

National Technology Day celebration at CSIR-NEIST



Prof T K Chandrashekhkar, Secretary, Science and Engineering Research Board, DST, Govt. of India delivering Technology Day lecture.

CSIR-NEIST celebrated National Technology Day 2014 with a day-long programme on 12 May, 2014 instead of the actual day i.e 11 May which happened to be a closed holiday. Befitting the occasion, a special function was held at Dr J N Baruah auditorium in which Prof T K Chandrashekhkar, Secretary, Science & Engineering Research Board, DST, Govt. of India graced the occasion as Chief Guest and delivered the Technology Day lecture. The programme was attended by a large gathering of invited guests, distinguished scientists, students and CSIR-NEIST fraternity both retired and existing. "The increase in number of Scientists and investment per scientist is essential for Global positioning of Indian Science, Technology and Innovation system at least to upgrade the present position of India to the present level of China" opined Prof TK Chandrashekhkar, in his lecture on "Science, Technology and Innovation Landscape". Prof Chandrashekhkar also mentioned that the increase in the number of Indian Scientists who publish at least 1 paper in SCI journal per year is the need of the hour from the base line number of 1,70,000 Scientists of India to 7,50,000, which itself is a challenging task in India to increase its R & D investments at 2% of GDP. This is an attempt to position India as number one in Global Economy by 2020 from its present 9th position, he mentioned. On the occasion, Dr D Ramaiah, Director, CSIR-NEIST stressed on the need of S&T intervention to uplift the GDP and per capita income and he greatly acknowledged the contribution of funding agencies

for their contributions in funding research projects of CSIR-NEIST and he hoped for a more liberal and generous funding in future to develop the NE region of the country. Earlier, in his welcome address, Dr R C Boruah, Outstanding Scientist, highlighted the performance of the Institute in terms of commercialization of technologies, patents, research papers, Ph.D students, completed projects. The function was concluded with the vote of thanks by Mr Dipankar Neog, Scientist, CSIR-NEIST. After the programme Prof Chandrashekhkar visited different divisions of the laboratory and later on an interactive meeting was held among the scientists and Prof Chandrashekhkar. It is also worthwhile to mention here that earlier on the same day, Prof T K Chandrashekhkar inaugurated the new Girls' Hostel at CSIR-NEIST campus. The day was declared as 'Open Day' during 2.00 to 4.30 pm for the visit of students and general public.

CSIR-NEIST gear up to combat malnutrition in women and children through proper S&T intervention

Under its 12th Five Year Plan Project, "S&T interventions to combat malnutrition in women and children", CSIR-NEIST in association with the Institute of Integrated Resources Management (IIRM), Tezpur is all set to implement the project with an aim to improve the quality of life for the people of Sonitpur district of Assam. The project was launched at a function held at Tezpur on 14 May, 2014 wherein Dr D Ramaiah, Director, CSIR-NEIST, Dr P R Bhattacharyya, Head-Medicinal, Aromatic & Economic Plants Division, Dr S P Saikia, Nodal Scientist of the project and other team members were present. The project is aimed at development and exploitation of nutritionally rich food products to combat malnutrition in women and children. The Sonitpur district is among the 4 districts of Assam including Dibrugarh, Darrang and Chirang where 36 percent children between two to five years of age are underweight, while another 9.2% are severely underweight as per the World Health Organization (WHO) standards. Most adolescent girls and women in the tea garden areas of the district are anaemic because of poor diets. The targeted women population will be trained to grow mushrooms which is rich in folic acid and is of vital importance for treating anaemic condition in the human body in addition to catering health benefits. Edible mushroom can be used as a weapon against starvation because of its high protein, vitamin and folic acid content. Daily consumption of

mushroom and its value added products will help to fill the gap of protein and micronutrient deficiency and at the same time will enable the population to live a healthy life. Other technological interventions will be development of nutraceuticals and functional food from pigmented rice of North Eastern region and also from Komal Chaul (Soft Rice), a unique instant food of Assam. The project will strive to bring out a business model to promote entrepreneurship in rural and backward areas and generating employment opportunities for the local population in addition to ameliorating health status in the population.

Seminar/Conference/Workshop/Meeting attended

Dr D Ramaiah, Director, CSIR-NEIST

- Attended one day seminar and felicitation programme held in honour of Dr G Thyagarajan, Former Director, CSIR-NEIST at CSIR-CCMB, Hyderabad on 5 May, 2014 and delivered an invited lecture.

Visit

- A group of 25 students of B.Sc sixth semester (Major) along with 3 faculty staff from the Dept. of Zoology and 17 students of B.Sc sixth semester (Major) along with 3 faculty staff from the Dept. of Botany, Darrang College, Tezpur visited CSIR-NEIST on 2 May, 2014.
- A group of 27 U.G students along with 3 faculty staff and 3 lab assistants from the Dept. of Zoology, St. Anthony's College, Shillong visited CSIR-NEIST on 13 May, 2014.

Papers published

International Journal(s)

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S Transferase Polymorphism in COPD with Special Reference to Peoples Living in the Vicinity of the Open Cast Coal Mine of Assam, *PLOS One*, 2014, 9(5), p: 96739.

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- Dutta Mudoi K, Saikia S P and Borthakur M: Effect of nodal positions, seasonal variations, shoot clump and growth regulators on micropropagation of commercially important bamboo, *Bambusa nutans* Wall. Ex. Munro, *African Journal of Biotechnology*, 2014, 13(19), p: 1961-1972.
- Tamuly C, Saikia Indranirekha, Hazarika Moushumi and Das M R: Bio-derived CuO nanocatalyst for oxidation of aldehyde: a greener approach, *RSC Advances*, 2014, 4, p: 20636-20640.
- Borah B J, Borah S J, Saikia L and Dutta D K: Efficient three-component coupling reactions catalyzed by CuO-nanoparticles stabilized on modified montmorillonite, *Catalysis Science and Technology*, 2014, 4(4), p: 1047-1054.
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Book Chapter

- Saikia R and Kadoo N: Molecular detection and identification of *Fusarium oxysporum*, In- Molecular Identification of Fungi, published by Springer Berlin Heidelberg, 2010, (Part-1), p: 131-157.
- Babu B K, Saikia R and Arora D K : Molecular Characterization and Diagnosis of *Macrophomina phaseolina*: A Charcoal Rot Fungus, In-Molecular Identification of Fungi, published by Springer Berlin Heidelberg, 2010,(Part-1), p: 179-193.
- Sarma Rupak K, Debnath Rajal, Yadav Archana and Saikia Ratul: Rhizosphere Engineering of Crop Plants by Bacterial ACC-deaminase Under Water Stress, In-Soil Microbial Ecology, Edited by D. P. Singh H. B. Singh, published by Studium Press LLC, USA, 2014 (Chapter-16), p: 353-367.

Padma Bhushan Dr T Ramasami visited CSIR-NEIST



Padma Bhushan Dr T Ramasami, Former Secretary, DST, Govt. of India and DG-CSIR delivering lecture at Dr J N Baruah auditorium.



Members of staff of CSIR-NEIST attending the lecture.

Padma Bhushan Dr T Ramasami, Former Secretary, DST, Govt. of India and DG-CSIR visited CSIR-NEIST from 15 to 16 May, 2014. On the occasion, a special function was held at Dr J N Baruah Auditorium on 15 May, 2014 wherein Dr Ramasami addressed the CSIR-NEIST staff members. Delivering a lecture on his chosen topic "Research and Development in Nation Building–Role of CSIR; a Perspective", Dr Ramasami opined that CSIR has a special role in current changing scenario of India in Global Science, Technology and Innovation Space. He discussed the scale of transformations in R&D with respect to national objectives and the nation building role of science as emerging paradigm for socio-economic uplift. He mentioned that though the

gross expenditure in R&D or gross expenditure per full time equivalent meets global bench marks and R&D outputs per scientist is also high, still there is a need to invest at least 2% GDP on R&D in the country. Earlier Dr R C Boruah, Outstanding Scientist in his welcome address briefed some activities and achievements of the Institute. Dr D Ramaiah, Director, CSIR-NEIST gave detail introduction about Dr T Ramasami to the gathering. Dr Ramaiah in his remarks spoke about the Institute's vision in various spheres of activities and acknowledged the role of different funding agencies in supporting the R&D programmes of various Institutes/organizations/academics etc. On the occasion, a book on "Birds of CSIR-NEIST campus" authored by Dr Mantu Bhuyan, Scientist, was released by Dr T Ramasami.

During his brief visit, Dr Ramasami visited some divisions of the Institute and also interacted with the scientists at an interactive meeting held on 16 May, 2014 at M S Iyengar hall.

CSIR-NEIST organized demonstration programme on Mushroom cultivation for workers of tea estate



Left: Dr A K Bordoloi, Principal Technical Officer, CSIR-NEIST explaining the cultivation practice. Right: Participants at the programme.

A demonstration programme on cultivation of Mushroom was organized on 21 May, 2014 at Horuchorai Tea Estate, Jorhat under 44 no. Madhya Sarucharai Gaon Panchayat at Horuchorai, Jorhat under a project sponsored by DSIR, Govt. of India. Total 110 nos. of women from the area participated in the programme. The programme was attended by Mr Apurbo Kumar Sharma, Manager, Horuchorai Tea Estate, Mr Monuranjan Gogoi, President of 44 no. Madhya Sarucharai Gaon Panchayat, Mr Tulosi Bora, an active member of the Panchayat and few staff members from CSIR-NEIST. Mrs Janumoni Bora, 44 A P members and Mr Bhaben Bharali, Ex- MLA were also present at the programme. Dr Mina P

Borthakur, Principal Investigator of the project spoke about the objectives of the project. Dr A K Bordoloi, Co-Investigator, presented technical demonstration of the cultivation wherein he encouraged the participants to take up mushroom cultivation for income generation, entrepreneurship development and improving the quality of life. Dr Bordoloi further said that the intake of Mushroom can help in nutrition deficiency as it is a rich source of protein, vitamin and folic acid.

Padma Bhushan Dr T Ramasami inaugurated Common Facility Centre on Weaving and Textile Product Manufacturing of CSTRI-NEIST centre



Padma Bhushan Dr T Ramasami, Former Secretary, DST, Govt. of India and Former Director-General, CSIR inaugurating the Common Facility Centre.

With the objective to boost the weaving and textile products manufacture of the state through proper S&T intervention, CSIR-NEIST with the support of DST, Govt. of India inaugurated a "Common Facility Centre on Weaving and Textile Product Manufacturing" at New Sonowal Mising Gaon on 16 May, 2014. The Centre is implemented in association with a local NGO, Society for North East Handmade Paper Development (SNEHPAD).

Padma Bhushan Dr T Ramasami, Former Secretary, DST, Govt. of India and Director-General, CSIR inaugurated the centre in presence of Dr D Ramaiah, Director, CSIR-NEIST and Dr R C Boruah, Outstanding Scientist, at an inaugural function attended by a large gathering of members from local Self Help Groups, SNEHPAD, local weavers from surrounding places, press and media personnel, besides CSIR-NEIST staff members. Speaking on the occasion, Dr Ramasami stressed the necessity of technology dissemination that are relevant and



Dr T Ramasami speaking on the occasion while Dr D Ramaiah (left), Director, CSIR-NEIST and Dr R C Boruah (right), Outstanding Scientist are seen seated on the dais.

useful to the society. Technology for the rural people needs special attention from all quarters and the whole purpose of creating such centres with the association of NGOs are important to reach out to the people up to the grass root level, he opined. Dr Ramasami also informed about similar activities supported by the Department of Science & Technology (DST), Govt. of India in other parts of the country while mentioning that in its 12th Five Year Plan, the Department aims to direct more investment for S&T interventions benefitting directly the weaker sections of the populace.

Mr Prakash Thakur, Secretary, SNEHPAD in his welcome address mentioned the objective and the activities of the facility centre and extended gratitude to CSIR-NEIST for coming up with such a centre for the benefit of the local weavers. Dr D Ramaiah in his remarks urged for the involvement of all to take the benefits of the centre for the upliftment of the society at large. While Dr R C Boruah, Outstanding Scientist, CSIR-NEIST in his remarks spoke about the genesis of this initiative and the importance of S&T intervention for rural development. The programme concluded with vote of thanks by Mr Dipankar Neog, Nodal Scientist of the project, wherein he emphasized that the centre's main aim is to provide opportunities for income generation, skill development and rural development.

Condolence held

The Director and members of the staff of CSIR-NEIST deeply condoled the sad demise of its former colleagues, Shri Md Mahnoor Ali (retd.) and Shri H P Pathak (retd.), at condolence meetings held in front of the administrative block on 1 May, 2014 and 15 May, 2014 respectively.

CSIR-NEIST organized Motivation programme for school students



Dr P C Neog, Former Chief Scientist of the Institute speaking on the occasion as Chief Guest.

A six-days 'Motivational programme for talented students' was organized by CSIR-NEIST during 26-31 May, 2014 at its premises. The programme was sponsored and catalyzed by NCSTC, DST, Govt. of India, New Delhi in which 38 class XII science students along with 10 guardian teachers from different schools of Assam, Nagaland and Arunachal Pradesh participated in the programme. The week-long programme commenced with an inaugural session on 26 May, 2014 which was presided over by Dr R C Boruah, Outstanding Scientist & Director-in-charge, CSIR-NEIST. Dr P C Neog, Former Chief Scientist, CSIR-NEIST attended the session as Chief Guest while Dr Pinaki Sengupta, Chief Scientist & Area-Coordinator- Materials Science attended as Guest of Honour. In his address, Dr Neog emphasized on the need to promote science education among school students especially in the North East region. He encouraged the students to cultivate the quality of public speaking, nurture creativity and innovative mind right from the school level. Dr Pinaki Sengupta gave a short interesting lecture on "Career and Research Opportunities" in his address as Guest of Honour. Delivering his presidential remarks, Dr R C Boruah, mentioned that the Institute has been organizing Motivational programme since 1980s which has benefitted nearly 26000 students. He further urged the students to take full advantage of the programme. Earlier, Dr Jatin Kalita, Scientist & Coordinator of the programme spoke



Participants of the Motivation Programme along with the organizers.



Students conducting experiments under their project works.

in detail about the programme, its objective and the various activities to be held under the programme. The session concluded with vote of thanks by Mr Madhurjya Saikia, Technical Officer. The six-days programme covered series of activities like popular science lectures delivered by various scientists; science elocution competition among the participating students; face-to-face with scientists, practical project work by the students under the supervision of scientists, cultural programme and visit to nearby research Institutes, biosphere reserve spots and ancient engineering heritage sites. The week long programme concluded with a valedictory session held on 31 May, 2014 under the presidentship of Dr R C Boruah, Outstanding Scientist & Director-in-charge. In the function, certificates and prizes were distributed to the participants by Dr R C Boruah.

Farewell

The following member(s) of the staff have retired from Council's service on superannuation from CSIR-NEIST on 31 May, 2014.

1. Dr S Mahiuddin, Chief Scientist.
2. Mr Debeswar Bora, Lab Assistant.