

Director CSIR-NEIST addressed Staff Members on New Year's Day



Dr V M Tiwari, Director, CSIR-NEIST addressing the staff members on New Year's Day

On 1st January 2026, CSIR-NEIST organized a New Year Get-Together Meeting at the J N Baruah Auditorium, during which Dr N Kalaiselvi, Director General, CSIR, addressed the entire CSIR fraternity through an online presentation. In her address, Dr Kalaiselvi highlighted the significant research work, major discoveries, and innovative technologies developed by various CSIR laboratories across the country. She emphasized CSIR's growing contribution to national development through science, technology, and innovation while encouraging all laboratories to continue striving for excellence and societal impact.

Following the Director General's address, Dr V M Tiwari addressed the staff members. Extending New Year's Greetings, he encouraged everyone to begin the year with enthusiasm and dedication and a shared commitment to excellence. Referring to the key messages conveyed by the Director General, he underscored the pivotal role of CSIR in strengthening the nation's scientific and technological capabilities. Dr Tiwari emphasized the importance of teamwork and collaboration, urging all employees to function as one family to create meaningful scientific and societal impact. He encouraged the staff to draw inspiration from the accomplishments of other CSIR laboratories while focusing on emerging thrust areas such as the bioeconomy, genome-edited rice varieties developed by CSIR-NEIST, green energy production technologies, and other innovative research initiatives. He also stressed the need for the optimal utilization of the

institute's sophisticated research facilities and scientific instruments.

Highlighting the institute's recent achievements, Dr. Tiwari noted that CSIR-NEIST recorded a 20% increase in research publications and a significant rise in patent filings compared to the previous year, reflecting the institute's growing research productivity and innovation ecosystem.

Concluding his address, Dr Tiwari urged all staff members to maintain a healthy lifestyle and positive work culture, emphasizing that physical well-being, motivation, and collective commitment are essential for achieving greater scientific excellence in the year ahead.

CSIR-NEIST Hosted National Workshop on Deciphering Pathogens using Genomics Approaches for One Health



Group photo of the participants along with the organizers

CSIR-NEIST successfully organized a two-day national workshop and training programme titled "*Decoding Pathogens Using Genomics Approaches for One Health (DePG-OH)*" from 21-22 January, 2026 at its premise. The workshop was a part of the prestigious GDP-FINER project (Genomic-based Discovery of (Potential) Pathogens for India's North-Eastern Region); a national level project funded by Department of Biotechnology, Govt of India which is being executed by ten national level governmental and non-governmental organisations including CSIR-NEIST Jorhat, AAU Khanapara, CIHSR Nagaland, Conservative Initiative Shillong, IIPH Shillong, NEIGRIHMS Shillong along with TIFR NCBS, IISc Bangalore, BRICS CDFD and CSIR IGIB. The close proximity of wild mammals like bats and rodents to local communities may result in exposure of locals to

potential pathogens. This five year project hopes to conduct risk assessment of potential emerging infectious zoonotic diseases in the North Eastern States of Meghalaya, Arunachal Pradesh and Nagaland, helping better understand our relationship with nature in this biodiverse region. The two-day workshop and training programme was formally inaugurated on 21 January, 2026 wherein Prof (Dr) Shekhar C Mande, current President of the Indian National Science Academy (INSA), and former Director General of CSIR & Secretary, DSIR and Dr Kartik Neog, Director, Central Muga Eri Research and Training Institute (CMER&TI) graced the occasion. Prof Mande delivered the keynote address on “Changing Perspectives of Communicable Diseases”.



Prof (Dr) S C Mande, delivering keynote address during the inaugural session

In his address, Dr Mande emphasized the growing role of genomics in understanding disease emergence, spillover, and preparedness for public health policy in an increasingly interconnected world. He highlighted the need for capacity building among young researchers and called for stronger One Health-centric research initiatives in India, particularly in biodiversity-rich regions like the North East.



Dr V M Tiwari, delivering welcome address on the occasion

Delivering the welcome address, Dr Virendra M Tiwari, Director, CSIR-NEIST, emphasized the institute's commitment to capacity building and translational research in infectious disease biology. He highlighted the importance of scientific interventions in addressing biological challenges.

Dr Pankaj Bharali, Sr Scientist & Convenor of the programme stressed the importance and applicability of this workshop in the capacity building of CSIR-NEIST with NER as well as other national/international organizations for the excellence of fundamental and cutting-edge research in the thematic.

The programme was aimed to primarily provide an overall insight on the genomics-based pathogen detection that prioritizes the 'One Health' concept by merging the health surveillance of human, animal and environment on the genomic background. The programme also intended to cater a hands-on experience of the genomic sequencing tools and techniques to detect the early emerging threats, even before the appearance of any clinical symptoms.

The programme covered technical demonstration and a series of expert lectures by eminent scientists from leading national institutions such as CSIR-IGIB, BRIC-TIGS, TIFR-NCBS, WII, CDFD, ICAR-NRCP, Assam Agriculture University and Tezpur University, covering topics ranging from zoonotic spillover, environmental and wastewater surveillance, antimicrobial resistance, wildlife genomics, to environmental DNA-based biodiversity monitoring.

The workshop concluded with a hands-on training module on genomic data analysis for pathogen identification, followed by a valedictory session, participant feedback, and certificate distribution. The event was widely appreciated for its scientific depth, practical orientation, and relevance to current global health challenges. It is worth mentioning that the programme was attended by around 100 participants comprising students and researchers from all the eight North Eastern states.

CSIR-NEIST celebrated 77th Republic Day

Along with the rest of country, CSIR-NEIST celebrated the 77th Republic Day with great enthusiasm on 26 January, 2026. Scientists, research scholars, officers, staff members, and students along with their family members gathered at the institute's campus to commemorate the occasion. The celebration commenced with the unfurling of the National Flag, followed by the collective singing of the National Song. Addressing the gathering, Dr V M Tiwari, Director, CSIR-NEIST, delivered an inspiring address highlighting the essence of **Vande Mataram** as a symbol of India's freedom struggle and national unity. He paid tribute to the sacrifices of freedom fighters and emphasized the

pivotal role of the Indian Constitution in shaping a progressive nation.



Dr V M Tiwari, addressing the gathering on the occasion of 77th Republic Day celebration at CSIR-NEIST



Dr V M Tiwari is escorted to inspect the Guard of Honour after receiving the salute.

Dr Tiwari also recalled the emphasis laid by Hon'ble Prime Minister Shri Narendra Modi on preserving and honoring the legacy of **Vande Mataram**. In his address, Dr Tiwari outlined the institute's future roadmap while highlighting its recent achievements. He elaborated on the successful execution of several flagship research initiatives and missions, including the Himalayan Geo-Hazard Programme, API Mission, Himalayan Bioresources Programme, CSIR Aroma Mission, and Floriculture Mission, along with multiple externally funded projects. He also highlighted several new patents that have been filed and granted. He further expressed confidence that five technologies developed by CSIR-NEIST would soon feature among the Top 100 Technologies of India. Dr Tiwari also underlined notable technological milestones, including the development of Decaffeinated Tea technology, which was officially launched by the Hon'ble Union Minister of Science & Technology and Vice President of CSIR Dr Jitendra Singh

in September, 2025. Emphasizing CSIR-NEIST's role in regional development, Dr Tiwari spoke about the institute's sustained contributions towards entrepreneurship and startup promotion in the North Eastern Region. He also welcomed the newly recruited personnel, noting that more than 20 new members have recently joined the institute. He also congratulated scientists of the institute, including Dr Swapnali Hazarika, Dr Binoy Saikia, Dr Twahira Begum, and others, for their recent recognitions and achievements. On this auspicious occasion, Dr Tiwari called upon all members of the CSIR-NEIST fraternity to renew their commitment to overcome procrastination, foster collaboration, and enhance the institute's reputation through innovative research. As part of the celebrations, employees who retired in 2025 were felicitated with compendiums and gift hampers in recognition of their dedicated service to the institute. The day's programme concluded with a series of indoor and outdoor sports activities, adding a spirit of celebration to the national occasion.

MoU & ToT AGREEMENTS:

CSIR-NEIST signs Mou with Tripura Government to strengthen medicinal and aromatic plants sector



(From left) Shri Prasad Rao Vaddarapu, Director, NTFP Centre of Excellence, Govt. of Tripura; Shri R K Samal, IFS, PCCF & HoFF and Principal Secretary (Forests), Govt. of Tripura & Dr V M Tiwari, Director, CSIR-NEIST on the MoU signing day.

CSIR-NEIST signed a Memorandum of Understanding (MoU) with the NTFP Centre of Excellence, Govt. of Tripura on 08 January, 2026 to enhance collaboration in the field of Medicinal and Aromatic Plants (MAPs), including agarwood, with the aim of supporting sustainable livelihoods and rural development in the state.

The MoU provides a framework for cooperation in research, technology development, and field-level interventions related to the cultivation and value addition of MAPs. The collaboration seeks to utilize Tripura's rich natural resources alongside CSIR-NEIST's scientific expertise to strengthen the MAPs sector in the state. The agreement was signed in the presence of Dr V M Tiwari, Director, CSIR-NEIST; Shri Prasad Rao Vadarappu, IFS, Director, NTFP Centre of Excellence, Tripura Forest Department; and Shri R K Samal, IFS, PCCF & HoFF and Principal Secretary (Forests), Government of Tripura.

CSIR-NEIST TRANSFERS BHIM KOL ALCOHOLIC BEVERAGE TECHNOLOGY TO ENTREPRENEUR



Technology Transfer Agreement signed with M/s N S Enterprise, Arunachal Pradesh for transfer of technology for the production of an alcoholic beverage from Bhim Kol (*Musa balbisiana*).

On 10th January 2026, CSIR-NEIST has transferred a standardized technology for the production of an alcoholic beverage from Bhim Kol (*Musa balbisiana*) to Mr Jumpu Lomdak, M/s N S Enterprise, Arunachal Pradesh. The technology was developed by the CSIR-NEIST Branch Laboratory, Itanagar. The Technology Transfer (ToT) ceremony was held in the presence of Prof V M Tiwari, Director, CSIR-NEIST, along with Dr S Venkata Mohan, Director, CSIR-NEERI, and other officials. Bhim Kol is an underutilized yet abundantly available indigenous banana of the North Eastern region, known for its high nutritional value and rich antioxidant content. The transferred technology is expected to encourage the development of sustainable agro-based industries and contribute to regional economic growth in Arunachal Pradesh and Assam.

CSIR-NEIST transfers Honey Wine-making Technology to Assam-based Industry

On 10th January 2026, in the presence of Dr S Venkata Mohan, Director, CSIR-NEERI, along with other officials, CSIR-NEIST transferred a wine-making technology based on indigenous yeast and honey collected from diverse sources across Northeast India to M/s C K Udyog, Assam, for large scale production and commercialization.



Technology Transfer Agreement signed with M/s C K Udyog, Jorhat for transfer of the technology on Process for production of Honey Wine using Indigenous Yeast.

The newly developed honey wine is rich in vitamins D and E and antioxidants, making it a value-added product for the beverage sector. The transfer of this technology is expected to support industrial development and contribute to economic growth in the NE region.

CSIR-NEIST ORGANIZED NEXUS LECTURE SERIES WITH FOCUS ON SUSTAINABLE CHEMISTRY AND ARTIFICIAL INTELLIGENCE

CSIR-NEIST successfully conducted NEIST-NEXUS Lecture Series which was started from 23 to 30 January 2026, highlighting emerging directions in sustainable organic synthesis and the application of artificial intelligence in chemical and materials research.

On 23 January, as part of the series, Dr Atul A More, Scientist, CSIR-NEIST, delivered a lecture on "Advancing Cost-Effective and Sustainable Organic Synthesis." His talk emphasized environmentally benign synthetic strategies that employ electrons and photons as clean reagents to achieve high atom economy and improved energy efficiency. Dr More

outlined innovative approaches for the synthesis of cyclic and acyclic ketones as well as nitrogen-containing heterocycles, and discussed green electrochemical methodologies, including aerobic indole oxygenation and metal-free electro-conjugation reactions. The presentation also demonstrated the scalability of these methods through a shortened, eco-friendly synthetic route to a pharmaceutical compound used in insomnia treatment.

On 30 January, a lecture was delivered by Dr Hriday Jyoti Mahanta, Scientist, CSIR-NEIST, titled *“Words to Matter: How Large Language Models are Learning Chemistry, Materials, and Meaning.”* Dr Mahanta provided insights into the fundamentals of large language models, explaining how transformer architectures and attention mechanisms enable machines to capture complex patterns in chemical and materials data. He highlighted the advantages of pre-trained and domain-specific models in reducing computational costs while enhancing performance, and discussed how framing chemistry as a structured “language space” can accelerate discovery across diverse chemical systems.

The sessions witnessed active participation from researchers, faculty members, and students, fostering thoughtful discussions on the future of chemical sciences and technology-driven innovation.

TRAINING PROGRAMMES:

CSIR-NEIST CONDUCTS ONE-DAY TRAINING WORKSHOP ON FAECAL SLUDGE MANAGEMENT FOR HIMALAYAN REGION



Dr V M Tiwari, Director, CSIR-NEIST felicitating Dr S Venkata Mohan (2nd from right), Director, CSIR-NEERI, Nagpur

On 10th January, 2026, CSIR-NEIST organized a one-day training workshop on Faecal Sludge Management for the Himalayan Region, with the support of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India.

The workshop focused on promoting practical and scalable solutions for sanitation and waste management in ecologically sensitive Himalayan areas. Dr V M Tiwari, Director, CSIR-NEIST, emphasized the institute's commitment to translating scientific research into field-ready technologies, particularly in the areas of environmental biotechnology and waste-to-value approaches. Delivering the keynote address, the Guest of Honour Dr S Venkata Mohan, Director, CSIR-NEERI, highlighted the critical need for systematic faecal sludge and septage management in India. He discussed key aspects such as sanitation coverage, existing regulatory frameworks, and the role of decentralized treatment systems in achieving sustainable sanitation outcomes.

CSIR-NEIST BLIT'S SKILL DEVELOPMENT PROGRAMME EMPOWERS PAINTERS IN ARUNACHAL PRADESH

On 30 January 2026, CSIR-NEIST Branch Lab Itanagar organized a special training programme aimed at enhancing professional painting skills at Naharlagun, Arunachal Pradesh, with academic support from Nagaon University, Assam, and Global Hunt Foundation, sponsored by AkzoNobel India.



The training formed part of a broader effort to strengthen employability and vocational competence among painters working in the region.

The programme emphasized hands-on learning, surface preparation techniques, modern coating systems, and quality finishing standards. Participants were also introduced to industry best practices that align with current market requirements.

HONORS & ACHIEVEMENTS:



Dr Banashree Saikia, DST-Women Scientist (WISE-PDF), BSTD, CSIR NEIST, has been awarded with the 'Young Scientist Award' at the Agri Vision 2026-8th International Conference on Sustainable Agriculture for Food Security held during January 28-30, 2026, in Bhubaneswar, Odisha. Dr Saikia delivered an invited talk on 'CRISPR/Cas-based genome editing for crop improvement and represented CSIR-NEIST Jorhat.

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