





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

VOL. XXXVIII NO. 6 AUGUST-NOVEMBER, 2016

# Connecting Science & Technology for a Brighter Tomorrow

CSIR-NEIST ORGANIZED OUTREACH PROGRAM UNDER INDIA INTERNATIONAL SCIENCE FESTIVAL— 2016 (IISF-2016)



विशः প্ৰসাৰন কাৰ্য্যক্ৰম आउटरीच कार्यक्रम OUTREACH PROGRAMME

ON 22<sup>ND</sup> NOVEMBER 2016



চি এছ আই আৰ - উত্তৰ পূব বিজ্ঞান তথা প্ৰযুক্তিবিদ্যা প্ৰতিষ্ঠান, যোৰহাট सी एस आई आर-उत्तर पूर्व विज्ञान तथा प्रौद्योगिकी संस्थान, जोरहाट



Dignitaries seated on the dais during technical session (from left), Dr Sunil Rai, Vice Chancellor, Kaziranga University, Jorhat & Chief Guest; Dr D Ramaiah, Director, CSIR-NEIST and Dr Uddhab Kr Bharali, a renowned innovator & Guest of Honour.



Inauguration of the exhibition by Dr D Ramaiah, Director, CSIR-NEIST

A one-day outreach program as a precursor to the 2nd India International Science Festival was organized at CSIR-NEIST on 22 November, 2016. The program was attended by 175 students with 17 teachers, besides grass root innovators, entrepreneurs and members from various NGOs. The day-long program began with the inauguration of exhibition by Dr D Ramaiah. Director, CSIR-NEIST. **CSIR-NEIST** showcased technologies, products and processes through posters & other exhibit materials which greatly enthused the visitors. A flyer depicting the various aspects of science for the masses-'India International Science Festival 2016 (IISF-2016)' was distributed among the participants. The exhibition also included display of working models of 'Micro Light Propeller Hydro Turbine' Extraction 'Innovative Bioproducts from Biomass' by the innovators, Mr Kamal Chandra Saikia and Mr Bhagaban Baruah respectively of TOCIC-NEIST under PRISM project sponsored by DSIR. The participants also visited various labs and interacted with the scientists in the face-to-face interactive session. Later, a technical program was held at Dr J N Baruah auditorium wherein Dr Sunil Rai, Vice Chancellor, Kaziranga University graced the occasion as Chief Guest and Dr Uddhab Kr Bharali, a renowned innovator was present as Guest of Honour. Dr D Ramaiah presided over the session and delivered the welcome address wherein he spoke about the outreach program and IISF. Dr Bharali VOL. XXXVIII NO. 6. AUGUST - NOVEMBER, 2016



The exhibition included display of working models of 'Micro Light Propeller Hydro Turbine' by the innovators, Mr Kamal Chandra Saikia of TOCIC-NEIST under PRISM project sponsored by DSIR.



The exhibition included display of 'Innovative Extraction of Bioproducts from Biomass' by the innovators, Mr Bhagaban Baruah of TOCIC-NEIST under PRISM project sponsored by DSIR.



Explaining the developed products of CSIR-NEIST to the visited Students.



Face-to-face interaction of the students with scientists

in his address gave a brilliant exposition of some of his innovations which have benefitted all strata of people and also to animals. He said that innovation becomes one in true sense only when it finds an end user. Dr Sunil Rai in his address called for introspection of the blessings of science and said that complicated problems can have simple solutions if common sense with good scientific understanding is applied together. He further recommended that innovations should be for the masses and environment friendly. Also on the occasion, child scientists namely, Ms. Bidisha Gogoi, Ms. Dimpi Deori, Mr Debojit Gogoi and Mr Prudom Priyangsa Dutta who represented the state in National level and the country in International level were felicitated.



Ms Teetu Yoka spoke on the occasion and shared her experiances working with CSIR-NEIST.

Ms. Teetu Yoka, Secretary of the Action Aid Society, Arunachal Pradesh and a beneficiary of **CSIR-NEIST** technologies also spoke on the occasion wherein she shared about her experiences working with CSIR-NEIST. During the feedback session, the participants institute for the appreciated the inspirational and enriching program and further requested for such opportunities in future as well.

# WORKSHOP ON BIO-BOTANICAL SUSTAINABLE APPROACH FOR THE AGRICULTURAL PEST MANAGEMENT IN NORTH-EAST INDIA HELD AT CSIR-NEIST





Left: Release of Souvenir by the dignitaries during inaugural session. Right: Participants of the workshop along with the organizers and resource persons

CSIR-NEIST in association with the Institute of Pesticide Formulation Technology (IPFT), Gurgaon, organized a workshop on 'Bio-botanical sustainable approach for the agricultural pest management in North-East India' during 10-11 November, 2016 at its premise. The workshop was sponsored by IPFT for popularizing biopesticides in crop protection among the stakeholders. A total of 58 participants comprising of progressive farmers, small tea growers, academicians and personnel from Bio-pesticide industries in Assam participated in the workshop. In the Inaugural session, Dr D Ramaiah, Director, CSIR-NEIST and Chairman of the session emphasized the importance of organic agriculture and biopesticides for crop protection. He also informed about the ongoing work of CSIR-NEIST on biopesticides, particularly on botanicals for crop protection. Dr A K Barooah, Director, TRA, Jorhat and Chief Guest of the inaugural session spoke about the recent program of Govt. of India on organic

India on organic agriculture and quality control aspect of biopesticides. From IPFT, Gurgaon, Dr PK Patanjali, Chief Formulator & Scientist H, briefed about their mission for popularizing the biopesticides in North East India. A souvenir on the workshop was also released in the inaugural session. In the two-day workshop, Dr P K Patanjali, Dr Pinki Bhandari, Deputy Chief & Head, Bioscience Division, IPFT, Gurgaon, Dr LK Hazarika, Prof & Head, Department of Entomology, AAU, Jorhat, Dr A Babu, Dy. Director (Research) & Senior Principal Scientist, TRA Nagrakata, Dr Mantu Bhuyan, Senior Scientist, CSIR-NEIST, Jorhat and Mr Samir Bordoloi, Farm to Food Foundation Jorhat discussed on different aspects of biopesticides for crop protection. Participants actively took part in the deliberations and the workshop was concluded with a brainstorming session.

### **CSIR-NEIST CELEBRATED CSIR FOUNDATION DAY 2016**





Left: Padma Shri Prof Goverdhan Mehta, FNA, FRS, President of International Union of Pure and Applied Chemistry delivering CSIR Foundation Day Lecture at CSIR-NEIST. Right: Prof Goverdhan Mehta inaugurating the Experimental Animal House at CSIR-NEIST in presence of the Director, Dr D Ramaiah, and other officials from the Institute.

CSIR-NEIST celebrated the 75th Foundation Day of its apex body, CSIR with a 3-day program at its premise during 24-26 September, 2016. This year, the event carried a special significance as it marked the beginning of the year-long Platinum Jubilee celebration of the organization. Established on 26 September, 1942, the Council of Scientific & Industrial Research (CSIR) today has a pan-India presence with 38 constituent laboratories spread across the country. The annual event is marked by technology awards, felicitation of the employees, award of special fellowships/scholarships to science students, etc. At CSIR-NEIST, an 'Open Day' was observed on 24 September, 2016 wherein about 150 students and general public visited the Institute and interacted with the scientists. Later during

the day, Padma Shri Prof Goverdhan Mehta, FNA, FRS, President of International Union of Pure and Applied Chemistry who was on his maiden visit to the institute to grace the Foundation Day function had inaugurated the Experimental Animal House and modernized RRL Nursery School. An interactive session of the scientists with Prof Mehta was held further on the same day. On 25 September, a special function was held at Dr J N Baruah auditorium wherein Prof Mehta graced the function as Chief Guest and delivered the Foundation Day Lecture on the topic, "Dimensionality of Chemistry: A Science for Global Sustainability in the 21st Century". Dr D Ramaiah, Director, CSIR-NEIST presided over the function attended by dignitaries, invitees, press personnel and CSIR-NEIST fraternity.





Left: Dr K M Bujarbaruah, Vice Chancellor, Assam Agricultural University, Jorhat handing over the saplings of Citronella and Lemon grass to the farmers. Right: Farmers attending the Kisan Mela and interactive program with Hon'ble PM on 26.09.2016.

The following day on 26 September, a 'Kisan Mela' was organized at experimental farm, CSIR-NEIST, as a part of the main CSIR Platinum Jubilee Foundation Day program held at Vigyan Bhawan, New Delhi.

The event at Vigyan Bhawan was graced by Shri Narendra Modi, Hon'ble Prime Minister of India & President, CSIR wherein the Hon'ble PM dedicated 7 new plant varieties developed by CSIR labs to the nation and further interacted with progressive farmers assembled in five different locations across the country. The interaction was supported through live telecast by Doordarshan. It is noteworthy to mention that the newly developed improved

varieties of Citronella and Lemon grass of CSIR-NEIST were released by the Hon'ble PM in the program. Dr K M Bujarbaruah, Vice Chancellor, Assam Agricultural University, Jorhat handed over the dedicated saplings (by the Hon'ble PM) of Citronella and Lemon grass to progressive farmers at CSIR-NEIST in presence of Shri Swapan Saikia, AFS, Divisional Forest Officer, Jorhat and Shri Birendra Nath Sharma, District Agriculture Officer, Jorhat. About 500 farmers/beneficiaries of CSIR-NEIST participated in the fair wherein saplings of Citronella and Lemon grass were distributed free of cost.

# CSIR-NEIST PARTICIPATED IN CSIR PLATINUM JUBILEE TECHNOFEST UNDER INDIA INTERNATIONAL TRADE FAIR-2016 (IITF-2016)



CSIR-NEIST's Anti-Arthritis product on display at the Technofest along with other healthcare products developed by CSIR Institutes.

CSIR-NEIST participated in the CSIR Platinum Jubilee Technofest held during 14-27 November, 2016 at Pragati Maidan, New Delhi. Various theme-based information panels highlighting the science and the technology components of major CSIR contributions, informative exhibits including demonstrable models were featured in this mega event held under India International Trade Fair-2016. CSIR-NEIST showcased its products under the theme area, 'CSIR 800: Societal Interventions' along with other CSIR Institutes. CSIR-NEIST has been contributing to the society through various technological interventions appropriate to the common man particularly in the rural areas of NE region. Cultivation of aromatic & economic plants is one such activity which has made huge impact in the lives of masses.

Further, the institute has recently developed improved varieties of Citronella and Lemongrass with high oil content and herbage yield. Under Affordable Healthcare, the Institute has developed herbal products against Arthritis and Fungal infections. The Institute exhibited its contributions through posters and sample materials of healthcare products and other rural technologies in the theme pavilion. As a part of the Technofest, CSIR-NEIST also signed two tripartite MoUs on 25 November, 2016 for technology transfer on Herbal Anti-Arthritis formulation to M/s Altis Life Sciences, Himachal Pradesh and M/s Multani Pharma Ltd., New Delhi through NRDC, New Delhi. It may be mentioned that the theme 'CSIR 800: Societal Interventions' was conferred the Platinum Award for excellence in display.

### **TECHNOLOGIES TRANSFERRED FOR COMMERCIALIZATION**

HERBAL ANTI-ARTHRITIS OINTMENT





Dr D Ramaiah, Director, CSIR-NEIST handing over the Know-how package on Herbal Anti-Arthritis formulation to Mr G C Goomar, Kudos Laboratories India, on 09.09.2016

CSIR-NEIST transferred its technology on 'Herbal Anti-Arthritis formulation' to M/s Kudos Laboratories India, New Delhi on 9 September, 2016 in association with NRDC, New Delhi. A team from Kudos Laboratories led by Mr Karan Goomar, Proprietor of the company visited CSIR-NEIST during 8-10 September, 2016 for taking demonstration and interaction with the technology team.

Arthritis is a major socio-economic burden of the modern life style and will continue to attract research and development efforts for

r a new effective therapy. CSIR-NEIST herbal formulation against Arthritis is effective in both Rheumatoid arthritis and other joint pains. Since its development in the year 2011, the Institute has transferred the marketing rights to 5 parties across the country. The technology now transferred/licensed for the first time is a major step of the Institute in line with the Swastha Bharat mission of the Hon'ble Prime Minister of India & President, CSIR and intends to provide affordable healthcare to the society.

#### **SOLID AND LIQUID DEODORANT CLEANER TECHNOLOGIES**



Dr D Ramaiah, Director, CSIR-NEIST handing over the technology package to Mr Dileswar Pradhan (3rd from right), CEO, M/s DSP Agrofoods & Chemical Industries, Bhubaneswar in presence of technology team members and other of

CSIR-NEIST transferred its two technologies on Solid and Liquid Deodorant Cleaner to a Bhubaneswar based company, M/s DSP Agrofoods & Chemical Industries in August, 2016. Mr Dileswar Pradhan, CEO of the company visited CSIR-NEIST during 3-5 August and took demonstration & training of the technologies. Solid and Liquid Deodorant Cleaner finds wide applications in



Solid and Liquid Cleaner Refreshner Products

surface cleaning of floors, glass articles, tiles, ceramics, etc. and can be used in hotels, restaurants, hospitals, clinics and households. Similar to the liquid deodorant, the solid deodorant cleaner in the form of portable tablets has an advantage for easy transport and handling. Both the products are essential oil based, making them suitable for use as room and car fresheners.

### **SOCIETAL ACTIVITIES**

#### **CSIR-NEIST IMPARTS TRAINING ON MUSHROOM CULTIVATION**

Under CSIR 800 program, CSIR-NEIST provided training on Mushroom Cultivation to 17 school dropout students of the Institute for Cultural and Rural Development (I-CARD), Baghchung, Jorhat on 11 August, 2016 at CSIR-NEIST. The training was aimed to encourage the students to adopt mushroom cultivation commercially for their livelihood. The program was coordinated by Dr S P Saikia, Senior Scientist & Group Leader, MAEP Group.



Trainees from I-CARD along with the organizers

### CSIR-NEIST BRANCH LAB, ITANAGAR IMPARTS TRAINING ON MUSHROOM CULTIVATION & VERMICOMPOST PRODUCTION

CSIR-NEIST branch lab, Itanagar organized a training and awareness program on "Cultivation of Mushroom and Production of Vermicompost" at community hall, G-Sector, Naharlagun on 23 August, 2016. About 70 nos. of farmers/villagers/beneficiaries from G-Sector, F-Sector and Yawn Colony participated in the program.

The program was coordinated by Dr J C Borah, Scientist-in-charge, branch lab.



A section of trainees attending the program.

#### TRAINING ON MUSHROOM CULTIVATION AT DEOTOLA, BHOGPUR, ASSAM.



Dr B C Baruah, Sr Technical Officer, Branch Lab., briefing on Mushroom cultivation during the training program

Another training program on Mushroom cultivation was organized at Deotola, Bhugpur, Assam on 2 October, 2016 jointly with the Association For Environment & Rural Development (AFERD), Deotola. Altogether 30 women from different SHG Groups viz, Joytimoy SHG, Swagatam SHG, Ronam SHG, Bornali SHG, Pragati SHG, Adivashi SHG, Changalion SHG, Bapuji SHG and Trinayan Krishi Sewa Deotola participated in the training programme.

## MOTIVATIONAL PROGRAM FOR SCHOOL STUDENTS HELD



Participants along with staff from CSIR-NEIST branch lab.

CSIR-NEIST branch lab, Itanagar, organized one-day Motivational program for school students on 19 August, 2016 at its premise. Popular talks and demonstration were rendered by the branch lab scientists on "Biotechnology: Origin and its development", "Medicinal and aromatic plants" and "Cultivation of mushroom". About 50 nos. of students of classes XI and XII along with 2 teachers from New Galaxy Public School, Nirjuli participated and interacted in the day long programme.

### STUDENTS VISIT CSIR-NEIST UNDER GYANJYOTI PROGRAMME



Under the Hon'ble Chief Minister's Gyanjyoti Programme, Govt. of Assam, CSIR-NEIST organized students' visit to the Institute on 25 October, 2016. Around 380 students of class VIII and IX along with 8 teacher guides visited various divisions and interacted with the scientists...

Mr Probin Boruah, Principal Technical Officer, interacting with the students of Gyanjyoti program at Dr J N Baruah Auditorium. VOL. XXXVIII NO. 6. AUGUST - NOVEMBER, 2016

# CSIR-NEIST CELEBRATED COUNTRY'S 70TH INDEPENDENCE DAY ON 15 AUGUST, 2016



Dr D Ramaiah, Director, CSIR-NEIST delivering his address on the occasion of the nation's 70th Independence Day celebration at CSIR-NEIST.

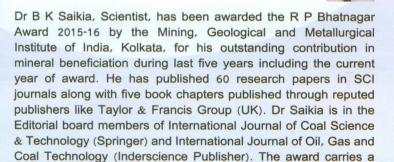
## CSIR-NEIST OBSERVED VIGILANCE AWARENESS WEEK DURING 31 OCTOBER TO 7 NOVEMBER, 2016



Dr D Prajapati, Director-in-charge, CSIR-NEIST addressing the staff members in the valedictory function held on 07.11.2016. Mr · Vikram Singh, Administrative and Vigilance Officer and Mr J L Khongsai, Section Officer, Vigilance, are seen seated on the dais (from left).

#### **AWARD**

### DR B K SAIKIA, SCIENTIST RECEIVES R P BHATNAGAR AWARD 2015-16



medal, citation and cash prize of rupees five thousand.

# CSIR-NEIST OBSERVED HINDI WEEK DURING 5-14 SEPTEMBER, 2016



हिन्दी दिवस समारोह में मुख्य अतिथि के रूप में बोलते हुए ओएनजीसी, जोरहाट के उप-महाप्रवंधक (मानव संसाधन) श्री ई हसनैन एवं (दायें से) निस्ट, जोरहाट के मुख्य वैज्ञानिक डॉ पिनाकी सेनगुप्ता एवं संस्थान के प्रसासनिक अधिकारी क्षी विक्रम सिंह.

#### **COLLOQUIUM HELD**

Speaker : Prof Dr Kunal K Majumder, K P C Medical College,

Kolkata

Topic : The health effect of Arsenic toxicity

Date : 21.10.2016

### **FAREWELL**

The following members of the staff have retired from the Council's service on superannuation from CSIR-NEIST during August-November, 2016.

- 1. Dr D Prajapati, Chief Scientist
- 2. Dr P K Barooah, Principal Technical Officer
- 3. Ms. Jogomaya Hazarika, Principal Technical Officer
- 4. Mr D K Phukan, Sr Technician (2)
- 5. Mr Jogodhar Gayan, Sr Technician (2)
- 6. Mr Bimal Dutta, Lab Assistant
- 7. Mr Aju Gowala, Lab Assistant
- 8. Mr Sadananda Kalita, Lab Assistant
- 9. Mr Prafulla Kalita, Lab Assistant

#### **CONDOLENCE HELD**

The Director and members of the staff of CSIR-NEIST deeply condoled the sad demise of its employee, Shri Tapi Tacho, Non-Tech (who breathed his last on 10.10.2016) at a condolence meeting held in front of the administrative building on 13.10.2016.

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