

INFOWATCH

An In-house Monthly Communication (June, 2024)

CSIR-NEIST celebrated World Environment Day 2024



From top: Padma Shri Smt. Yanung Jamoh Lego addressing the event as Chief Guest and Dr Virendra M Tiwari, Director, CSIR-NEIST delivering his address on the occasion.

CSIR-NEIST celebrated the World Environment Day 2024 with great enthusiasm and commitment to the theme "Land Restoration, Desertification and Drought Resilience". The festivities commenced with the ceremonial planting of medicinal plant saplings by the Director, CSIR-NEIST and other dignitaries symbolizing a collective pledge towards a greener and healthier planet. A special programme was held at Dr J N Baruah 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, Chief Scientist & Head, CSIR-TKDL, New Delhi graced the occasion as the Guest of Honour.

Dr Virendra M Tiwari, Director, CSIR-NEIST addressed the gathering and emphasized on 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 the society in healing thousands from

life threatening diseases. Dr Viswajanani Sattigeri stressed on the significance of documentation of traditional knowledge, importance of our biodiversity and related flora and fauna in the environment. She highlighted the imperative need for land restoration through extensive plantation efforts and advocated for adopting environmentally friendly lifestyles.

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

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

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



Dr Viswajanani Sattigeri, Scientist & Head, CSIR-TKDL, New Delhi planting a sapling in presence of Director, CSIR-NEIST, Dr V M Tiwari; Padma Shri Smt. Yanung Jamoh Lego and other CSIR-NEIST officials.



Attendees of the World Environment Day programme at CSIR-NEIST.

Consultative Meeting of DBT organized at CSIR-NEIST

A two-day Consultative Meeting of Department of Biotechnology (DBT), Govt. of India entitled "Developing a roadmap for supporting and nurturing Biotechnology in NER by DBT during the next five years" was organized at CSIR-NEIST during 21-22 June, 2024. The meeting was attended by all heads and representatives of S&T Councils, Health Departments, Veterinary Departments of all the 8 States of NER and many leading scientists of NER Research Institutes like IBSD-Imphal, Pasteur Centre-Shillong, Guwahati Medical College, Jorhat Medical College, Tezpur University, Mizoram University, Veterinary Colleges of Assam, ADMac-Guwahati, NRC-Mithun-Dirang, NRC-Yak-Medziphema, NRC-Pig-Guwahati and several others alongside many eminent scientists and technical experts from across India to discuss the current state of progress and identify the major challenges of NER in Medical, Veterinary, Agriculture, Aquaculture, Environment and Bioenergy sectors of Biotechnology for developing a roadmap of DBT to strengthen effective and inclusive support to NER. Dr Virendra M Tiwari, Director, CSIR-NEIST, Jorhat welcomed the delegation of eminent scientists and leaders, the DBT organizing team and all participants of the meeting. He shared that CSIR-NEIST, Jorhat is continuously working for the welfare of the NE region through quality knowledge and skilled human resource generation, S&T intervention and entrepreneurship development relevant to the NE States. Dr Dinakar Salunke, ICGEB, New Delhi shared the genesis of the meeting, necessities and possibilities for future course of action for biotechnology research. Dr. Suraksha S Diwan, NER Program of DBT highlighted the success stories of DBT support towards promoting biotechnology R&D in the Northeastern states. Dr. Rajesh S Gokhale, Secretary, DBT, New Delhi in

his keynote address encouraged the scientists and academicians to come together to develop S&T mission for uplifting and encouraging biotechnological research in all sectors to rich greater heights in the Northeast India. On this occasion, a brochure of DBT NER programmes and their achievements was released and prizes of BIRAC funded CSIR-BioNEST Udyomita 1.0 prizes were awarded to the winning young entrepreneurs.



DBT officials releasing a brochure on DBT's NER programmes and achievements on the occasion.



A section of attendees at DBT Consultative Meeting.

CSIR-NEIST organized Blood Donation Camp



Blood donation by CSIR-NEIST staff led by the Director, Dr Virendra M Tiwari.

A Blood Donation Camp was organized on 18 June, 2024 at CSIR-NEIST Clinical Center. This event provided a valuable opportunity for CSIR-NEIST family (staff and their families) to unite and make a significant difference in the lives of those in need.

Organized in collaboration with the Greater Lion's Club, the camp coincided with World Blood Donation Day and was hosted at CSIR-NEIST. The program was inaugurated by Dr Virendra M Tiwari, Director, CSIR-NEIST.

CSIR-NEIST observed International Yoga Day

The 10th International Yoga Day was celebrated at CSIR-NEIST under the theme "Yoga for Self and Society," emphasizing health and well-being on 21 June, 2024. Commemorating the day, a yoga session was held at CSIR-NEIST Social Activity Centre wherein Dr V M Tiwari, Director, CSIR-NEIST emphasized the benefits of yoga for physical and mental well-being in his opening remarks. CSIR-NEIST staff and family members participated in the yoga session.



Director, CSIR-NEIST visited Branch Laboratory, Itanagar

Dr Virendra M Tiwari, Director, CSIR-NEIST, visited CSIR-NEIST Branch Laboratory in Itanagar, Arunachal Pradesh on 15 June, 2024 along with a team of scientists and administrative officer to review the research and extension activities. During discussion with the staff, he emphasized the importance of aligning research with local needs and state-specific requirements. He encouraged them to maintain high standards while focusing on addressing regional scientific challenges. His visit included inspection of the experimental farm and the various laboratories.



Dr Virendra M Tiwari, Director, CSIR-NEIST interacting with scientists and student researchers during his visit to the branch laboratory, Itanagar.

Ph D awarded

Mr Ashim Gogoi has been awarded Doctorate degree by the Academy of Scientific & Innovative Research for his thesis entitled "Development of Attenuation Relation from Ground Motion Parameters and Simultaneous Estimation of Site Characteristics Pertaining to Some Important Cities in and around Shillong-Mikir Hills Plateau, NE India". Mr Gogoi worked under the Supervision of Dr Sangeeta Sharma, Principal Scientist and Dr Saurabh Baruah, Chief Scientist, CSIR-NEIST.



Mr Ashim Gogoi

Ms. Rashmita Devi has been awarded Doctorate degree by the Academy of Scientific & Innovative Research for her thesis entitled "Development of Nano-Based Sensing Platform for the Detection of Neurological Significant Analytes".



Ms. Rashmita Devi

Ms. Rashmita completed her Ph D work under the Supervision of Dr Prakash Jyoti Saikia, Principal Scientist, CSIR-NEIST and Dr Raju Khan, Senior Principal Scientist, CSIR-AMPRI, Bhopal.

Mr Nirangkush Borah has been awarded Doctorate degree by the Academy of Scientific & Innovative Research for his thesis entitled "Development of metal nanoparticles as chemical sensors using



Mr Nirangkush Borah

natural products and their applications in detection of food additives". Mr Nirangkush worked under the Supervision of Dr Chandan Tamuly, Sr Principal Scientist, CSIR-NEIST branch laboratory.

Papers published

In International Peer Reviewed Journals

- Title:** Delineating the Acquired Genetic Diversity and Multidrug Resistance in *Alcaligenes* from Poultry Farms and Nearby Soil.
Authors: Abhilash Bhattacharjee and Anil Kumar Singh.
Journal: *Journal of Microbiology* 2024 <https://link.springer.com/article/10.1007/s12275-024-00129-w>
IF: --
- Title:** Active Hydrogen Free, Z-Isomer Selective Isatin Derived "Turn on" Fluorescent Dual Anions Sensor.
Authors: Muthumanickam Shenbagapushpam, Bosco Christin Maria Arputham Ashwin, Paulpandian Muthu Mareeswaran, Paneerselvam Yuvaraj and Selvakumar Kodirajan.
Journal: *Journal of Fluorescence* 2024 <https://link.springer.com/article/10.1007/s10895-024-03762-1>.
IF: 2.7
- Title:** Solvent-free grafting route to develop thin and flexible polymer film from lignin.
Authors: Ankumoni Saikia, Koushik Dutta and Ajit Singh.
Journal: *Polymers for advanced technologies* 2024 e6457 <https://onlinelibrary.wiley.com/journal/10991581>
IF: 3.4
- Title:** Visible-light-induced copper-catalyzed oxidative esterification of α -azidoketones with diazoacetates: access to α -acyloxyacetates.
Authors: Uma Devi Newar, Dhruva Jyoti Baruah, Arnav Bhuyan, Abhimanyu Nayaka and Ram Awatar Maurya.
Journal: *Organic & Biomolecular Chemistry* 2024 <https://pubs.rsc.org/en/content/articlelanding/2024/ob/d4ob00590b>
IF: 3.2
- Title:** Identification of Novel Variants of Three *Zephyranthes* Species Through Multilocation Assessment.
Authors: M Lal, J Baruah, R L Darnei and T Begum.
Journal: *Bangladesh Journal of Botany* 2024, Vol. 53, Issue 2, pp: 265-271 <https://www.banglajol.info/index.php/BJB/article/view/74038>
IF: 0.3
- Title:** Oxidizing methanol at cubic-hexagonal junction of NiO-ZnO at low onset potential.
Authors: Salma A Khanam, Kangkan Sarmah, Ankur Kanti Guha, Seonghwan Lee, Young Bin Park, Lakshi Saikia, Sayanika Saikia, Rafikul Ali Saha and Kusum K Bania.
Journal: *Electrochimica Acta* 2024 Volume 498 <https://www.sciencedirect.com/science/article/abs/pii/S0013468624008818?via%3Dihub>
IF: 6.6 (**Highest Impact Factor Paper**)
- Title:** Poly(octadecyl methacrylate) via RAFT Technique and Its Rheological Study for Waxy Crude.
Authors: Pranjal P Dutta, Bitupan Mohan and Prakash J Saikia.
Journal: *Industrial & Engineering Chemistry Research* 2024, Vol. 63, Issue: 25, pp: 10879-10891 <https://pubs.acs.org/doi/10.1021/acs.iecr.4c00509>
IF: 4.2
- Title:** In vitro and in silico analysis of broad-spectrum bio-activity of essential oils derived from medicinal and aromatic plants against microbial phytopathogens.
Authors: Monica Sharma, Remya Suma, Naimisha Chowdhury, Tarali Borgohain, Shridhar Hiremath, Channakeshavaiah Chikkaputtaiah and Banashree Saikia.
Journal: *European Journal of Plant Pathology* 2024 <https://link.springer.com/article/10.1007/s10658-024-02906-0>
IF: 1.8
- Title:** Catalyst- and chromatography-free multi-component domino synthesis of 5-alkyl barbituric acids at room temperature.
Authors: Biswajita Baruah, Monoj Sarma, Gaurav K Rastogi and Mohit L Deb.
Journal: *Synthetic Communications*, 2024 Vol. 54, Issue: 13, pp: 1051-1059 <https://www.tandfonline.com/doi/full/10.1080/00397911.2024.2363376>
F: 2.1

10. Title: Externally supplied ascorbic acid moderates detrimental effects of UV-C exposure in cyanobacteria.

Authors: Tridip Phukan, Tridip; Sukjailin Ryntathieng and Mayashree B Syiem.

Journal: *Photochemical & photobiological sciences*, 2024, <https://link.springer.com/article/10.1007/s43630-024-00612-8>

F: 3.1

11. Title: Delineating the Acquired Genetic Diversity and Multidrug Resistance in *Alcaligenes* from Poultry Farms and Nearby Soil.

Authors: Abhilash Bhattacharjee and Anil Kumar Singh.

Journal: *Microbial Ecology and Environmental Microbiology*, 2024, <https://link.springer.com/article/10.1007/s12275-024-00129-w>

F: 3

12. Title: Eryngial: An α,β -Unsaturated Fatty Aldehyde as the Major Phytotoxin in Spiny Coriander (*Eryngium foetidum* L.) Essential Oil.

Authors: Gitasree Borah, Begom Rifah Samia, Sajjad Hussain, Phirose Kemprai, Siddhartha Proteem Saikia and Saikat Haldar,

Journal: *Chemistry & Biodiversity*, 2024, e202400195 (1 of 10) <https://onlinelibrary.wiley.com/doi/10.1002/cbdv.202400195>

F: 2.9

The Sentinel, 23 June 2024

CSIR-NEIST in Print Media

Consultative meet on biotechnology roadmap for North East Region held at CSIR-NEIST

TWO-DAY EVENT FOCUSES ON FUTURE STRATEGIES FOR BIOTECHNOLOGY IN NER

CHRONICLE NEWS SERVICE

JOHAR: The Department of Biotechnology (DBT), Government of India, organized a two-day Consultative Meeting titled "Developing a Roadmap for Supporting and Nurturing Biotechnology in NER by DBT during the Next Five Years" at CSIR-NEIST on June 21-22, 2024. The event brought together heads and representatives from Science and Technology Councils, Health Departments, and Veterinary Departments of all eight North Eastern Region (NER) states, alongside leading scientists from prominent research institutes.

Attendees included representatives from IBSD-Imphal, Pasteur Centre-Shillong, Guwahati Medical College, Jorhat Medical College, Tezpur University, Mizoram University, Veterinary Colleges of Assam, AIKMS-Guwahati, NRC-Itanagar, Dirang, NRC-Yak-Medziphema, NRC-Pig-Guwahati, and other



The Brochure release by DBT officials

esteemed institutions. The meeting aimed to discuss the current progress and challenges in biotechnology across medical, veterinary, agricultural, aquaculture, environmental, and bioenergy sectors in the NER, with the goal of developing a comprehensive roadmap for DBT's support in the region.

Dr. Virendra M. Tiwari, Director of CSIR-NEIST, Jorhat, welcomed the delegation of eminent scientists, leaders, the DBT organizing team, and all partic-

ipants. He emphasized CSIR-NEIST's ongoing commitment to the welfare of the NE region through quality knowledge generation, skilled human resource development, scientific and technological interventions, and entrepreneurship initiatives.

Dr. Dinakar Sahukre from ICGEB, New Delhi, outlined the origins of the meeting, emphasizing the necessities and future possibilities for biotechnology research in the region. Dr. Suraksha S. Diwan

from the NER Program of DBT highlighted successful DBT-supported biotechnology R&D initiatives in the Northeastern states. In his keynote address, Dr. Rajesh S. Gokhale, Secretary of DBT, New Delhi, encouraged scientists and academicians to collaboratively develop a Science and Technology mission to elevate biotechnological research in Northeast India to new heights.

During the event, a brochure detailing DBT NER programs and their achievements was released. Additionally, prizes from the BIRAC-funded CSIR-BioNEST Udyomita 1.0 were awarded to young entrepreneurs, recognizing their innovative contributions to biotechnology.

The consultative meeting marked a significant step in fostering collaboration and strategizing future support for biotechnology in the North East Region, aiming for inclusive and effective development across various sectors.

The Hills Times, 23 June 2024



The Sentinel

CSIR-NEIST organizes meet on Biotechnology in NE