

## Dr P S Ahuja, DG-CSIR delivers 20<sup>th</sup> Dr J N Baruah Memorial Lecture



From top: Dr P S Ahuja, DG-CSIR & Chief Guest of the programme lighting the Inaugural lamp as Dr D Ramaiah (extreme right), Director, CSIR-NEIST; Dr Sudeep Kumar (2<sup>nd</sup> from right), Director-Central office, CSIR & Guest of Honour of the programme and Mr U C Borah (left), President, Assam Science Society- Jorhat branch & Dr J N Baruah Memorial Trust looks on. Dr P S Ahuja, DG-CSIR delivering the 20<sup>th</sup> Dr J N Baruah Memorial lecture.

The 20<sup>th</sup> Dr J N Baruah Memorial Lecture was held at CSIR-NEIST on 2 September, 2014. Held annually in the honour and fond memory of Late Dr J N Baruah, Former Director of CSIR-NEIST, the programme was organized by Dr J N Baruah Memorial Trust and Assam Science Society, Jorhat branch in collaboration with CSIR-NEIST. Late Dr J N Baruah was not only an able leader but also an eminent scientist and an educationist from the state of Assam who contributed significantly for popularizing science among the students. Dr P S Ahuja, Director-General, CSIR

graced the occasion as the Chief Guest while Dr Sudeep Kumar, Head-PPD, CSIR and Director-Central office, CSIR attended as Guest of Honour. The programme was attended by a galaxy of scientists, invited guests, students from nearby schools & colleges, members from Dr J N Baruah Memorial Trust & Assam Science Society- Jorhat branch, besides CSIR-NEIST fraternity.

Delivering his lecture on, "My Tryst with Plant Research", Dr Ahuja emphasized on the need for translational research for the Industry, Society and Environment which he said, forms the main ethos of CSIR. The next major step towards sustainable development is to improve the value of our products and services per unit of natural resources employed, opined Dr Ahuja. In his address as Guest of Honour, Dr Sudeep Kumar also emphasized on need-based research for applications in the industry and society while lauding on the contribution of CSIR-NEIST in the region by tapping its vast natural resources. Dr R C Boruah, Outstanding Scientist, CSIR-NEIST delivered the welcome address wherein he briefed about the Institute and significant contributions of Late Dr J N Baruah during his tenure as the Director. Dr J C S Katak, Former President, Assam Science Society- Guwahati, spoke in detail about the activities of Dr J N Baruah Memorial Trust. The programme was presided over by Mr U C Borah, President, Assam Science Society- Jorhat branch & Dr J N Baruah Memorial Trust. Dr P S Ahuja, DG-CSIR lighted the Inaugural lamp followed by floral tribute to the portrait of Late Dr J N Baruah by the dignitaries. Dr D Ramaiah, Director, CSIR-NEIST delivered the inaugural speech. To mark the occasion, Dr J N Baruah Memorial Award 2014 in Biological Sciences was conferred to Prof Latha Rangan, Biotechnology Division, IIT-Guwahati for her significant work on, "Tapping Zingiberaceae: Wilderness to Gene Mining" while Ms. Smitakshi Goswami, Salt Brook Academy, Dibrugarh was conferred the Dr J N Baruah Student Fellowship for securing more than 96% marks in HSSLC exam of SEBA, Assam in 2014. Besides, Ms. Papor Saikia, a student of Higher Secondary (Science stream) was awarded the second year grant of Dr J N Baruah Student Fellowship. On the occasion, Dr Manash Protim Baruah, son of Late Dr J N Baruah in his speech expressed gratitude for successful organization of the lecture while mentioning the success of the programme in the state during the last 19 years.

Mr U C Borah in his presidential address stressed for spreading awareness on science and to motivate the young students to take up science as a career and to provide impetus to scientific research in North East Region. The programme concluded with vote of thanks by Dr S P Saikia, Scientist, CSIR-NEIST & Secretary, Dr J N Baruah Memorial Trust.

## Dr P S Ahuja, DG-CSIR addresses CSIR-NEIST staff members



Dr P S Ahuja, DG-CSIR, addressing the CSIR-NEIST staff members.

In connection with his visit to deliver the 20th Dr J N Baruah Lecture at CSIR-NEIST, Dr P S Ahuja, Director-General, CSIR addressed the CSIR-NEIST staff members in the morning hours on 2 September, 2014 wherein he urged all to work together for solving critical issues of the system like upgradation of manpower skills at large in Administration, full implementation of ERP by 2015 in a mission mode, to generate balance sheet through ERP with more emphasis on Purchase procedures and Finance & Accounting. He also stressed on collective efforts of all and focus on the ethos of the Council, that is to develop technologies, products, processes for Industry, Society, Environment and to some extent on Strategic sector leading to translational research.

Dr Sudeep Kumar, Head- PPD, CSIR and Director -Central office, CSIR who also visited, emphasized further to strengthen the mandate of CSIR. Dr D Ramaiah, Director, CSIR-NEIST delivered the welcome address while Dr R C Boruah, Outstanding Scientist offered the vote of thanks.

## Assam Science Society invites applications for Award/Fellowship for 2014

Like previous years, this year also the Assam Science Society invites applications for Awards/Fellowships in various fields for the year 2014. The awards/fellowships are intended to provide additional incentive and impetus to the scientists/researchers at various levels to pursue research in various fields of science. Following are the four Awards/Fellowships.

1. Professor V D Thawani Award
2. Professor V D Thawani Fellowship
3. Dr Rohini Kanta Baruah Award
4. Professor Durlabh Deka Memorial Award

All interested researchers and scientists of CSIR-NEIST pursuing Ph D research work or has outstanding original research contribution are encouraged to apply for the same. Details including formats, etc. may be obtained from the office of the Assam Science Society, Khanapara, Guwahati-781022 (Ph: 0361-2363258). The last date of receipt of application/nomination is 30 November, 2014.

## Talk delivered

Dr Mantu Bhuyan, Scientist,

- delivered a talk entitled, "Birds and Environment" in the regional workshop on 'Ecosystem services and functions of Birds' organized by Department of Zoology, N N Saikia College, Titabar on 6 September, 2014.
- delivered a talk entitled, "Urban Biodiversity" in Expert Consultation Workshop held at Assam Agricultural University on 13 September, 2014 organized by Assam Cities Climate Change Resilience Network.

## Visit to CSIR-NEIST by students

- 19 students along with 4 faculty members from TRB Education (College cum coaching centre/tuition), Sivasagar, Assam on 10 September, 2014.

## Dr Binoy Kr Saikia, Scientist, receives Mineral Engineering Science Award 2014

Dr Binoy Kr Saikia, Scientist, has been conferred the Engineer AC Datta Mineral Engineering Science Association (MESA) of India Award -2014 for his contribution to the Mineral Engineering Science. The award was given on the occasion of Engineer's Day celebration on 15 September, 2014 held at Udaipur by the Institution of Engineers, Udaipur chapter. Dr Saikia was felicitated with a certificate and a cash award of Rs. 5000/-.



**Dr Binoy K Saikia, Scientist**

The award is hosted by the Mineral Engineering Science Association (MESA) of India, Visakhapatnam to encourage young Indian scientists working in the areas of mineral sciences in India and abroad. Dr Saikia had obtained his M.Sc and Ph D degree in Chemistry in 2001 and 2008 from Gauhati University and CSIR-NEIST respectively. He has been working on different aspects of "Coal Science & Technology" since his doctoral studies. His research interests are "advanced characterization and utilization of high sulfur Northeast Indian coals, green coal beneficiation, nano-mineralogy, elemental chemistry of coal, rare earth elements in coal and coal products". He has published 35 research papers in reputed journals (SCI) along with three book chapters (ISBN). Dr Saikia had attended and presented many research papers in national as well as international conferences. He is an editorial board member of 'International Journal of Coal Science & Technology' published by Springer publication.

## CSIR-NEIST researchers receives first prize in paper presentation

Mr Hirok Jyoti Borah and Ms. Indumoni Das, Project fellows, Chemical Engineering Division, have been awarded the first prize in oral presentation for their papers entitled, "Studies on extraction kinetics of malic acid *Dillenia indica* fruit" and "Synthesis of dendrimer derivatives and evaluation of thermochemical properties: a DFT study" respectively in Students' Chemical Engineering Congress-2014 held during 19-20 September, 2014 at Department of Chemical Engineering, Haldia Institute of Technology, Haldia, West Bengal. Mr Hirok J Borah and Ms Indumoni Das are currently working under the supervision of Dr Swapnali Hazarika, Scientist.

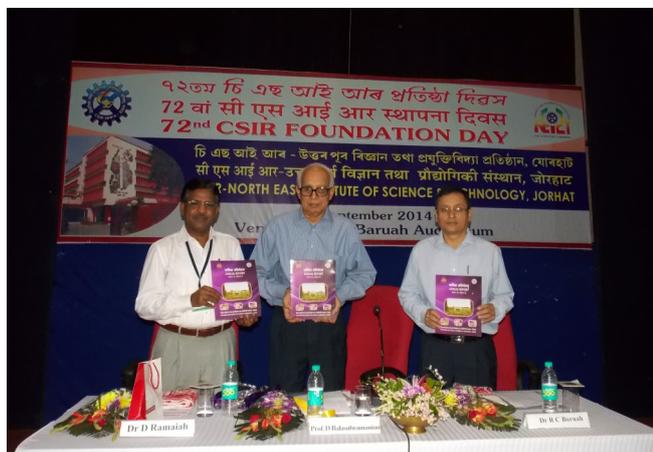
## Hindi week celebrated at CSIR-NEIST



Sri Sunil S Patkar, Airport Director, Jorhat delivering his address as Chief Guest at the concluding function. Also seen on the dais are (from right), Dr D Ramaiah, Director, CSIR-NEIST and Dr D Prajapati, Chief Scientist.

CSIR-NEIST celebrated Hindi Week during 9-15 September, 2014. The week-long celebration included various competitions like Dictation Competition, Spot Essay writing, Quiz etc. conducted in Hindi medium among CSIR-NEIST staff members. The concluding function was held on 15 September at Dr J N Baruah auditorium wherein Sri Sunil S Patkar, Airport Director, Jorhat graced the occasion as the Chief Guest. The function was presided over by Dr D Ramaiah, Director, CSIR-NEIST. Dr D Prajapati, Chief Scientist and Chairman, Official Language Implementation Committee of the Institute delivered the welcome address wherein he briefed about the Rajbhasha activities in the Institute. Sri Ajay Kumar, In-charge, Rajbhasha Section, CSIR-NEIST & Coordinator of the programme read out the message of Minister of Home, Govt. of India on the occasion to follow progressive use of Hindi. In his guest lecture, Mr Patkar shared his experience for popularizing Hindi in day-to-day official use. He appealed to all to learn Hindi with the feeling of nationality. In his presidential remarks, Dr Ramaiah expressed satisfaction over the progress of Hindi in the Institute. As per Official Language Act and under the constitutional provision every employees of Central Government employees must have working knowledge of Hindi and so one should learn Hindi and co-operate office in progress, he said. On the occasion, the winners of the competitions held were awarded with prizes as well as those staff members who successfully cleared the Hindi courses, Prabodh/Praveen/Pragya were awarded with certificates as issued by the Ministry of Home, Rajbhasha Vibhag, Govt. of India. The function ended with vote of thanks by Mr Somnath, Assistant, Finance & Accounts.

## CSIR-NEIST celebrated 72nd CSIR Foundation Day



From top: Padmashree Prof. D Balasubramanian delivering the 72nd CSIR Foundation day lecture as Chief Guest. Release of CSIR-NEIST Annual Report 2013-14 by Prof Balasubramanian, flanked by Dr D Ramaiah (left), Director, CSIR-NEIST and Dr R C Boruah (right), Outstanding Scientist.

CSIR-NEIST celebrated 72nd Foundation Day of its apex body, CSIR on 22 September, 2014 at its premise. Befitting the occasion, a special function was held at Dr J N Baruah auditorium with a large gathering of eminent scientists, invited dignitaries, guests, prominent citizens of Jorhat town, members of press and media and members of CSIR-NEIST fraternity. The function was held in advance instead of the actual day, 26 September on account of unavoidable circumstances. Padmashree Prof. D Balasubramanian, Research Director, L V Prasad Eye Institute and Former Director, CSIR-CCMB, Hyderabad, graced the occasion as the Chief Guest. Addressing on the occasion, Prof Balasubramanian said that Foundation day is a day to look back, retrospect and learn from the history to prepare for tomorrow. Delivering the Foundation Day lecture on “Pebbles

and Ripples—Invention and Innovation” he emphasized the need for more innovation in the development of technologies. He said that all inventions ever created are like pebbles thrown in to the sea and the ripples that comes as a result are the innovations while entrepreneurs resembles the big waves created. It is the product which leads to invention and invention leads to further innovation and products and thus the cycles goes on, he opined. Dr D Ramaiah, Director, CSIR-NEIST briefly mentioned the achievements of the Institute in his presidential address. Dr R C Boruah, Outstanding Scientist, delivered the welcome address. As a part of the celebration programme, the retired staff members of the year 2013-2014 were felicitated as well as the members who completed 25 years of service in the organization. Also, winners of Essay, Art and Quiz competitions held under the programme were awarded with prizes. The CSIR-NEIST Annual Report for 2013-14 was released by the Chief Guest on the occasion and CSIR-NEIST Golden Jubilee scholarship for Under Graduate students (science) of NE India for the year 2014-15 were awarded to the selected 2 students each from the states of Assam and Manipur. As a part of the event, the Institute observed ‘Open Day’ to facilitate the visit of students and public on 26 September, 2014.

## Best Poster Award to CSIR-NEIST researcher

Mr Tapan Dey, Project Fellow, Biotechnology Division, has been conferred the Best Poster Award for his poster entitled, “Chronic obstructive pulmonary disease: role of environmental pollutants in genetically susceptible individuals” in the ‘International Seminar on New Frontiers in Biotechnology: Functional Genomics & Proteomics’ held during 27-28 September, 2014 at Invertis University, Barilly, Uttar Pradesh. Mr Tapan Dey is currently working under the supervision of Dr B G Unni, Chief Scientist.

## Honour/Recognition

- Dr B G Unni, Chief Scientist, has been nominated as an Advisory Member for the forthcoming ‘National Conference on Recent Advances in Biotechnological Research in North East India: Challenges and Prospects’ to be organized by Tezpur University, Tezpur.

- Dr Binoy Kr Saikia, Scientist, has been appointed as an Editorial Board Member of the *International Journal of Coal Science & Technology* published by Springer and China Coal Society.

## Visit abroad

Dr S P Saikia, Scientist, visited Sofia, Bulgaria during 24-26 September, 2014 and participated in the scientific conference on 'Plant physiology and genetics— Achievements and Challenges' organized by the Institute of Plant Physiology and Genetics, Bulgarian Academy of Sciences, Sofia. Dr Saikia also presented a paper entitled, "Variability of growth and oil characteristics of *Jatropha curcas* L. in North East India" in the conference.

## Papers published

### International peer reviewed journal(s)

- Khare P, Baruah B P: Thermogravimetric Analysis of Perhydrous Indian Coals, *Energy Source*, Part A, 2014, 36 (7), p: 774-782.
- Chebrolu Lavanya Devi, Thurakkal Shameel, Balaraman Hari Shankar, Ramaiah Danaboyina: Selective and dual naked eye detection of Cu<sup>2+</sup> and Hg<sup>2+</sup> ions using a simple quinoline-carbaldehyde chemosensor, *Sensors and Actuators B: Chemical*, 2014, 204 (December), p: 480-488.
- Sharma Arpita, Saikia Ananya, Khare P, Dutta DK, Baruah BP: The chemical composition of tertiary Indian coal ash and its combustion behaviour - a statistical approach: Part 2, *Journal of Earth System Science*, 2014, 123 (6), p: 1439-1449.
- Shumyantseva V V, Bulko T V, Kuzikov A V, Khan R, Archakov A I: Development of methods for functionalization of screen printed electrodes with biocompatible organic-inorganic hybrid nanocomposites for biosensing applications, *Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry*, 2014, 8 (3), p: 237-242.
- Sarmah M M, Prajapati D: Aza-Diels-Alder

reaction: An efficient approach for construction of heterocycles, *Current Organic Chemistry*, 2014, 15 (12), p: 1586-1620.

- Jain Shilpi, Baruah B P, Khare Puja: Kinetic leaching of high sulphur mine rejects amended with biochar: Buffering implication, *Ecological Engineering*, 2014, 71 p: 703-709.
- Khare Puja, Sarmah M, Baruah B P: Chemometric application for thermal behaviour of blends of bamboo with solid fossil fuel, *Environmental Progress And Sustainable Energy*, 2014, 33 (1), p: 315-321.
- Bhuyan Diganta, Saikia Mrinal, Saikia Lakshi: Magnetically recoverable Fe<sub>3</sub>O<sub>4</sub>@SBA-15: An improved catalyst for three component coupling reaction of aldehyde, amine and alkyne, *Catalysis Communications*, 2014, 58 p: 158-163.

## Book Chapter(s)

- Banik D: Agapetes, In-Fascicles of flora of India, Fascicle 25 Ericaceae, Ed by M Sanajappa and A R K Sastry, Published by Botanical Survey of India, Kolkata, 2014 p: 247-389.

## Visit to CSIR-NEIST by students

- 92 students along with 5 teachers from St.Mary's High School, Margherita, Assam on 24 September, 2014.
- 29 students along with 4 teachers from Ganakpukhuri High School, Golaghat, Assam on 24 September, 2014.

## Farewell

The following members of the staff have retired from Council's service on superannuation from CSIR-NEIST on 30 September, 2014.

1. Dr L Nath, Chief Scientist
2. Shri Arun Kalita, Lab Assistant