





सी एस आई आर-उत्तर पूर्व विज्ञान तथा प्रौद्योगिकी संस्थान, जोरहाट CSIR-NORTH EAST INSTITUTE OF SCIENCE & TECHNOLOGY, JORHAT

**VOL. XXXIX NO. 2 APRIL 2017 - JULY 2017** 

# Connecting Science & Technology for a Brighter Tomorrow

### **CSIR-NEIST TRANSFERS SIX TECHNOLOGIES FOR COMMERCIALIZATION**

The institute transferred 6(six) technologies to 5 (five) companies for commercialization during May to July 2017. On 11 May 2017, a newly developed high yielding Citronella variety i.e, Jor Lab C-5 was transferred to M/S Nahorjan Tea Company Pvt Ltd., Golaghat. On the same day the same technology was also transferred to M/S Lukwah Tea Estate, Sivasagar. Technology of Anti-Arthritis transferred to M/S. Ridhi Sidhi, New Delhi on 24th May 2017 at CSIR Head Quarter, New Delhi. The technology on Herbal Anti-Arthritis formulation transferred to M/s Ayur Force Organics Pvt.Ltd., New Delhi on 12 June 2017. The technology transfer has been catalyzed by NRDC, New Delhi. Mr Devender Khatreja, Production Head (Technical) from Ayur Force visited CSIR-NEIST during 12-14 June 2017 for technology demonstration and interaction with the scientists. A tri-partite MoU between CSIR-NEIST, NRDC and Ayur Force was signed on 12 June 2017 followed by handing over of technology package by Director, CSIR-NEIST. Two (2) technologies (i) Herbal Mosquito Repellent Liquid Vaporizer and (ii) Herbal Mosquito Repellent Candle, M/s. Medtronic Tech Solutions Pvt. Ltd., Hyderabad on 6 July 2017 and 26 July 2017 respectively.

#### GLIMPSES OF TECHNOLOGY TRANSFER AGREEMENTS SIGNED





Dr D Ramaiah, Director, CSIR-NEIST handing over the signed Technology Transfer Agreements to Mr Ajay Parikh (seen left in the pictures above), General Manager, M/s Lukwah Tea Estate, Sivasagar, Assam, for the technologies transferred on 'Bacterial Formulation for crop enhancement & yield improvement' and 'Improved variety of Citronella (Jor Lab C-5)' on 11.05.2017.



Dr D Ramaiah, Director, CSIR-NEIST handing over the signed Technology Transfer Agreement to Mr Rajesh Singhania, Director, Nahorjan Tea Company (P) Ltd., Bokakhat (Golaghat), Assam for the technology transferred on 'Improved variety of Citronella (Jor Lab C-5)' on 11.05.2017.



Dr D Ramaiah, Director, CSIR-NEIST handing over the Herbal Anti-Arthritis technology package to Mr Devender Khatreja, Production Head (Technical), M/s Ayur Force Organics Pvt.Ltd., New Delhi on 12 June 2017 in presence of the technology team and staff members.

#### SHRI HITENDRA NATH GOSWAMI, HON'BLE SPEAKER, ASSAM LEGISLATIVE ASSEMBLY INAUGURATED SKILL DEVEL-OPMENT TRAINING CENTRE AT CSIR-NEIST, JORHAT



Shri Hitendra Nath Goswami, Hon'ble Speaker, Assam Legislative Assembly inaugurating the Skill Development Training Centre at CSIR-NEIST in presence of the Director, CSIR-NEIST. Dr. D. Ramaiah and staff members.



Shri Goswami visiting Technology Demonstration Centre and various divisions of the

Shri Hitendra Nath Goswami, Hon'ble Speaker, Assam Legislative Assembly inaugurated the Skill Development Training Centre at CSIR-NEIST on 8 July 2017 in presence of the Director, CSIR-NEIST, Dr D Ramaiah and staff members. The Centre has been created under the vision of National Skill India Programme and CSIR Skill Development Initiative with an aim to develop skilled human resources in various trades for socio-economic development of the country. At a solemn ceremony held at the centre, Shri Goswami addressed a gathering of invited guests and CSIR-NEIST fraternity. In his address, Shri Goswami appreciated CSIR's initiative for setting up such a centre in this part of the country and extended his best wishes for its future endeavours. He also appreciated the various research developments taking place in the institute and the contribution made by CSIR-NEIST particularly in the areas of healthcare and entrepreneurship development through its technologies and processes. He further mentioned that the Government of Assam would like to associate with the Institute for which he would pursue with the Government especially in promoting the technologies developed by the Institute for the benefit of the state and its people. It may be mentioned that CSIR-NEIST has completed the basic training for the first batch of trainees in the trades of Plumbing, Fitting, Welding and Weaving in June 2017 with three months of intensive theoretical and practical sessions. It is also worthwhile to mention that earlier on the day, a two-day National Conference on 'Vision 2015: Connecting North East through Open and Distance Learning' jointly organized by IGNOU Regional Centre, Jorhat and CSIR-NEIST kicked off wherein Shri Hitendra Nath Goswami graced the Inaugural function as the Chief Guest held at Dr J N Baruah Auditorium, CSIR-NEIST. During the day, Shri Goswami also visited various divisions of the Institute accompanied by the Director and staff members.

#### **CSIR-NEIST CELEBRATED NATIONAL TECHNOLOGY DAY 2017**

CSIR-NEIST celebrated National Technology Day on 11 May 2017 with a special programme held at Dr J N Baruah Auditorium. Prof R K Khandal, President R&D Business Development, India Glycols Ltd. Noida, graced the occasion as Chief Guest and delivered the National Technology Day Lecture. The programme was presided over by Director, CSIR-NEIST, Dr D Ramaiah. Besides the Director of Central Muga Eri Research & Training Institute, Dr B K Singh, veteran and retired scientists, present and ex-staff members of CSIR-NEIST fraternity, students and research scholars, industry partners, Press & Media attended the function. In his welcome address, Dr Ramaiah dwelt upon the significance of the Technology Day, progress of science and technology in the country, vision and leadership of the Hon'ble Prime Minister of India and President of CSIR, Shri Narendra Modi and Hon'ble Science and Technology Minister of India and the Vice-President of CSIR Shri Harsh Vardhan. In his illuminating lecture on 'Role of CSIR in making Chemical Industry Self Sustainable', Dr Khandal carried the entire audience with him through his eloquent observations on the progress of Indian Chemical industry vis-a-vis China and his road



Prof. R K Khandal, President, R&D Business Development, India Glycols Ltd. Noida, delivering the National Technology Lecture on 'Role of CSIR in making Chemical Industry Self Sustainable'.

VOL XXXIX NO. 2 APRIL 2017 - JULY 2017

map for CSIR to making India leaders in Chemical industry. He also urged the CSIR-NEIST scientists to develop their know-how in such a fashion so as to be relevant to the society by providing practical and hands-on solution to the day-to-day problems of the common masses. In tune with the spirit of the day, a Compendium on CSIR-NEIST Technologies was also released by the Chief Guest on the special occasion. Earlier on the day, two technologies on 'Bacterial Formulation for crop enhancement and improvement' and 'Agrotechnology on Citronella, Jor Lab C-5' were transferred to Lukwah Tea Estate, district Sivasagar, Assam; and 'Agrotechnology on Citronella, Jor Lab C-5' to Nahorjan Tea Company (P) Ltd., district Golaghat, Assam. The innovators of the various technologies of CSIR-NEIST in the recent times namely, Dr Mantu Bhuyan for Anti Arthritis, Dr Tridip Goswami for Liquid Deodorant Cleaner, Solid Deodorant and Freshener and Wood Care formulation, Dr H P Dekabaruah for Bacterial Formulation for increase of crop yield and Dr Mohan Lal for Agrotechnology for high yield of Citronella along with their team members were felicitated.



Prof. R K Khandal releasing the compendium on CSIR-NEIST technologies in presence of Dr D Ramaiah, Director, CSIR-NEIST.

The day was also declared as an 'Open Day' for students and the general and more than 100 students and teachers from different schools visited the institute. .

## BANANA FIBRE DEVELOPMENT CENTRE INAUGURATED AT CSIR-NEIST BRANCH LAB, IMPHAL AND TRAINING PROVIDED TO THE FIRST BATCH OF TRAINEES

With an objective to motivate unemployed youth towards entrepreneurship development in the region and particularly in the state of Manipur through low cost technologies like Banana fibre extraction and processing, CSIR-NEIST has established a Banana Fibre Development Centre at its Branch Lab in Imphal, Manipur. The Centre was inaugurated by Shri Th Biswajit, Hon'ble Minister for Commerce & Industries, Power & PWD, Govt. of Manipur and Shri Karam Shyam, Minister, Revenue, CAF&PD, Govt. of Manipur on 22 May 2017 in presence of Dr D Ramaiah, Director, CSIR-NEIST. Dr H B Singh, Scientist-in-charge, Branch Lab and Dr T Goswami, Principal Scientist working in the area of natural fibres including Banana fibre were also present on the occasion besides other members from the Institute. The inauguration programme was followed by the opening of 5-day training programme on novel products & Banana fibre held during 22-26 May 2017. The training was held in collaboration with CSIR-CLRI, Chennai wherein a total of 57 trainees from Manipur participated in the programme.





Left: Shri Th Biswajit, Hon'ble Minister for Commerce & Industries, Power & PWD, Govt. of Manipur unveiling the inauguration plaque of the Banana Fibre development Centre at CSIR-NEIST Branch Lab on 22.05.2017. Right: Release of a pamphlet on novel products based on fabrics of Northeast and leather by the dignitaries on the occasion.

#### SHRI S N PRADHAN, JOINT SECRETARY, MIN. OF DONER VISITED CSIR-NEIST

Shri S N Pradhan, Joint Secretary, Ministry. of DoNER, GoI, New Delhi, visited CSIR-NEIST on 12 June 2017. During his visit, an interactive meeting with Shri Pradhan and the scientists was held at M S Iyengar Hall. The meeting was led by Dr D Ramaiah, Director, CSIR-NEIST. Dr Mantu Bhuyan, Sr Scientist presented the concept note of 'Science & Technology Intervention in NER (STINER)' mission of CSIR which will be a part of the ambitious project of DoNER Ministry. Shri Pradhan also visited various labs in the Institute and interacted with the scientists/research students.





Left: Dr D Ramaiah, Director, CSIR-NEIST; Shri S N Pradhan, Joint Secretary, Min. of DoNER and Dr P Sengupta, Chief Scientist (from left) during the interactive meeting.

Right: Shri S N Sharma, Joint Secretary, Ministry of DoNER, during his visits to the laboratories.

## TRAINING PROGRAMME ON 'NOVEL PRODUCTS BASED ON ETHNIC DESIGN AND FABRICS OF NORTH EAST INDIA' AT CSIR-BLIM, IMPHAL

A 5-day training programme was organized on 'Novel Products based on Ethnic Design and Fabrics of North East India' at CSIR-BLIM, Imphal during 22-26 May 2017. Dr D Ramaiah, Director CSIR-NEIST, Jorhat, Presided over the Inauguration meeting, where Mr TH Biswajit, the Minister for Commerce and Industries, power & PWD, Manipur, and Mr Karam Shyam, Revenue Minister of Manipur, were present as the Chief Guest and Guest of Honour respectively. Speaking on the occasion, Mr Th Biswajit said that the state govt. is trying to promote industries to generate income in the state. He also urged that there is also need to encourage our entrepreneurs to solve unemployment problems in the society. Revenue minister while speaking said the training will help in increasing the productivity and sustain livelihood. Dr D Ramaiah, Director of CSIR-NEIST, highlighted the scientific intervention extended to the people in the fields like agrotechnologies in the region. On that occasion, a pamphlet of CSIR-NEIST, Branch Laboratory, Imphal, was also released. About 80 trainees participated in the programme. The program was conducted in collaboration with CSIR-CLRI, Chennai.



Ministers inspect an exhibition on novel products based on fabrics of Northeast India and banana fibre at the Branch Laboratory, Imphal of CSIR-NEIST.



Distribution of certificates to the trainees on May 26, 2017.

#### TRAINING-CUM-WORKSHOP ON BASIC BIOINFORMATICS TOOLS 11-12 JULY 2017

A two-day hands-on training-cum-workshop on biological data analysis was organized at Bioinformatics Infrastructure Facility (BIF) Centre during 11-12 July 2017. A total of 40 participants joined in the workshop from different universities/institutes of Assam. The main objectives of the workshop were given depth knowledge of network analysis software for different type of biological data analysis. The workshop was inaugurate by Dr. D Ramaiah, Director, CSIR-NEIST. The Resource persons were Dr. Pankaj Borah,

Assistant Professor in Bioinformatics, MBBT, Tezpur University, Tezpur, Assam and Dr. Y. Shilla Devi, Scientist, BSTD-Biotechnology, CSIR-NEIST, Jorhat. Dr Borah delivered an excellent presentation on different important and interesting bioinformatics area. Dr. Borah gave a fruitful explanation on network pharmacology. He nicely explained how to deal with these type of softwares. Dr. Y. Shilla Devi, delivered an interesting talk on Molecular Simulation and Molecular Docking. The hands on training session by Dr. Pankaj Borah made the understandings of data cleaning and assembly more accurate and adequately. He showed how to deal with our generated data, what are the different approaches and techniques for the data handling, how we could use the Cytoscape and Mev reference based techniques. The ADME property was an another interesting topic that was effectively illustrated and discussed in the workshop. In the valedictory function on 12 July 2017, the resource persons and the participants nicely shared their views, feelings, feedbacks about the whole workshop. The workshop was organized with the support of Department of Biotechnology (DBT) Govt. of India, New Delhi.







A view of workshop

#### VISIT OF STUDENTS FROM DEPT OF ECONOMICS, RUTGERS UNIVERSITY, NEW JERSEY, USA

• A group of five (5) students and their escorting Professor Dr Sanjib Bhuyan, Dept of Economics of Rutgers University, New Jersey, USA, visited this institute on 14 June 2017 as a part of their summer educational programme. The team was briefed about the activities of the institute by the scientists in the conference hall and a small documentary about CSIR-NEIST was also screened. Later on they were taken to the different laboratories of the institute where they gathered knowledge about the ongoing research and different infrastructural and instrumental facilities of the institute.



 $\hbox{\it Dr D Ramaiah, Director, CSIR-NEIST interacting with the team}$ 



The team visiting CSIR-NEIST's Labs

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#### VOL. XXXIX NO. 2 APRIL 2017 - JULY 2017

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#### **PhD** awared

- 1. Nabajyoti Hazarika, JRF, Chemical Sciences and Technology Division.
- 2. Barnali Sarmah, JRF, Chemical Sciences and Technology Division.

#### **Visits**

Five (5) students along with one (1) professor from Rotger University, New Jersey, USA, and 338 students and 53 teachers from different schools of Assam visited the institute during the period.

#### Colloquium

- 1. Dr. Madhu Dikshit, Director, CSIR-CDRI, Lucknow, delivered the invited talk entitled "Phytopharmaceutical drug discovery and development: CSIR-CDRI Efforts" on 12 Jul 2017. The talk was largely attended by the Scientist, Techchnical Officers, Technical Assistants, Research Scholars and other staff of this institute.
- 2. Dr Sergio Mapelli, Scientist, CNR Institute of Agricultural Biology and Biotechnology, Millan, Italy visited CSIR-North East Institute of Science & Technology Branch Itanagar, Naharlagun, and delivered an invited lecture on "Industrially Important Crops". In this programme total 45 nos of students along with their teachers from Dept. of Life Science, Rajiv Gandhi University, Dept. of Foresty, NERIST, Dept. of Botany, DN College, Itanagar and Dept. of Biotechnology and Bioengineering, NIT, Yupia attended the programme. The basic objective of the programme was to provide a platform to the students of different institute of Itanagar Capital Complex for exchange their idea for future research and development in the area of Biotechnology and plant Science. Most of the students interacted actively with the Scientist from Italy. Dr Pinaki Sengupta, Chief Scientist delivered the welcome address and introduced the distinguish Scientist. Scientist from NEIST Jorhat also attended the programme and interacted actively with the distinguish Scientist from Italy. After the programme, all the students visited the Nursery, Mushroom Production Centre and other laboratories of the institute.



Dr Sergio Mapelli, delivering his lecture on "Industrially importance crops"

#### **New Joining**

The following member(s) have joined CSIR-NEIST during April 2017 to July 2017.

- 1. Shri Ravi Kumar Lingam, Scientist
- 2. Shri J Leon Raj, Scientist
- 3. Mr Hemant Sankar Dutta, Scientist
- 4. Dr Jayaramudu Jarugala, Scientist
- 5. Dr Debasis Mohanty, Scientist
- 6. Dr Rinku Baishya, Scientist
- 7. Dr Deepak Kumar, Scientist

#### **Farewell**

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

- 1. Mr Probin Baruah, Principal Technical Officer
- 2. Mr O P Sahu, Principal Technical Officer
- 3. Mr Nakul Saikia, Technician
- 4. Mr Ram Nath Das, Sr Technical Officer
- 5. Mr Arun Kumar Rajwar, Section Officer (F&A) Officiating
- 6. Mr Ajit Ch Goswami, Section Officer (G) Officiating
- 7. Mr Babul Saikia, Assistant (G)

#### Condolence held

The Director and members of the staff of CSIR-NEIST deeply condoled the sad demise of its ex-employee, Shri Kamal Ch Bharali (who breathed his last on 02.07.2017) at a condolence meeting held in front of the administrative building on 5 July 2017.

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