibre from the laboratory to the pilot plant scale. This process is being transferred to industry. The foundation stone for the new Heat Treatment Line for the Carbon Fibre Facility was inaugurated virtually by the Hon'ble Vice President of India. This will facilitate the production of higher-grade carbon fibres to meet the future needs of the aerospace sector. This significant milestone underscores NAL's commitment to advancing research and development in aerospace engineering.

In his address, Shri Jagdeep Dhankhar, Hon'ble Vice President, commended the contributions of CSIR-NAL to India's aerospace sector and highlighted the government's

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support for scientific research and development initiatives.

He mentioned, “In the past two years, India’s space accomplishments have become globally recognised, both in the field of defence and in the shape of things like Chandrayaan-3. I now realise it is not the handiwork of one institution, but the convergence of several that has contributed to this.”

The Aerospace Showcase at NAL’s Belur Campus served as a platform to celebrate achievements, foster collaboration, and inspire future generations of aerospace engineers and scientists. Through cutting-edge research, innovation, and collaboration, NAL continues to play a pivotal role in advancing India’s aerospace capabilities on the global stage.

### World Environment Day 2024

## World Environment Day Celebrations at CSIR-NBRI



Dr AK Shasany, Director, CSIR-NBRI felicitating Prof. Sonti

CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow, and the International Society of Environmental Botanists (ISEB) jointly celebrated World Environment Day on 5 June 2024. Prof. Ramesh V Sonti,

Director, International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi, was the Chief Guest of the function. Dr PV Sane, Former Director, CSIR-NBRI, graced the occasion as Guest of Honour.



**Awarded participants with the dignitaries**

The ISEB is a constituent unit (scientific member) of the International Union of Biological Sciences (IUBS), Paris, and has been operating in the CSIR-NBRI since 1994 and also celebrated its 29<sup>th</sup> Foundation Day on occasion.

Welcoming the guests, Dr AK Shasany, Director, CSIR-NBRI, highlighted the importance of this year's theme of World Environment Day, i.e., 'Land Restoration, Desertification and Drought Resilience'. He said that awareness regarding the sustainable uses of our natural resources is the need of the hour. We have to change our lifestyle to save our environment. We must do a self-assessment for sustainable utilisation of our natural resources & conserve them for future generations.

In his address, Prof. Sonti, while discussing combating the climate change crisis, said that according to the Paris Agreement, there is a commitment to limit the rise in global surface temperature to 1.5°C above pre-industrial levels. However, the latest report of the Intergovernmental Panel on Climate Change (IPCC) shows that from 2011 to 2020, global surface temperatures have increased by 1.1°C above pre-industrial levels. Any increase over 2°C may have catastrophic effects.

He further said that the warmer temperatures will likely reduce yields of major crops such as rice, maize, wheat and soybean. We must develop crop varieties with wide adaptation to multiple stresses of climate change. All modern plant breeding technologies, including genomic selection, genome editing and genetic transformation, must be used to develop new crops for food safety. We must reduce the usage of pesticides and adopt alternatives such as microbial fertilizers for crop yields.

Dr PV Sane, in his presidential address, said that we have to take strong steps to save our natural resources. The general public must be aware of the sustainable use of natural resources & coming catastrophic effects of climate change.

Prof. Sonti also felicitated the ISEB Fellowship Awardees and Young Scientist Awardees for the years 2021 & 2022 on the occasion. These awards were given by the society for outstanding contributions to environmental science.

Earlier, Dr RD Tripathi, Secretary, ISEB, while highlighting the activities of the Institute and ISEB, informed that NBRI and ISEB have been working on environmental protection and

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climate change for more than three decades.

Dr Vivek Pandey, Chief Scientist and Joint Secretary, ISEB, proposed the vote of thanks.

On the occasion, Dr N Kalaiselvi, Hon'ble DG, CSIR, New Delhi & Secretary, DSIR, Ministry of Science & Technology, Government of India, visited the distant research centre of the institute situated at Banthra. Dr Kalaiselvi also inaugurated the newly established Nursery & Floriculture Centre 'Neelkamal' at the centre. This facility is being started under CSIR- Floriculture Mission and will work as an exclusive centre for beneficiaries to know about the CSIR Floriculture Mission initiatives. Various plants for sale were also available in this centre. This centre will also serve as the information centre for the products, technologies and plant varieties developed by the institute.

Earlier in the day, the Environmental Information, Awareness, Capacity Building and Livelihood Programme Centre (EIACP) at NBRI, in collaboration with CSIR-Jigyasa, NCC, Navyug Kanya Mahavidyalaya, Integral University, and Prithvi Innovations, organised an awareness programme at NBRI, on 5 June 2024 to create awareness on the importance of protecting



and restoring land resources. Various interactive activities on Mission Life were organised for the participants to encourage individual actions for sustainable use of natural resources.

A Panel Discussion on policy actions vis-à-vis R&D interventions for mitigating climate change and land degradation was also organised. Eminent experts, including Dr AK Shasany, Director, CSIR-NBRI; Shri DK Soni, Regional Director, CPCB; Dr MA Khalid, Dean, Integral University; Ms Anuradha Gupta, Prithvi Innovations, made deliberations and discussed the action plans for the restoration of degraded land and combating desertification.

The participants also administered the Mission Life Pledge, and plant saplings under the "Vriksh Parigrah" initiative, symbolising their duty to nurture the environment, were also distributed to the participants. Around 100 participants from 12 different institutions/organisations participated in the programme.

## **Insightful Talks on the Occasion**

The CSIR-Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar, commemorated World Environment Day on 5 June 2024, focusing on its theme. The event

was organised under the JIGYASA Programme, aiming to enhance environmental awareness and sustainable practices among students, researchers, and the community.



Shri Sudhansu S Khora, IFS, RCCF, Angul, and the Odisha Mining Corporation's Executive Director (Forest & Environment Section), served as the Chief Guest. Shri Sanjay K Bhar, Regional Director of CMPDI, Bhubaneswar, was the Guest of Honour.

In his opening address, Dr Ramanuj Narayan, Director, CSIR-IMMT, highlighted the institute's various environmental initiatives and ongoing efforts towards sustainability.

Shri Sanjay K Bhar presented an insightful talk on the environmental challenges associated with mining, particularly coal mining. He emphasised the importance of eco-restoration activities post-mining, showcasing successful examples of environmental reclamation.

Shri Sudhanshu S Khora shared valuable insights into the forests of Odisha and the state's departmental programmes focused on protection, restoration, and sustainable management practices. He underscored the significant role of research institutes like CSIR-IMMT in contributing to a sustainable environment.

Dr NK Dhal, Head of the Environment & Sustainability (E&S) Department, provided an overview of the department's research initiatives aimed at environmental conservation.

His presentation highlighted the department's commitment to sustainability through innovative research and projects.

Dr DP Das, Jigyasa Nodal Scientist, emphasised the importance of scientific education and demonstration for school students. He discussed various interactive demonstrations on electricity, electrochemistry, and optics to inspire young minds and foster a deeper understanding of environmental science. A special highlight of the event was the felicitation of former scientists from the Environment & Sustainability Department, Dr RN Kar and Dr P Chattopadhyay, for their significant contributions to environmental research at CSIR-IMMT.

The celebration also included a plantation drive at the Bose-Einstein International Residence within the CSIR-IMMT campus. Dr Ramanuj Narayan and Dr NK Dhal, scientists, research scholars,



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and children, planted mango trees, reinforcing the institute's dedication to environmental conservation.

To further engage participants, drawing competitions were organised for school children up to the 10<sup>th</sup> standard, and a photography competition was held for staff, students, research scholars, and staff wards of CSIR-IMMT. The winners were



recognised and awarded during the event, celebrating their creative contributions to environmental awareness.

## CSIR-CLRI Organises a Lecture

*An Agreement concerning licensing the technology as "GENOCORIUM, a regenerated leather for applications in lifestyle products, was exchanged between M/s Tata International Limited (TIL) and CSIR-CLRI.*



CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai, celebrated World Environment Day and National Technology Day on 4 June 2024. Dr KJ Sreeram, Director, CSIR-CLRI, welcomed the Chief Guest, Shri Venkatadri Karuppampalayam Ranganathan, Chief Commercial Officer, M/s Tata Chemicals, Mumbai; Shri P Rajasekaran, Business Head, Finished Leathers, Tata International Limited, Dewas; Scientists and Researchers of the Institute.

Shri KR Venkatadri delivered a Technology & Environment Day lecture on "Pioneering Sustainability: Bridging Tech & the Environment". While delivering the

lecture, Mr Venkatadri discussed the need for an innovation team in the research group, assessing the market and its value for the research outcomes, different levels of technology development and its environmental sustainability.

An Agreement concerning licensing the technology as "GENOCORIUM, a regenerated leather for applications in lifestyle products, was exchanged between M/s Tata International Limited (TIL) and CSIR-CLRI. Dr P Saravanan, Chief Scientist, CSIR-CLRI, and Shri P Rajasekaran shared the advantages of this eco-friendly technology and its business opportunities in the global market, respectively. A short film

on environmental sustainability was screened to create awareness among the participants.

A Software on Contractual Document Information Retrieval System was also released during the programme. Dr Subhendu Chakrabarti, Chief Scientist, highlighted the importance of the programme and its details. On this occasion, certificates of appreciation was issued to Scientists who have developed and commercialised various technologies.

In continuation of World Environment Day celebrations, Shri Karthikeyan, IFS, Assistant Inspector General of Forests, Ministry of Environment & Forests, Regional Office, Chennai, visited



CSIR-CLRI and interacted with Dr KJ Sreeram, Director, CSIR-CLRI and a team of scientists. Director CSIR-CLRI explained the role of CLRI in protecting the environment and the initiatives taken on campus to enhance greenery. Besides, saplings were planted by Shri Karthikeyan, Dr KJ Sreeram, and other members of CSIR-CLRI. The celebrations were also organised at CLRI Regional Centres at Ahmadabad, Jalandhar, Kanpur, and Kolkata.

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## CSIR-NEIST Celebrates World Environment Day 2024



**Padma Shri Smt. Yanung Jamoh Lego**

CSIR-North East Institute of Science & Technology (CSIR-NEIST), Jorhat, enthusiastically celebrated World Environment Day 2024 and was committed to the theme. A special programme was held at Dr JN Baruah's

auditorium, wherein Padma Shri Smt. Yanung Jamoh Lego, a renowned traditional herbal healer from Arunachal Pradesh, graced the occasion as the Chief Guest and Dr Viswajanani Sattigeri, Scientist & Head, CSIR-

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environment.*

TKDL, New Delhi, was the Guest of Honour.

Dr Virendra M Tiwari, Director, CSIR-NEIST, addressed the gathering and emphasised the cultivation of medicinal plants and judicious use of land and water resources. He highly appreciated the contribution of Padma Shri Smt. Yanung Jamoh Lego towards society in healing thousands from life-threatening diseases. Dr Viswajanani Sattigeri stressed the significance of documentation of traditional knowledge, the importance of our biodiversity and related flora and fauna in the environment. She highlighted the need for land restoration through extensive plantation efforts and advocated for adopting environment friendly lifestyles.

Smt. Yanung J Lego emphasised the importance of every individual's efforts to foster sustainable living for future generations. She stressed the significance of maintaining a green, pollution-free environment amidst increasing urbanisation and urged people to work closely with nature.

## **A Joint Celebration by CSIR-CEERI, Vijnana Bharati-Rajasthan, and Parishkar College**

Vijnana Bharati-Rajasthan, in collaboration with Parishkar College of Global Excellence, CSIR-CEERI, and other esteemed institutions, celebrated World Environment Day with great enthusiasm on 5 June 2024. Representatives from the organisations above and other



**Dr Viswajanani Sattigeri, planting a sapling**

More than 250 farmers and women cultivators from different regions of Assam and Arunachal Pradesh, besides the CSIR-NEIST fraternity, attended the programme. As a part of the celebration, the dignitaries also planted medicinal plant saplings on campus.

The programme concluded with the distribution of more than 2000 medicinal plant saplings to progressive farmers, NGOs, SHGs by RCFC-NER, CSIR-NEIST. During the event, seeds of CSIR-released BLB-resistant rice variety 'Samba Mansuri' along with OP-12 Biofertilizer developed by CSIR-NEIST were also distributed to the farmers. The event served as a reminder of social responsibility to safeguard the environment and promote sustainable practices for a greener and healthier future.

dignitaries attended the event. The experts reviewed the current environmental conditions and had a fruitful discussion on practical solutions to environmental hazards.

In the inaugural session, dignitaries and participants took an oath to protect the environment.



On this occasion, Dr PC Panchariya, Director, CSIR-CEERI, delivered a keynote lecture titled “Plastic Waste Processing @ CSIR-CEERI”. Dr Panchariya highlighted the severe environmental crisis caused by plastic pollution, stating that the situation has become critical. He mentioned that CSIR-CEERI is fully aware of the issue and is actively involved in its solutions. He showcased the new technologies being developed by CSIR-CEERI for efficient processing and recycling of plastic waste, which would help reduce plastic waste entering our environment. He made a clarion call to every individual in the programme to contribute significantly to the cause. The programme was attended by experts from various environmental organisations and activists, policymakers, and educators from leading state organisations.

The speakers expressed their concerns over increasing environmental pollution and discussed climate change, biodiversity loss, sustainable agriculture, and renewable energy. The consensus among the experts was that addressing these issues requires a multi-faceted approach, including government cooperation, social participation, and technological innovation.

During the discussions, students, faculty members, and other learned local residents presented practical solutions towards environmental protection, such as composting, rainwater harvesting, and using biodegradable materials.

Dr Meghendra Sharma, Secretary, Vijnana Bharati-Rajasthan, emphasised the importance of trees in environmental protection. A pledge was taken to plant one crore trees in the state. Dr Sharma said that this would be done in the coming year with the cooperation of all participating institutions and organisations. He said the initiative aimed to combat rapid climate change and maintain ecological balance. He stated that we are committed to building a greener Rajasthan. Professor Savita Paiwal, Principal, Parishkar College of Global Excellence, Jaipur, proposed the vote of thanks.

Besides, to raise environmental awareness among the citizens,



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the students organised a bicycle rally on this day. In addition, a campaign called “One Tree for the Nation” was launched to promote tree plantation. Students and their parents enthusiastically participated in these activities.

## Events

### World Ocean Day Celebrations at CSIR-NIO and Regional Centres



*CSIR-NIO organised a beach cleaning activity, carried out at the Caranzalem Beach.*

World Ocean Day is an international day celebrated annually on 8 June. The concept was proposed to support the implementation of worldwide Sustainable Development Goals (SDGs) and foster public interest in protecting the ocean and the sustainable management of its resources. On similar lines, World Ocean Day was observed by CSIR-National Institute of Oceanography (CSIR-NIO), Goa, and its regional centres.

Prof. Sunil Kumar Singh, Director, CSIR-NIO, and Dr Ramesh Kumar, Retd Chief Scientist and presently the Chairperson, OSI-Goa Chapter, explained the importance of oceans and the need to keep them clean. The beach cleaning activity was successfully carried out at Caranzalem Beach, Goa.

CSIR-NIO, RC, Visakhapatnam, along with staff, students and volunteers, worked diligently to help preserve the beauty and cleanliness of Rama Krishna Beach. This initiative was held in collaboration with the Ministry of Earth Sciences (MoES), the Ocean Society of India, and Andhra University.



## CSIR-AMPRI Organises “One Week One Theme” programme on “Energy and Energy Devices”



CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI), Bhopal, organised One Week One Theme programme on the “Energy and Energy Devices” theme on 25 June 2024. Prof. Sudhir S Bhadauria, Director, University Institute of Technology, RGPV, Bhopal, Vice President, VIBHA, was the Chief Guest at the occasion. The distinguished guests were Mr Subhro Banerjee, Director, Nordische Energy Systems Pvt. Ltd, Bengaluru, and Dr Vinod K Sethi, DG (Research), RKDF University, Bhopal.

At the outset, Dr Avanish Kumar Srivastava, Director, CSIR-AMPRI, in his address, highlighted the importance of celebrating the One Week One Theme programme on “Energy and Energy Devices” and talked about research activities of CSIR-AMPRI which aligns with the theme. A Capsule Film about ‘Make in India’ Raman Spectrometer was played at the occasion.

Speaking about the theme, Dr DP Mondal, Chief Scientist, CSIR-AMPRI, Bhopal, emphasised that the proper direction should be given to the research carried out at CSIR for dissemination to society. He highlighted carbon, aluminium, and graphene foam-related research carried out at CSIR-AMPRI for battery application. Foam-related studies are also being performed in collaboration with Nordische Energy Systems Pvt. Ltd.

Mr Subhro Banerjee, Director, Nordische Energy Systems Pvt. Ltd, Bengaluru, talked about foam-related battery research going on at Nordische in collaboration with CSIR-AMPRI and emphasised that it has huge potential in the energy sector. Nordische has many collaborations at national and international levels and plans to disseminate the products from East to West worldwide.

Dr Archana Singh, Principal Scientist, CSIR-AMPRI, Bhopal,

*Dr Avanish Kumar Srivastava, Director, CSIR-AMPRI, highlighted the importance of celebrating the One Week One Theme programme on “Energy and Energy Devices”.*

presented on Materials for Energy at CSIR-AMPRI and highlighted various materials and devices being developed at CSIR-AMPRI for energy applications.

Dr Vinod K Sethi, Director General (Research), RKDF University, Bhopal, talked about “Renewable energy deployment towards environmental sustainability”. He emphasised that carbon dioxide capture, utilisation and storage are important for a sustainable future.

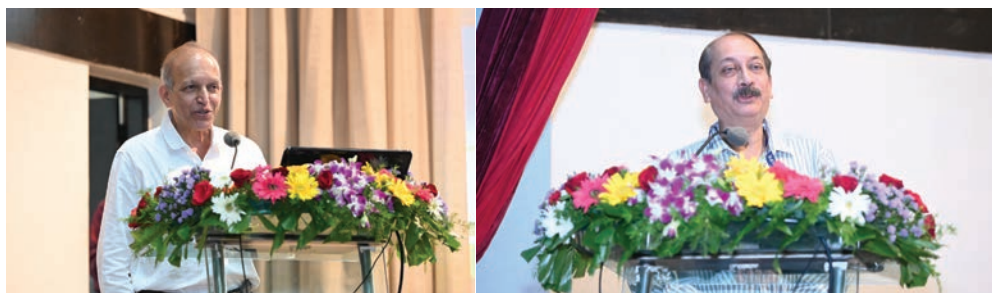
Citing the example of the Raman spectrometer, Prof. Sudhir S Bhaduria emphasised that these programmes motivate students

to perform research and solve problems of society like global warming and climate change in future.

A poster presentation session was also organised for the students of CSIR-AMPRI, and prizes were sponsored for the first three winners by BioLogic India. CSIR-AMPRI technology-based Mementos were presented to the Guests by Director, AMPRI.

Dr Sarika Verma, Principal Scientist, moderated the programme, and Dr Mohd Akram Khan, Chief Scientist, proposed the vote of thanks.

## CSIR-NIScPR and CSIR-NCL Jointly Organise One Week One Theme-EED Programme



As part of the Energy and Energy Devices (EED) theme, CSIR’s National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi, collaborated with the CSIR-NCL, Pune, to organise an event titled “TRL Assessment and Patent Landscaping of Energy Technologies: Pathways for Commercialisation” on 25 June 2024 at CSIR-NCL, Dr Homi Bhabha Road, Pune.

The enthusiastic response included 150 participants from

various universities, faculty, students, research institutes, start-ups, and industry.

The event commenced with a video message from Prof. Venu Gopal Achanta, Director of CSIR-NPL, New Delhi, and Director (Additional Charge) of CSIR-NIScPR. His welcome set the tone for the proceedings. Following that, Prof. Sujit Bhattacharya, Chief Scientist at CSIR-NIScPR, provided an insightful overview of the event.

Dr Ashish Lele, Director of CSIR-NCL, graced the occasion

as the Guest of Honour. In his address, he delved into the critical aspects of Technology Readiness Level (TRL) Assessment and Patent Landscaping for Energy Technologies, emphasising their significance in commercialisation pathways.

The Chief Guest, Dr (Prof.) GD Yadav, Former Vice Chancellor of ICT Mumbai, lauded CSIR-NIScPR's commendable work in TRL Assessment and Patent Landscaping. He highlighted the institute's pivotal role in shaping the future of energy technologies.

The event featured two engaging technical sessions. The first session, which focused on Technology Readiness Level Assessment, was chaired by Prof. Satishchandra Ogale, Director of the Research Institute for Sustainable Energy at TCG-CREST, Kolkata. In this session, Dr Anjan Ray, Former Director, CSIR-IIP; Dr Vipin Kumar, Sr Principal Scientist, CSIR-NIScPR; and

Shri Siddharth R Mayur, Founder President & CEO, H2E Power Systems Ltd. delivered their expert talks.

The second session, centred on the Technology Mapping of Energy Technologies, was led by Prof. Siddharth Jabade, Vice Chancellor of Vishwakarma University. In this session, Dr Sujit Bhattacharya, Chief Scientist, CSIR-NIScPR; Dr V Premnath, Chief Scientist, CSIR-NCL; Prof. RR Hirwani, Founder Head, CSIR-URDIP and Dr Nitin S Tewari, Sr Principal Scientist, CSIR-NCL delivered their expert talks.

After two technical sessions, a Panel Discussion on "Energy Devices: Pathways for Commercialisation" was organised under the chairmanship of Dr Reji Mathai, Director, Automotive Research Association of India.

Dr Vipin Kumar, Sr Principal Scientist, CSIR-NIScPR, delivered concluding remarks. Dr Shiv Narayan Nishad, Sr Scientist, CSIR-NIScPR, proposed the vote of thanks.

*Prof. GD Yadav, Former VC of ICT, Mumbai, lauded CSIR-NIScPR's commendable work in TRL Assessment and Patent Landscaping.*

## CSIR-AMPRI Celebrates Foundation Day

CSIR-AMPRI, Bhopal, Celebrated National Technology Day and CSIR-AMPRI Foundation Day on 27 May 2024. Dr DK Aswal, Director, Health, Safety and Environment, Bhabha Atomic Research Centre, Department of Atomic Energy, Mumbai, was the Chief Guest at the function.

Welcoming the gathering, Dr Avanish Kumar Srivastava, Director, CSIR-AMPRI, highlighted the growth of the institute in terms of papers, patents and technology transfer. He also said

there are big hurdles between basic research and technology transfer and its availability in the market. He added that we have



*Dr DK Aswal,  
discussed sustainable  
development,  
environment, clean  
energy and nuclear  
energy in detail.*

crossed these hurdles, and several technologies are available in the market.

A Capsule Film about CSIR-AMPRI and 'Make in India' Raman Spectrometer was played at the occasion.

Dr Sandeep Singhai, Senior Principal Scientist and Head, Business Development Group, briefed about CSIR-AMPRI's Make-in-India 'Raman Spectrometer' and Bamboo composites technology. Dr Tarun Sharda from M/S Technos Instruments, Jaipur, presented the success story of 'Make in India' Raman Spectrometer and their plan to upgrade it with advanced functions. Shri Bhujang Shet from M/S Permali Wallace Private Limited, Bhopal, presented about Bamboo composites technology, which was transferred to them by CSIR-AMPRI, Bhopal. He appreciated the cooperation from CSIR-AMPRI for the technology demonstration at various places like CSIR-NEIST, Jorhat, Assam, and CSIR, New Delhi, on flooring.

During his visit, Dr DK Aswal interacted with scientists and visited various laboratories/facilities, including the Make-in-India Raman Spectrometer, Metal Additive Manufacturing Facility, Bamboo Composite Structure (Baithak) and Centre for Advanced Radiation Shielding & Geopolymeric Materials (CARS&GM). He also visited the site of the new CSIR-AMPRI building in Bhopal.

Dr DK Aswal addressed the gathering and delivered keynote lecture on "Nuclear Energy

for Clean Environment and Sustainable Future". He discussed sustainable development, environment, clean energy and nuclear energy in detail. He said that radiation is beneficial for people when they are exposed to it within a threshold limit; otherwise, above that, they are harmful. He emphasised the indigenisation and collaboration between Bhabha Atomic Research Centre, Uranium Corporation of India Limited and CSIR-AMPRI in areas of mutual interest in future.

Dr JP Chaurasia, Senior Principal Scientist and Head, Planning & Performance Division, spoke about certificate distribution for the cultural programme organised at CSIR -AMPRI. The Chief Guest distributed certificates to the students, staff children, and their family members for participation in cultural programmes organised at CSIR-AMPRI.

Dr SK Jha, Outstanding Scientist and Head, Radiation Protection Section (Nuclear Fuels), Health Physics Division, Bhabha Atomic Research Centre, Mumbai, Dr Pallavi Singhal, SO/E, RPS (NF), HPD, Bhabha Atomic Research Center, Mumbai and Shri Rajesh Kumar, Director, Technical, Uranium Corporation of India Limited, DAE, Jaduguda Mines, Singhbhum East, Jharkhand also graced the occasion by their presence.

Dr Archana Singh, Principal Scientist, moderated the programme, and Dr (Er) Manish Mudgal, Chief Scientist, CSIR-AMPRI, proposed the vote of thanks.

## CSIR-NIScPR Organises Student-Scientist Connect Programme



CSIR-NIScPR, New Delhi, hosted a Student-Science Connect Programme titled “Impact of Climate Change: Food and Water Sustainability” on 8 May 2024 at its Pusa Campus. The programme aimed to engage school students and inspire action towards sustainability through science education.

Shri CB Singh, Head of Jigyasa, Training and HR Division, CSIR-NIScPR, delivered the welcome address, setting the tone for a day filled with learning and discovery.

Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, presented the inaugural address, emphasising the institute’s commitment to addressing climate change and promoting sustainability. “We aim to raise awareness about climate change and inspire students to participate actively in environmental conservation and energy-saving practices. Through this student-science connect programme,” she added.

Dr Shiv Narayan Nishad, Senior Scientist, CSIR-NIScPR, gave an expert talk on the “Impact of Climate Change: Food and Water Sustainability,” providing critical

insights into this pressing global issue and contributing to the dialogue on climate action.

The event also featured an engaging activity called “Doing Science is Fun,” led by Shri Amit Kumar Sharma from the Nirbhaya Science Museum, MCD, New Delhi. This activity highlighted the joy of scientific exploration, with Shri Sharma guiding the students through interesting science-based activities and satisfying their curiosity with thought-provoking questions and answers.

Fifty-five students from two schools visited the lab: Kendriya Vidyalaya, BSF Camp, Chhawla, and Cambridge School, Srinivaspuri, New Delhi. Dr Kanika Malik, Senior Principal Scientist, CSIR-NIScPR, presented the vote of thanks.

On 26 March 2024, a student-scientist connect programme was also organised by CSIR-NIScPR at its Pusa Campus, New Delhi, to raise awareness among students about science.

Introducing the CSIR and its laboratories to students, Dr Suman Ray, Principal Investigator and Nodal of the CSIR-NIScPR Jigyasa project, underscored the significance of

*Prof. Ranjana Aggarwal said, “We aim to raise awareness about climate change and inspire students to participate actively in environmental conservation and energy-saving practices”.*



bridging science with society and elucidated the role of CSIR Jigyasa in facilitating science education for school children, encouraging them to foster a genuine passion for science, potentially paving the way for future scientists and innovators.

Dr Paramananda Barman, Scientist, CSIR-NIScPR, interacted with the students and delivered a lecture on science communication. He highlighted the importance of effective science communication to engage a wider audience. He guided students on how to plan and write a popular science story. In addition, he discussed SVASTIK (Scientifically Validated Societal Traditional Knowledge), a national initiative by CSIR-NIScPR to communicate India's scientifically validated traditional knowledge to society. With examples from SVASTIK,

Dr Barman also stressed the importance of using Indian languages while disseminating science content.

He encouraged students to develop a habit of reading popular science magazines, newsletters, and scientific blogs and to incorporate writing habits besides regular classroom tasks. Dr Barman also discussed the transformative power of social media platforms in disseminating scientific content in simple language.

*Science Reporter* and *Vigyan Pragati* were distributed to the students. A feedback survey was also conducted to determine students' perceptions of Millets.

A total of 40 students and four teachers from PM SHRI Kendriya Vidyalaya Sector-2, RK Puram, New Delhi, attended the event and visited the lab.

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