

CSIR-North East Institute of Science & Technology, Jorhat
Connecting Science & Technology for a Brighter Tomorrow

Director, CSIR-NEIST extends New Year's Day Greetings to the staff



Dr D Ramaiah (center), Director, CSIR-NEIST delivering his New Year's Day speech. Mrs A Sengupta, Head-RPBD Division and Mr Ajay Kumar, Hindi Officer, are seen delivering the same in Assamese and Hindi respectively.



A section of staff members attending the address.

Dr D Ramaiah, Director, CSIR-NEIST addressed the staff members on 2 January, 2017 and extended new year's greetings to all. He said that new year is the best time to look ahead and think where we want to make headway. Delivering his new year's day speech, he recalled the Institute's performance made in 2016 and mentioned that it has been eventful and rewarding in many aspects. 'A good number of technologies were translated during the year and we have shown excellence in academics, external cash flow and in societal fronts', he said. He recapitulated the various activities and events held during the year which have been significant to the overall performance of the Institute. He expressed his appreciation and con-

gratulations to all for achieving the milestones and objectives of 12th Five Year Plan Projects which are due to be over by March, 2017. With four ambitious Fast Track Translation Projects sanctioned by CSIR recently and several Mission Mode Projects which have been proposed, he encouraged all to give their best in achieving the deliverables. Declaring the year 2017 as the year of *Objective Oriented Research For Mankind*, he appealed to all to strive hard to achieve higher objectives and develop technologies for the masses, both in high-end category and also for the rural areas. The Institute's Diary-2017 and Calendar-2017 were released by the Director later, on the occasion.

Mr Srinivas Lanka, Mentor-Industrialists, Corporate Boards and Govt. Initiatives visited CSIR-NEIST



Interactive session between Mr Srinivas Lanka and CSIR-NEIST's scientists led by Dr D Ramaiah, Director, CSIR-NEIST at MS Iyengar hall.

Mr Srinivas Lanka, a thought leader in the field of Pharmaceuticals in India and mentor to various Industrialists, Corporate Boards and Government of India Initiatives visited CSIR-NEIST during 4-6 January, 2017. A close interaction between Mr Lanka and the scientists was held during the period wherein issues related to research and development particularly in the field of Pharmaceuticals were discussed. Mr Lanka provided valuable insights related to strategies for new drug development and its marketing. Detailed discussions on effective marketing strategies vis-a-vis the active

Not all of us can do great things. But we can do small things with great love.

- Mother Teresa

CSIR-North East Institute of Science & Technology, Jorhat
Connecting Science & Technology for a Brighter Tomorrow

-technologies of CSIR-NEIST was also held during the interactive sessions. Mr Lanka also delivered a Special Lecture entitled, "Linkage of Govt. and Industry to achieve health Indian Pharma" on 5 January, 2017 at Dr J N Baruah auditorium.

CSIR-NEIST organized workshop-cum-training on Biological data analysis using R-package



Dr D Ramaiah, Director, CSIR-NEIST addressing the participants in the inaugural session.

A two-day workshop-cum-training on "*Biological data analysis Using R-Package*" was organized by CSIR-NEIST during 5-6 January, 2017 supported by DBT, Govt. of India. The main objective of the workshop was to generate an in-depth knowledge about the applications of R-language for analysis of biological data analysis. The programme started with a short inaugural session presided over by Dr D Ramaiah, Director, CSIR-NEIST on 5 January, 2017. Dr Santanu Dutta, Associate Professor in Mathematics, Tezpur University and Dr Rajal Debnath, Scientist, CMER&TI, Jorhat attended as resource persons. Dr Dutta discussed about R language, setting up R platform and its multifarious applications including biological data analysis while Dr Debnath elaborated the use of various bioinformatics tools like QIIME, MUTHOR, UPARSE etc. in gene sequencing data analysis and discussed the implementation of R-package. A hands-on training on QIIME and R-package was held further wherein the participants were trained with demo session by



A section of participants attending the programme.

microbial gene sequenced datasets. The programme ended with a valedictory session held on 6 January, 2017. Dr D Ramaiah, Director CSIR-NEIST presided over the session wherein Mr Srinivas Lanka, Mentor to Industrialists, Corporate Boards and various Govt. Ministries and currently on his official visit to CSIR-NEIST also joined the programme. Mr Lanka in his brief address mentioned the importance of biological data analysis in recent R & D which was also reiterated by Dr T C Bora, former Head, Biotechnology Division. The programme was coordinated by Dr Ratul Saikia, Sr Scientist & in-charge, BIF-Centre, CSIR-NEIST. Altogether 35 nos. of participants from different institutes/organizations like IIT-Guwhati, NIT-Silchar, Tezpur University, Mizoram University, Guwahati University, Assam Agricultural University, Dibrugarh University, TRA-Tocklai, CMER&TI-Jorhat, RFRI-Jorhat and various colleges joined in the workshop.

CSIR-NEIST conducted first Entrance Test for India International Earth Science Olympiad (IESO) 2017 in Jorhat

An Entrance Test of the Geological Society of India INTERNATIONAL EARTH SCIENCE OLYMPIAD (IESO) 2017, which is scheduled to be held in France for the year 2017, was successfully conducted by CSIR-NEIST for the first time in Jorhat

Not all of us can do great things. But we can do small things with great love.

- Mother Teresa

CSIR-North East Institute of Science & Technology, Jorhat
Connecting Science & Technology for a Brighter Tomorrow

on 22 January, 2017. Held at KV-NEIST, altogether 62 students from different schools of in & around Jorhat participated. Dr R K Mrinalinee Devi, Women Scientist, Geoscience & Technology Division (GSTD), conducted the examination as Centre In-charge of the Jorhat Centre. The Geological Society of India is the body responsible for selecting the Indian team for the International Earth Science Olympiad. So far, the program in the country involves four stages: (i) National level Entrance Test, (ii) Training Camp culminating in the Indian National Earth Science Olympiad, (iii) Pre-departure training camp and (iv) International Earth Science Olympiad. The Earth Science Olympiad (ESO) is conducted by the ESO Cell at the Geological Society of India constituted by the President, Geological Society of India. The IESO is supported by the Ministry of Earth Science (MoES), Government of India as one of its outreach programme for promoting the study of Earth Science.

Societal Activities

CSIR-NEIST Branch Lab, Itanagar organized training on mushroom cultivation



CSIR-NEIST's team with the women trainees at Laluk (Assam).

CSIR-NEIST Branch Lab., Itanagar in association with Bongalmara Self Help Group, Laluk (Assam) imparted training on Mushroom cultivation to the members of the SHG at No.1 Bongalmara, Laluk, Assam on 17 January, 2017. Dr Chandan Tamuly,

Scientist and Dr B C Baruah, Sr Technical Officer interacted with the trainees and disseminated information about the nutritional and commercial aspects of the cultivation practice. A practical demonstration on preparation of mushroom bag was conducted and to help the trainees in the initial cultivation, CSIR-NEIST's team distributed 30 packets of mushroom spawn to the participants. Altogether 12 members received the training.

Another training-cum-awareness programme on Mushroom cultivation was held at branch lab on 18 January, 2017. Altogether 12 ST women from G sector Naharlagun, Polocolony Naharlagun and A sector Itanagar participated in the programme. Dr Budhen Ch Baruah, Sr Technical Officer coordinated the programme and distributed 24 packets of Mushroom spawn to the participants for the initial cultivation process.

CSIR-NEIST organized training program on Medicinal & Aromatic Plants Cultivation



Training programme held at Krishi Vigyan Kendra, Kathua.

CSIR-NEIST in association with its sister laboratory, CSIR-IIIM, Jammu and Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST), Jammu organized training programmes at Krishi Vigyan Kendra, Jammu and Krishi Vigyan Kendra, Kathua on 10 & 11 January, 2017 respectively under the project "J&K AROMA AROGYA GRAM-JAAG (RSP-4001)". Dr S P Saikia, PI of the project coordinated the programmes aimed to pro-

Not all of us can do great things. But we can do small things with great love.

- Mother Teresa

-mote commercial cultivation of medicinal & aromatic plants for socio-economic upliftment of rural masses of J&K. Altogether 151 farmers from Jammu and Kathua attended the programmes.

Seminar/Workshop/Conference attended

Mr Bijit K Choudhury, Scientist, attended a National seminar-cum-exhibition on 'Earthquake hazards: effects, mitigation and management' organized by Environmental Watch & Management Institute, Guwahati at Maniram Dewan Trade Centre during 20-21 January, 2017 and presented a paper entitled, 'Understanding the attenuation of seismic waves in the Indo-Burman ranges from the perspective of regional seismic Lg phase'.

Papers published

In International Peer Reviewed Journals

- Darabdhara G, Sharma B, Das M R, Boukherroub R, Szunerits S: Cu-Ag bimetallic nanoparticles on reduced graphene oxidenanosheets as peroxidase mimic for glucose and ascorbic acid detection, *Sensors and Actuators B: Chemical*, 2017, 238, p: 842-851
- Boruah P K, Sharma B, Hussain N, Das M R: Magnetically recoverable Fe₃O₄/graphene nanocomposite towards efficient removal of triazine pesticides from aqueous solution: Investigation of the adsorption phenomenon and specific ion effect, *Chemosphere*, 2017, 168, p: 1058-1067
- Darabdhara G, Boruah P K, Hussain N, Borthakur P, Sharma B, Sengupta P, Das M R: Magnetic nanoparticles towards efficient adsorption of Gram positive and Gram negative bacteria: An investigation of adsorption parameters and interaction mechanism, *Colloids and Surfaces a Physicochemical and Engineering Aspects*, 2017, 516, p: 161-170

- Roy S, Prasad A K, Handique G, Barua A, Roy S: First report on heat shock protein expression in red spider mites (*Oligonychus coffeae*) in response to pesticide exposure (Article), *Invertebrate Survival Journal*, 2016, 13, p: 350-354
- Gogoi D, Devi R, Pahari P, Sarma B, Das S K: cis-Diastereoselective synthesis of chroman-fused tetralins as B-ring-modified analogues of brazilin (Article), *Beilstein Journal of Organic Chemistry*, 2016, 12, p: 2816-2822
- Borthakur P, Darabdhara G, Das M R, Boukherroub R, Szunerits S: Solvothermal synthesis of CoS/reduced porous graphene oxide nanocomposite for selective colorimetric detection of Hg(II) ion in aqueous medium, *Sensors and Actuators B: Chemical*, 2017, 244, p: 684-692
- Bhuyan D, Selvaraj K, Saikia L: Pd@SBA-15 nanocomposite catalyst: Synthesis and efficient solvent-free semihydrogenation of phenylacetylene under mild conditions, *Microporous and Mesoporous Materials*, 2017, 241, p: 266-273

In National Peer Reviewed Journals

- Sharma R, Goswami A, Rudrapal M, Sharma D, Sharma H K, Chetia D: In vitro evaluation of the antimalarial activity of a designed novel quinuclidine derivative, *Current Science*, 2016, 111(12), p: 2028-2030

Farewell

The following members of the staff have retired from Council's service on superannuation from CSIR-NEIST in January, 2017.

1. Mr Tulsi Dutta, Sr Technician (2)
2. Rajendra Nath Bora, Technician (2)
3. Ms K Susheela Das, Lab Assistant