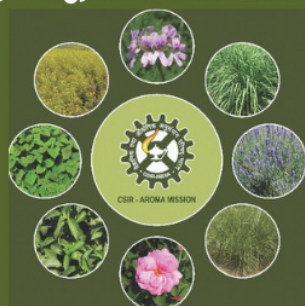




CSIR

**Aroma Mission
Honoured with**

Rashtriya Vigyan Team Puraskar 2025

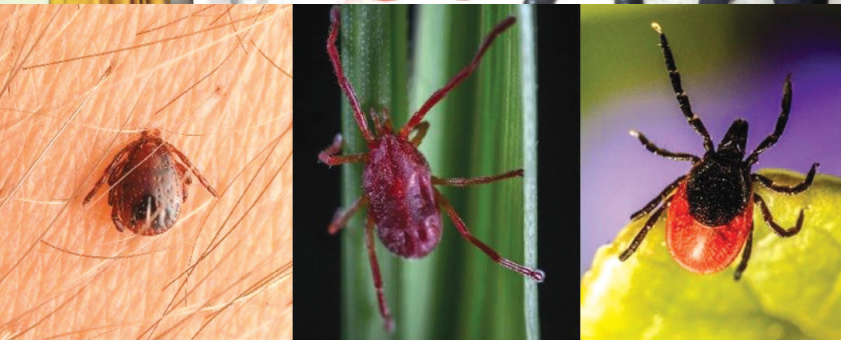


CSIR NEWS

**Newsletter of the Council of
Scientific & Industrial Research**

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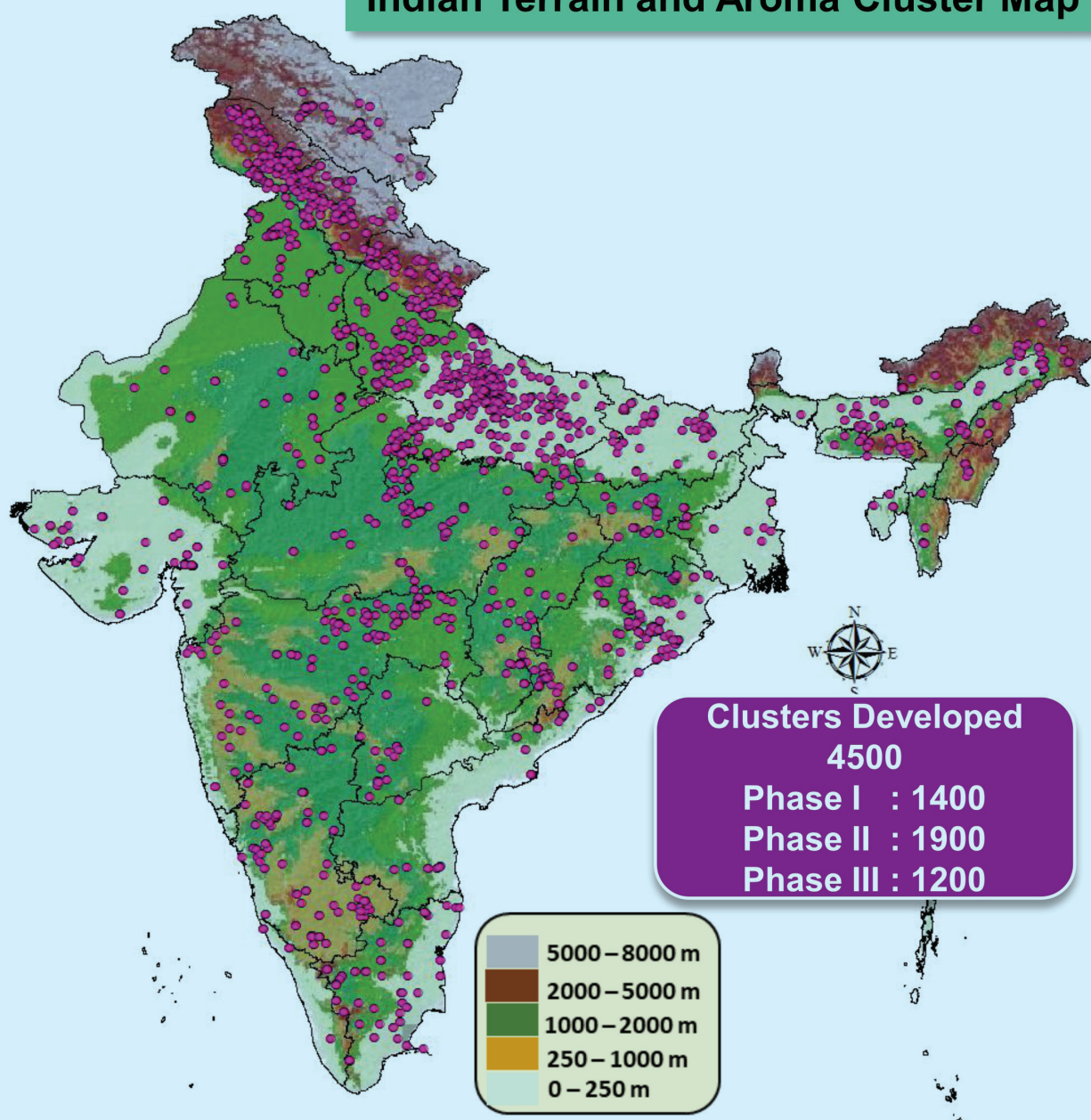
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CSIR Aroma Mission

Transforming Underutilised Lands into Sustainable Livelihoods

Indian Terrain and Aroma Cluster Map





The CSIR Aroma mission team, honoured with the Team Vigyan Award at RVP-2025, with the Hon'ble President of India and fellow awardess.

The CSIR Aroma Mission is a flagship initiative of the Council of Scientific and Industrial Research (CSIR) aimed at unlocking India's potential in aromatic and medicinal crops to generate sustainable livelihoods, especially in rural, tribal, and climatically challenging regions. The Mission focuses on transforming underutilised and marginal lands into productive assets through science-driven cultivation, value addition, and entrepreneurship in essential oils and aroma-based products.

Implemented in multiple phases, Phase I laid the foundation by introducing aromatic crops across 6,200 hectares using improved varieties and agro-technologies. This resulted in the production of 500 tonnes of essential oils valued at about ₹60 crore and generated 11 lakh man-days of rural employment. Phase II significantly scaled up the programme, expanding cultivation to 31,000 hectares with wider deployment of improved genotypes, agro-technologies, and distillation units.

The ongoing Phase III continues to consolidate these gains by covering an additional 14,000 hectares. It has led to the

development of two new high-performing genotypes, deployment of 20 agro-technologies, and installation of 22 efficient distillation units. Essential oil production has reached 1,500 tonnes, valued at about ₹200 crore, while generating 25 lakh man-days of rural employment. Entrepreneurship development remains a key focus, with 59 new entrepreneurs created so far.

Cumulatively, the Mission has covered 51,200 hectares, developed 52 improved varieties, deployed 84 region-specific agro-technologies, and installed 408 distillation units nationwide. More than 2,096 awareness and training programmes have trained over 1.22 lakh individuals, generating 96 lakh man-days of employment, nurturing 110 entrepreneurs, and producing 5,000 tonnes of essential oils valued at approximately ₹660 crore. The Mission's national significance was reaffirmed with the Rashtriya Vigyan Puraskar 2025, underscoring its role in strengthening rural economies and positioning India as a global leader in the aroma and essential oils sector.

Contributed by Science Communication and
Dissemination Directorate (SCDD), CSIR, New Delhi.
Email: ask.scdd@csir.res.in

Union Minister Dr Jitendra Singh Reviews CSIR's Future Roadmap

Union Minister of State (Independent Charge) for Science & Technology, Earth Sciences, PMO, Department of Space and Department of Atomic Energy, Dr Jitendra Singh, chaired a high-level review meeting of CSIR at Anusandhan Bhawan on 6 January 2026.

During the meeting, the Minister lauded CSIR's efforts and plans to develop indigenous capabilities in critical aerospace technologies, with a future bearing on the country's self-reliance in the aviation sector as well as overall economic growth.

Director General, CSIR and Secretary, DSIR, Dr N Kalaiselvi, presented CSIR's forward-looking roadmap, outlining key programmes and initiatives aimed at strengthening India's science and technology ecosystem in alignment with the national vision of Viksit Bharat. She highlighted CSIR's focus on mission-oriented research, institutional reforms, and translation of scientific outputs into outcomes with direct societal and economic relevance.

A major highlight of the presentation was the aerospace-related projects. Dr Kalaiselvi explained that a mission-mode programme is being envisaged to build indigenous capabilities in critical aerospace technologies, enhance strategic self-reliance, and safeguard sensitive



design and knowledge domains. She underlined that the plan is designed to support India's long-term development goals by strengthening high-end R&D, promoting innovation-led growth, and reducing external dependencies in strategic sectors, key pillars of the Viksit Bharat vision.

The Minister reviewed progress across a range of CSIR initiatives and deliberated on ways to further enhance the effectiveness, relevance, and impact of publicly funded research. He emphasised that scientific programmes must increasingly be assessed and communicated in terms of their real-world impact, including contribution to employment generation, entrepreneurship, industrial scale-up and societal well-being, particularly for the youth.

Dr Jitendra Singh also highlighted the importance of a decentralised and structured communication outreach strategy for CSIR. He advised that CSIR's 37 laboratories across the country should play a proactive role in showcasing their achievements by engaging directly with media, stakeholders, industry, and local communities. The focus, he noted, should be on clearly conveying how laboratory-led

Minister lauds CSIR's efforts and plan to develop indigenous capabilities in critical aerospace technologies, with a future bearing on the country's self-reliance in the aviation sector as well as overall economic growth.



innovations are translating into tangible benefits on the ground, rather than remaining confined to technical narratives.

Highlighting the need for a refreshed narrative, the Minister called for greater emphasis on success stories related to startups,

technology deployment, job creation, and sectoral impact, so that the value of scientific research is better appreciated by citizens and policy stakeholders alike.

Source: PIB

CSIR-NPL Celebrates 80th Foundation Day with Major Facility Inaugurations, Technology Transfers and Industry Collaborations

The celebrations were graced by Dr Jitendra Singh, Hon'ble Minister of State (IC) for Science and Technology and Earth Sciences, who inaugurated and dedicated two state-of-the-art national facilities — the National Environmental Standard Laboratory and National Primary Standard Facility for Solar Cell Calibration, at CSIR-NPL.

C SIR-National Physical Laboratory (CSIR-NPL), India's premier measurement standards laboratory in the country, celebrated its 80th Foundation Day on 5 January 2026, marking decades of excellence in strengthening the scientific and technological

ecosystem in the country through precision measurements, standards development and industrial support.

These include the National Primary Standard Facility for Solar Cell Calibration, which is the fifth such facility in the world after

the USA, Germany, China and Japan. It is a unique facility in the country and is the world's best in providing the lowest uncertainty in the measurement of solar cell current (uncertainty $\pm 0.35\%$). This facility would ensure the self-reliance and shorten the turnaround time of solar cell calibration. It enhances the investor confidence in the country's rapidly expanding solar PV sector. This national facility has been jointly developed by NPL India and PTB, Germany, with financial support from the Ministry of New and Renewable Energy, Government of India, to improve PV quality infrastructure in the country.

Another facility, the National Environmental Standard Laboratory for product certification of air monitoring equipment, is the third in the world after the UK and Germany and the first one in Asia. These facilities will enhance India's capabilities in quality assurance of environmental monitoring systems and enable indigenous manufacturers to demonstrate the quality of indigenous equipment and overcome trade barriers in a cost-effective way. This is like the government's Atmanirbhar Bharat initiatives. This National Environmental

Standard Laboratory has been established in NPL with financial support from the Ministry of Environment, Forest & Climate Change, Government of India.

Addressing the gathering, the Hon'ble Minister highlighted the role of scientific institutions in realising Atmanirbhar Bharat by strengthening science industry linkages and translating laboratory research into market-ready technologies. He emphasised that precision measurement and standardisation form the foundation of innovation,

Addressing the gathering, the Hon'ble Minister, Dr Jitendra Singh, highlighted the role of scientific institutions in realising Atmanirbhar Bharat by strengthening science industry linkages and translating laboratory research into market-ready technologies.





competitiveness and sustainable national growth.

During the programme, several technology transfers to industry and exchange of MoUs were carried out, reinforcing CSIR-NPL's commitment to accelerating the commercialisation of indigenous technologies. Key highlights included the transfer of Thermal Chemical Vapour Deposition (CVD) technology for graphene deposition to industry and collaborative MoUs for photovoltaic noise barrier systems, production of phytochemical, essential oil and petroleum Bharatiya Nirdeshak Dravya (BND), and initiatives promoting inclusive education for Divyangjan.

The event also witnessed the launch of the SAMARTH application, distribution of solar cell calibration certificates to industry, issuance of letters of confirmation for air monitoring systems, and the release of multiple BNDs by

CSIR laboratories, further strengthening the national measurement and reference standards framework.

Earlier, Dr (Mrs) N Kalaiselvi, Director General, CSIR and Secretary, DSIR, highlighted CSIR's role in supporting national priorities through mission-oriented research, strong industry partnerships and a robust standards infrastructure. Secretary, Ministry of New and Renewable Energy, also addressed the gathering and highlighted the importance of such facilities and the need to work together to meet the goals set as part of various national initiatives. He especially encouraged the National Institute of Solar Energy (NISE) and CSIR-NPL to work together.

Prof. Venu Gopal Achanta, Director CSIR-NPL, felicitated the distinguished guests during the Foundation Day ceremony, acknowledging their contributions to strengthening India's science, technology and innovation ecosystem. He highlighted the contributions of CSIR-NPL, ongoing projects and future activities.

The Foundation Day programme concluded with the vote of thanks by Dr SR Dhakate, Chief Scientist and the National Anthem, reaffirming the institute's legacy as the custodian of India's measurement standards and its vision to support emerging technologies and national development.

Dr N Kalaiselvi, DG, CSIR, highlighted CSIR's role in supporting national priorities through mission-oriented research, strong industry partnerships and a robust standards infrastructure.

Evolutionary GPS to Untangle the Evolution of Mites and Ticks

A new genomic study untangles the long-standing evolutionary puzzle of mites and ticks, revealing how parasitism arose and diversified over 100 million years. By tracing ancient gene and chromosome changes, the research offers vital clues for predicting the origin of parasitism and strengthening One Health strategies in a changing climate.

The eerie world of mites and ticks is as diverse as it is mysterious. They might look like insects to an untrained eye. But they fall in the broad category of arachnids — they have two body segments and eight legs. From the microscopic dust mites in our homes to the blood-sucking ticks on our pets and in forests, these creatures are omnipresent, occupying almost every environment on Earth. Several of them are parasitic; some of the most infamous ones cause scabies, lumpy skin disease, and galls on plants, among others, incurring heavy livestock and crop losses globally. Scientists want to predict their disease-causing abilities

from their genomes. Evolutionarily close arachnids transmit similar pathogens. However, there have been very few attempts to understand the evolution of arachnid genomes.

In a recently published study led by Dr Siddharth Kulkarni, a Ramanujan faculty

Scientific research must translate into jobs, startups and societal benefit, says Dr Jitendra Singh at the CSIR review.



member at CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB), Hyderabad, along with three undergraduate students from IISER, Thiruvananthapuram, the team investigated 90 different arachnid genomes to find signatures of their ancient evolutionary relationships. This is the largest dataset of arachnid genomes studied so far.

Mapping the Evolutionary GPS Coordinates of Chromosomes

The research didn't just look at gene composition; it looked at the physical order of genes on a chromosome whose movements can be tracked, as if an evolutionary GPS. "Think of it like a deck of cards. Over millions of years, the cards (genes) get shuffled. But if you find two different groups of mites that have the exact same 'hand' of cards in the same order, you know they share a common ancestor", said Dr Kulkarni.

Their analyses confirmed two major findings: There are two distinct groups, independently originating from different ancestors. They are called "Acariformes" (includes most mites) and "Parasitiformes" (includes ticks and remaining mites). This study is a major step in solving the notorious knot, reconstructing the relationships between arachnids like camel spiders, mites, marine horseshoe crabs, etc., which have remained stubbornly unclear.

Mapping their interrelationships can help researchers predict the spread of known infections and identify potential new vectors before outbreaks occur. Because ticks and mites move easily between wildlife, livestock, and humans, this knowledge will support early warning systems and targeted vector control. As climate change and land-use shifts alter the distribution of these tiny arachnids, studying their networks across ecosystems is key to protecting human, animal, and environmental health.

CSIR-NCL Develops CHT-KIT for Instant Detection of Chloral Hydrate Adulteration in Toddy

Technology transfer to the Authentic Chemicals and Research Centre, Tembhurni.

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, has developed a simple, rapid and user-friendly Chloral Hydrate Test Kit (CHT-KIT) for on-the-spot detection of chloral hydrate adulteration in Toddy. The technology has been commercially transferred to the Authentic Chemicals and Research Centre (ACRC-TEM), Tembhurni, for production and supply.

Toddy is a naturally fermented drink derived from Toddy trees and sold through government-approved outlets. It typically contains 5–6% ethyl alcohol along with healthy, natural, beneficial constituents. The Government of Maharashtra

constituted a committee comprising excise officials, Toddy suppliers, CSIR-NCL scientists and experts to examine quality concerns. The studies indicated large-scale adulteration of Toddy with chloral hydrate, a chemical which causes a sedative effect and rapid dependency, and whose marketing is banned in India. The studies further showed dangerous levels of chloral hydrate concentrations in toddy samples.

Once consumed, chloral hydrate converts into trichloroethanol, a powerful CNS depressant, and trichloroacetic acid, a corrosive compound. These chemicals are associated with adverse



The CHT Kit

CSIR-NCL's CHT-KIT is a unique and efficient colour-based solution that supports quick detection of harmful chloral hydrate adulteration in Toddy, ensuring public health and safety.

health effects, including rashes, vomiting, gastric issues, ulcers, organ damage and coma. All three compounds — chloral hydrate, trichloroethanol and trichloroacetic acid — are known carcinogens.

Current testing procedures require excise officers to carry multiple instruments or send preserved samples for laboratory analysis, which raises practical challenges and delays. To address this, CSIR-NCL scientists conducted extensive experimentation and developed the CHT-KIT, which provides a quick field-level test.

The CHT-KIT contains a defined mixture of reagents that instantly produce a pink colour when a Toddy sample containing chloral hydrate (≥ 10 mg/L) is added. The absence of pink colour confirms that the sample is free of chloral hydrate adulteration. The kit's performance has been



validated and approved by the Forensic Science Laboratory (FSL), Government of Maharashtra.

CSIR-NCL has demonstrated the kit to the Excise Department officials of the Government of Maharashtra. The know-how has been officially transferred to ACRC-TEM for production and supply. CSIR-NCL's CHT-KIT is a unique and efficient colour-based solution that supports quick detection of harmful chloral hydrate adulteration in Toddy, ensuring public health and safety.

Prof. MS Ananth Delivers the CSIR-NCL Foundation Day Lecture

C SIR-National Chemical Laboratory (CSIR-NCL), Pune, celebrated its 76th Foundation Day with a commemorative programme held at the CSIR-NCL on 3 January 2026. The celebration featured the Foundation Day Oration on "Innovation and the University" by Prof. MS Ananth, Former Director, Indian Institute of Technology Madras (IIT Madras).

The programme commenced with welcome remarks by Dr Parveen Goyal, Senior Scientist, CSIR-NCL, followed by the presentation of the Director's Report.

Dr Ashish Lele, Director, CSIR-NCL, reflected on its remarkable 75-year legacy and its journey toward NCL@100, aligned with India's aspirations during the Amrit Kaal. He emphasised CSIR-NCL's enduring role in advancing fundamental science, translating research into impactful technologies, and strengthening India's self-reliance and global standing in chemistry. Presenting the Director's Report for 2025, Dr Lele highlighted major scientific and technological achievements across seven strategic themes, including clean energy, C1 chemistry, sustainable chemical processes, biomanufacturing, circular economy, agritech, and strategic sectors. Key milestones included India's first hydrogen fuel-cell catamaran entering commercial service, significant progress in green hydrogen technologies, sodium-ion battery validation, solvent-free continuous manufacturing of metformin, advances in biotherapeutics, agri-biologicals, and strategic materials for defence and space.

Dr V Premnath, Chief Scientist, CSIR-NCL, introduced the Chief Guest, Prof. Ananth, highlighting his pioneering contributions to various scientific fields and his transformative leadership in Indian higher education.



In his Foundation Day lecture, Prof. MS Ananth spoke about the traditional role of universities as places meant for learning and the pursuit of knowledge, not just for practical or immediate benefits. He explained that universities were built on the idea that all fields of knowledge — science, engineering, medicine, social sciences and the humanities — are connected. Referring to thinkers such as Oakeshott, Chomsky, and EO Wilson, he emphasised that universities should foster curiosity, critical thinking, attention to detail, and independent thought, rather than focusing solely on job-oriented training.

Prof. Ananth highlighted the close link between teaching and research, saying that research makes teaching stronger, while teaching helps improve and refine research. He noted that real education is not about simply finishing the syllabus, but about helping students understand ideas deeply, ask questions and think creatively beyond rigid boundaries.



Prof. MS Ananth, Former Director, IIT Madras, emphasised the need for strong collaboration between academia and industry, citing the IIT Madras Research Park as an example where faculty, students and industry professionals work together to turn research into real-world impact.

Speaking about today's knowledge-driven world, he said that universities now play a key role in discovery, innovation and entrepreneurship. He emphasised the need for strong collaboration between academia and industry, citing the IIT Madras Research Park as an example where faculty, students and industry professionals work together to turn research into real-world impact. He also spoke about leadership and ethics in academic life, highlighting the importance of shared

leadership, consensus, honesty and ethical values.

In conclusion, Prof. Ananth said that while innovation, intellectual property and economic impact are important, they should always be guided by the university's core mission: the honest pursuit of truth, the development of strong character and the use of knowledge for the benefit of society. He conveyed many deep messages through several witty anecdotes that kept the audience engaged.

As part of the celebration, NCL Research Foundation (RF) Awards were given to the CSIR-NCL staff at the hands of the chief guest to recognise outstanding research and innovation, reinforcing CSIR-NCL's commitment to excellence and scientific leadership.

The programme concluded with a vote of thanks by Dr Parveen Goyal, who expressed gratitude to the distinguished guests, scientists, faculty members, researchers, students, CSIR-NCL alumnae and staff for participating in the celebration, both in person and online.

Dr Sridevi Annapurna Singh Delivers CSIR–IIIM Foundation Day Lecture

The CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu, 1 December 2025, celebrated its 85th Foundation Day

with great enthusiasm, marking more than eight decades of scientific contribution and national impact. The event brought together





Dr Sridevi Annapurna Singh, Former Director, CSIR-CFTRI, emphasised the global relevance of functional foods, nutraceuticals, and traditional Indian dietary wisdom.

senior scientists, dignitaries, and researchers to reflect on the institute's journey and its expanding influence in integrative medicine, natural product research, and innovation.

Dr Sridevi Annapurna Singh, Former Director, CSIR-CFTRI, Mysuru, graced the occasion as the Chief Guest and delivered a compelling Foundation Day lecture on "Hidden medicines in your food." She emphasised the global relevance of functional foods, nutraceuticals, and traditional Indian dietary wisdom. Stressing the need for scientific validation of indigenous knowledge, she said quality standards in food and nutraceuticals must be prioritised. She also advocated stronger collaboration between CSIR laboratories and industries to maximise expertise, resources, and impact. Guest of Honour, Dr Kannan Srinivasan, Director, CSIR-CSMCRI, Bhavnagar, lauded IIIM's excellent student-scientist ratio and its robust translational research ecosystem. He highlighted the critical role of the institute's pilot-scale facilities in helping innovations cross the challenging "valley of death" — the stage between laboratory research and commercialisation. He urged researchers to leverage emerging opportunities created through ICMR-supported clinical trials.

Presiding over the function, Director, CSIR-IIIM, Dr Zabeer Ahmed, described the 85th Foundation Day as a moment of immense pride. Tracing the institute's evolution from the Drug Research Laboratory of J&K (1941)

to RRL (1957) and finally IIIM (2007), he paid tribute to former directors and the legendary Col Sir Ram Nath Chopra, known as the father of Indian pharmacology. Dr Ahmed noted that more than 1,000 students from schools, colleges, and universities visited IIIM's Jammu, Srinagar, and satellite centres, reflecting the institute's commitment to inspiring young minds and connecting science with society. He listed several key achievements over the past year, including large-scale training of women under the Atal Incubation Centre, the e-tractor campaign launched by CSIR-CMERI, and the National Startup Festival that brought together over 75 startups. Highlights also included the Lavender Festival, floriculture conclaves, and major strides in traditional medicine standardisation, skill development, and incubation support. IIIM now runs four incubation centres and has supported more than 125 startups, with 12 already launching market-ready products. The institute also received the Bharat Incubator Award and national recognition for the CSIR Aroma Mission team.

On the occasion, IIIM inked two new industry partnerships by signing CDAs with Hapico and Medispace Innovations. The institute also marked the filing of 14 patents — ten foreign and four Indian. Several scientists and technical staff members were felicitated for outstanding contributions across drug testing, fermentation, aroma mission, GLP initiatives, and technology incubation. On the occasion, the S&T staff members were also awarded with appreciation certificates for the impactful work done by them during the preceding year. Besides this, scientists who filed patents abroad and in India were also felicitated. The ceremony concluded with a vote of thanks by Abdul Rahim, Chief Scientist & Head RMBD&IST and Head IIIM (Branch) Srinagar, while proceedings were conducted by Dr Gurleen Kour.

Technical Hindi Symposium “Abhyuday-3”

1 1 January 2026. The Third Technical Hindi Symposium (Takniki Hindi Sangoshthi) “Abhyuday-3” was organised with the active collaboration of CSIR-NIScPR, New Delhi, along with the Indian Institute of Technology (IIT) Indore and IIT Jodhpur, to promote the use of Technical Hindi and expand the outreach of science and technology to wider sections of society.

The two-day symposium witnessed research study outcomes on recent innovations and development in science

and technology, and their societal interface. Research scholars presented 25 papers focused mainly on biodiversity values of medicinal plants, biological waste disposal, human-AI collaboration, technology and social innovations, and the confluence of Rajbhasha and technology.

CSIR-NIScPR is mandated for science communication and evidence-based policy research, and played a key role in conceptualising and supporting the symposium to bridge the gap between scientific research



The symposium contributed to empowering citizens with scientific awareness in their own language and supported the broader goal of making science more accessible, participative, and socially relevant.

and society through the Hindi language. The institute has been consistently working towards making scientific knowledge accessible to the public, particularly through Indian languages, enabling science communicators, students, teachers, innovators, and citizens to better understand and apply scientific knowledge.

During the event, Shri CB Singh, Chief Scientist and Head, Popular Science Division, CSIR-NIScPR, highlighted the importance of Technical Hindi and effective science communication in taking research and innovation to wider sections of society. He also noted CSIR-NIScPR's sustained efforts in disseminating scientific knowledge in Hindi, including the publication of the popular science magazine *Vigyan Pragati* since 1952.

The Director of IIT Indore, Prof. Suhas Joshi, highlighted the Institute's initiatives to promote the use of Hindi in technical education, including discussions on science in Hindi, preparation of PhD abstracts compilation as per prescribed official language standards, and delivery of select undergraduate lectures in Hindi to enhance conceptual clarity. The Director of IIT Jodhpur, Prof. Avinash Kumar Agrawal, observed that the symposium had initiated meaningful technical discourse in Hindi and would play a significant role in strengthening its use in technical education and research.

The symposium witnessed participation from eminent educators, scientists, technical

experts, official language officers, and researchers from across the country. The programme included technical sessions, research paper presentations, invited talks, panel discussions, and special lectures on contemporary themes such as artificial intelligence, innovation, start-ups, higher education, and the use of Hindi in administration.

A key highlight of the symposium was the release of the *Smarika*, featuring scholarly contributions received for the event. A total of 26 research papers were accepted after peer review and compiled in the publication. These papers were presented across two technical sessions, namely Science and Engineering, which included 12 papers, and Digital Technology and Innovation, which featured 14 papers. The *Smarika* reflected growing academic engagement in Technical Hindi and served as a valuable resource for researchers, educators, and policymakers working towards strengthening the use of Hindi in science, technology, and innovation. In the valedictory session, Dr Manish Mohan Gore, Senior Scientist, CSIR-NIScPR, underscored the key takeaways of the two-day symposium. He stressed that such programmes are much needed to engage scientists and research scholars to discuss the latest and socially relevant developments of science and technology in the Indian languages, including Hindi.

Through its collaboration in "Abhyuday-3", CSIR-NIScPR reaffirmed its commitment to inclusive science communication, promotion of Technical Hindi, and building a strong interface between science, technology, and societal needs. The symposium contributed to empowering citizens with scientific awareness in their own language and supported the broader goal of making science more accessible, participative, and socially relevant.

STEM Awareness Programme

A one-day workshop under the NCSTC-sponsored project entitled "STEM awareness programmes and their impact on the scientific temperament of rural school students in the state of Punjab" was organised on 5 December 2025 at Teachers Home, Bathinda, Punjab, by CSIR-NIScPR. The objective of this initiative was to foster curiosity, innovation, and scientific thinking among students by providing them with exposure to scientific concepts, experiments, and interactions with STEM experts.

Around 280 students of Class IX-XII from different Government schools participated in the workshop, accompanied by their science teachers. District Education Officer, Mrs Mamta Sethy; District Science Supervisor, Dr Sanjeev Nagpal; Science Teacher, Mr Jitender Kumar; Mr Foran Singh, Retired Science teacher; and Dr Jitendra Kumar Pattanaik, along with the Project coordinator Dr Puspanjali Tripathy, were present in the Inaugural session.

Dr Jitendra Kumar Pattanaik, Associate Professor, Department of Geology, Central University of Punjab, Bathinda, delivered a STEM awareness lecture to motivate the students to study science. Participants also

performed hands-on science experiments under the guidance of Mr Foran Singh and Project Associate Mr Ajay Sharma. Besides, students also performed hands-on experiments on Newton's Laws of Motion and electricity.

A career guidance lecture was given by Dr Krishna Gopal, Lecture, DIET, Bathinda, for the students regarding different career options in science. Information on fellowships and schemes of the Department of Science & Technology (DST) for school and college students was also shared by Dr Puspanjali Tripathy. The workshop was concluded with feedback from the participants.

The objective of this initiative was to foster curiosity, innovation, and scientific thinking among students by providing them with exposure to scientific concepts, experiments, and interactions with STEM experts.



CSIR-IMTECH organises LASAICON 2025 Conference on Preclinical Research, Animal Welfare, Drug Discovery & Pharma Innovation



CSIR-Institute of Microbial Technology (CSIR-IMTECH) hosted a three-day Laboratory Animal Science Association Conference (LASAICON)-2025, on “Preclinical to Clinical: Connecting the Dots of Research, Animal Welfare, Drug Discovery, and Pharma

Innovation for Viksit Bharat” from 30 November to 2 December 2025. The landmark event shall bring together an interdisciplinary community of scientists, regulators, animal welfare experts, innovators, students and key stakeholders from academia and industry.



Dignitaries releasing the souvenir commemorating the celebration of LASAICON 2025



Dr Subeer Majumdar, DG of Gujarat Biotechnology University, receiving the Lifetime Achievement Award

Dr Sanjeev Balyan, Former MoS for the Ministry of Fisheries, Animal Husbandry & Dairying, was the Chief Guest of the event. Dr Balyan, a veterinary scientist himself, lauded the efforts of CSIR-IMTECH in organising LASAICON, which shall pave the way for a self-reliant India. He exhorted the scientists to undertake the areas of research that are beneficial to the common man, and especially agriculture. LASAICON-2025 aimed to address critical scientific and ethical intersections—promoting humane, responsible, and cutting-edge approaches in biomedical

research, accelerating drug discovery, and nurturing pharmaceutical innovation through informed scientific discourse and cross-sectoral collaboration.

Dr Sanjeev Khosla, Director, CSIR-IMTECH, while welcoming the dignitaries and scientists at the event, highlighted that there is a pressing need to develop a robust mechanism for the welfare of lab animals, as most of the failures in any drug discovery programme occur at the pre-clinical stage. He also dwelled on newer methods that have the potential to replace animal models like organoids due to

LASAIICON-2025 aimed to address critical scientific and ethical intersections – promoting humane, responsible, and cutting-edge approaches in biomedical research, accelerating drug discovery, and nurturing pharmaceutical innovation through informed scientific discourse and cross-sectoral collaboration.

their human-specific, 3D structure that better mimics human organs for disease modelling, drug screening, and toxicity testing.

The Lifetime Achievement Award was also given to Dr Sanjeev Balyan & Dr Subeer Majumdar, Director General of Gujarat Biotechnology University (GBU), for their exceptional contribution in the field of veterinary sciences. LASAI Awards were also given under different categories to eminent researchers for their work in animal studies and handling of laboratory animals.

Prof. JPS Gill, VC, GADVASU, Ludhiana, Dr Subeer Majumdar, DG, GBU, Gujarat and Dr G Rajamohan, Chief Scientist & Chairperson, LASAIICON-2025, in their respective addresses, gave a brief overview of the event that shall enable impactful dialogue and collaboration that bridges ethical preclinical research with transformative clinical and pharmaceutical advancements. They acknowledged IMTECH's world-class infrastructure and scientists who have played the role of an enabler to budding young researchers across the country.

The conference concluded with a thought-provoking panel discussion on the topic "From Bench to Bedside for Viksit Bharat: Animal welfare & Ethics, Pharma Innovation & Drug Discovery, and One Health Approach". Prof. G Taru Sharma chaired the valedictory function and also felicitated the winners of the oral and poster presentations conducted during the conference.

CSIR-IMTECH and LASAI extend their heartfelt gratitude to all speakers, delegates, sponsors, partners, volunteers, and the organising team for their invaluable contributions in making LASAIICON-2025 a memorable and impactful scientific event.

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