

THE IITG MONITOR



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Twelfth Convocation of IIT Guwahati

The Twelfth Convocation of Indian Institute of Technology Guwahati was held on Wednesday, 26 May 2010. The convocation was chaired by Dr. R. P. Singh, the Chairman of the Board of Governors of the Institute. The Chairman of the Senate and the Director of the Institute Prof. Gautam Barua awarded the degrees of Bachelor of Technology (BTech), Bachelor of Design (BDes), Master of Science (MSc), Master of Technology (MTech), Master of Design (MDes) and Doctor of Philosophy (PhD) to the students who completed the requirements for these degrees.

A total of 655 students were awarded degrees on the Twelfth Convocation. 308 students received BTech degrees, 21 students received BDes degree, 73 students received MSc degrees, 189 students received MTech degrees, 16 students received MDes degrees and 48 students received PhD degrees.

Mr. Sarabjot Singh of Electronics and Communication Engineering Department was awarded the President of India Gold Medal for securing the highest Cumulative Performance Index (CPI) among all the graduating BTech and BDes students. Mr. S. Satya Kalyan was awarded the Dr. Shankar Dayal Sharma Gold Medal. This medal is awarded to a graduating student adjudged to be the best in terms of general proficiency including character, conduct, and excellence in academic performance, extra-curricular activities, and social service.

Thirteen students were awarded the Institute Silver Medal for securing the highest CPI in their respective departments of BTech, BDes and MSc programmes.



Dr. R. P. Singh, Chairman, Board of Governors and Prof. Gautam Barua, Director, IIT Guwahati with the medal winners at the 12th Convocation

Conference Participation and Paper Presentation

Dr. Bithiah G. Jaganathan, Assistant Professor, Dept. of Biotechnology, presented a paper titled "Effect Of Rho GTPase on the Migration and Differentiation of Human Adult Hematopoietic Stem Cell" at the 8th Annual Meeting of the International Society for Stem Cell Research held at San Francisco, USA from 16 - 19 June 2010.

Professor T. Punniyamurthy, Dept. of Chemistry, presented a paper titled "Design & Development of Chiral Macromolecular Catalyst for Asymmetric Catalysis" at the Catalytic Asymmetric Synthesis 2010 held at Beijing, China from 19 - 21 May 2010.

Dr. Ashish K. Gupta, Assistant Professor, Dept. of Chemistry, presented a paper titled "Application of Smooth Exterior Scaling method to study the Dependent Dynamics of H_2 in Intense Laser Field " at the Gordon Research Conference held at Tilton School, USA from 6 - 11 June 2010.

Professor Bhishma K. Patel, Dept. of Chemistry, presented a paper titled "Multifaceted uses of Hypervalent Iodine (III) Reagent in Organic Synthesis" at the Eleventh Tetrahedron Symposium held at Beijing, China from 22 - 25 June 2010.

Dr. Santosh Biswas, Assistant Professor, Dept. of Computer Science & Engineering, presented a paper titled "Fair Diagnosability in PN Based DES Models" at the IEEE International Conference on Control and Automation (ITTC ICCA 2010) held at Xiamen, China from 9 -11 June 2010.

Dr. Jatindra K. Deka, Associate Professor, Dept. of Computer Science & Engineering, presented a paper titled "Bandwidth Probe: End-to-End Capacity Probing in Wireless Mesh Networks" at the 2010 International Conference on Educational and Network Technology (ICENT 2010) held at Qinhuangdao, China from 25 - 27 June 2010.

Ms. Shareka Iqbal, Assistant Professor, Dept. of Design, presented a paper titled "Identity and Adaptivity: Structures and Structural Interventions in Almora" at the 21st IAPS International Conference on Vulnerability, Risk and Complexity: Impacts of Global Change on Human Habitat held at Leipzig, Germany from 27 June to 2 July 2010.

Dr. Arupjyoti Saikia, Associate Professor, Dept. of Humanities & Social Sciences, presented a paper titled "Imperialism, Geology and Petroleum History of Oil in Colonial Assam" at the International Workshop on Space, Capital, Social History in South Asia held at University of Gottingen, Germany from 24 - 26 June 2010.

Dr. Swaroop N. Bora, Associate Professor, Dept. of Mathematics, presented a paper titled "Oblique Scattering of water waves by an uneven ocean-bed in two-layer fluid with ice-cover" at the 8th International Conference on Dynamical Systems, Differential Equations and Applications held at Dresden, Germany from 25 - 28 May 2010.

Professor Rafikul Alam, Dept. of Mathematics, attended the International Workshop on Accurate Solution of Eigenvalue Problem 8 (IWASEP8) as a plenary speaker, held at Berlin University of Technology, Germany from 28 June to 1 July 2010.

Dr. Shreemayee Bora, Assistant Professor, Dept. of Mathematics, presented a paper titled "Characterisation and Construction of the Nearest Defective Matrix via Coalescence of Pseudospectral Components" at the International Workshop on Accurate Solution of Eigenvalue Problem 8 (IWASEP8) held at Berlin University of Technology, Germany from 28 June to 1 July 2010.

Dr. Jiten C. Kalita, Associate Professor, Dept. of Mathematics, presented a paper titled "Bi-harmonic computation of the flow past an impulsively started circular cylinder at $Re = 200$ " at the 2010 International Conference of Applied and Engineering Mathematics (A part of World Congress on Engineering 2010) held at London, England from 30 June to 2 July 2010.

Dr. Niranjana Sahoo, Associate Professor, Dept. of Mechanical Engineering, presented a paper titled "Optimisation of $H_2 : CO$ Ratio in Syngas for a Dual Fuel Diesel Engine Operation" at the ASME International Conference on Thermal & Environmental issues in Energy Systems held at Sorrento, Italy from 16 - 19 May 2010.

Dr. Ujjwal K. Saha, Associate Professor, Dept. of Mechanical Engineering, presented a paper titled "Assessment of a Syngas - Diesel Dual Fuelled Compression Ignition Engine" at the ASME 2010 4th International Conference on Energy Sustainability held at Arizona, USA from 17 - 22 May 2010.

Professor Pinakeswar Mahanta, Dept. of Mechanical Engineering, presented a paper titled "Effect of Particle Size and Sand Inventory on Wall-to-Bed Heat transfer Characteristics of Circulation Fluidised Bed Riser" at the International Conference of Mechanical Engineering (ICME2010) held at London, United Kingdom from 30 June to 2 July 2010.

Dr. Saurabh Basu, Associate Professor, Dept. of Physics, presented a paper titled "Current and spin correlations in Fulde-Ferrell-Larkin-Ovchinnikov state of a s-wave superconductor" at the International Conference on Strongly Correlated Electron System, 2010 held at South Hadley, USA from 13 - 18 June 2010.

Dr. Sitangshu B. Santra, Associate Professor, Dept. of Physics, presented a paper titled "Finite size scaling in rotational sandpile models" at the Conference on Computational Physics held at Trondheim, Norway from 23 - 26 June 2010.

Dr. Perumal Alagarsamy, Associate Professor, Dept. of Physics, presented a paper titled "Future of Electronics" at the 2nd INDO-GERMAN Frontiers of Engineering held at Potsdam, Germany from 24 - 27 June 2010.

Dr. Saurabh Basu, Associate Professor, Dept. of Physics, presented a paper titled "Participation ratio across BCS-BEC crossover" at the Gordon Research Conference held at Santa Fe, USA from 27 June to 2 July 2010.

Dr. Pravat K. Giri, Associate Professor, Dept. of Physics, presented two papers titled "Microstructure and optical properties of freestanding Si nanocrystals" and "Cobalt doping of ZnO nanoparticles by ball milling: Enhanced UV luminescence and room temperature ferromagnetism" at the 3rd International Conference on Nanostructures Self- Assembly held at Cassis, France from 28 June to 2 July 2010.

A few of the many Seminars and Conferences held at IIT Guwahati



Prof. Prasenjit Duara and Prof. Birendranath Dutta delivering their speeches

Dept. of Biotechnology

21 June 2010

Speaker: Prof. M. V. Deshpande, National Chemical Laboratory, Pune

Topic: "Fungal Dimorphism"

Dept. of Chemistry

7 April 2010

Speaker: Dr. Parthasarathi Das, Aurigene Discovery Technology, Dr. Reddy's Laboratories Ltd., Hyderabad

Topic: "Chemistry-Biology Frontier: A Journey with Organic Molecules"

25 June 2010

Speaker: Somnath Bhattacharjee, Department of Chemistry, Baker's Research Group, Michigan State University, East Lansing, Michigan 48823, USA

Topic: "Regio- and Chemo-selective catalysis by nanoparticles"

Dept. of Electronics and Communications Engineering

18 May 2010

Speaker: Prof. T. V. Sreenivas, Professor, Dept. of Electronics and Communication Engineering, IISc Bangalore

Topic: "Compressive Sensing: An Overview"

Dept. of Humanities and Social Sciences

7 April 2010

Speaker: H S Shiva Prakash, Dean, School for Art and Aesthetics, Jawaharlal Nehru University, New Delhi

Topic: "The Impact of the Bhakti Movement on Art and Culture"

17 May 2010

Speaker: Dr. Joachim Schmerbeck, Assistant Professor, Department of Natural Resources, TERI University, New Delhi

Topic: "Forest fires and Ecosystem Services in India - what we know so far"

31 May 2010

Speaker: Prof. Birendranath Datta, Former Professor and Head of the Folklore Research Department, Gauhati University, Guwahati

Topic: "Society and social capital as reflected in folk literature"

9 June 2010

Speaker: Dr. Prasenjit Duara, Director of Research in Humanities and Social Sciences at National University of Singapore and Emeritus professor of History and East Asian Languages and Civilisations at the University of Chicago

Topic: "Asia Redux: Conceptualising the Region for our Times"

25 June 2010

Speaker: Arun Kumar Tripathi, visiting scholar, Institute of Philosophy, Dresden University of Technology, Germany

Topic: "Culture of Embodied Skills in Human Computer Interaction: Hermeneutics-Phenomenological Perspectives"

Dept. of Mathematics

21 April 2010

Speaker: Professor Sujatha Ramdorai, School of Mathematics, TIFR

Topic: "Problems in Number Theory: Simple yet sophisticated"

Centre for Energy

8 May 2010

Speaker: Prof. K. T. R. K. Reddy, Department of Physics, Sri Venkateswara University, Tirupati

Topic: "Novel and New Materials for Photovoltaic Application"

Centre for Nanotechnology

9 April 2010

Speaker: Mr. Sadhucharan Mallick, Research Scholar, Department of Chemistry, IIT Guwahati

Topic: "Antimicrobial Iodine doped Silver Nanoparticle-Chitosan Composite"

Appointments



Mr. Keyur Babulal Sorathia joined the Department of Design as Assistant Professor on 1 April 2010.



Dr. Amit Kumar joined the Department of Chemical Engineering as Assistant Professor on 8 April 2010



Dr. Arup Kumar Das joined the Department of Mechanical Engineering as Assistant Professor on 9 April 2010.



Dr. Deepak M. Fulwani joined the Department of Electronics & Communication Engineering as Assistant Professor on 9 April 2010.



Dr. Karuna Kalita joined the Department of Mechanical Engineering as Assistant Professor on 3 May 2010.



Rongali Bihu Celebration



Husori performance during Bohagi Utsav 2010

Bihu is the biggest festival of the people of Assam and transcends all religious and class barriers bringing people together. The Assamese people observe three different types of Bihu during the year, each marking an agricultural activity and denoting a change of season.

Bohag or Rongali Bihu marks the Assamese new year and advent of agricultural activities. Rongali Bihu celebrations begin in the middle of April and generally continue for a month. Rongali Bihu is the most festive and joyful of all the Bihus marked by Bihu Geet and Bihu Dance, taking blessing from the elders, visiting family and friends and feasting on Bihu delicacies like Jalpan, Xandah, Xurum, different varieties of Pitha, Laru, etc.

The second one is called Kati or Kongali Bihu. It is celebrated in mid-October when the paddy crops are yet to mature and the granaries are almost empty. It is a solemn occasion and there is no feasting on this day. Kongali Bihu is marked by silent prayer in the form of lighting of earthen lamps in the paddy fields and also near household Tulsi plant for the success of the crop.

Magh Bihu or Bhogali Bihu is celebrated in January. It is a harvest festival and marks the end of harvesting season. Since the granaries are full, there is a lot of feasting and eating during this period. An overnight community function is held in temporary thatched houses (made with thatch and dry plantation leaves/trunk) known as Bhela Ghar or Meji Ghar specially erected for the purpose. A Community feast is one of the main features of this Bihu which is held near the Bhela Ghar. People spend the night of the community feast in the Bhela Ghar and early in the morning the same is lit with fire, culminating the function.

Like every year, Bohag or Rongali Bihu was celebrated at IIT Guwahati as 'Bohagi Utsav' on 7 and 8 May 2010. The festival was marked by two days of various cultural and sports events including traditional dress competition, Bihu Husori, folk dance, drawing competition, go-as-you-like, laughter challenge, etc. The two cultural evenings were graced and inaugurated by Dr. B. N. Raychoudhury, Registrar and Prof. Gautam Barua, Director of the Institute, respectively. 'Bihuwan', the Bihu magazine was inaugurated by Prof. Anjan Dutta, Dean, Institute Works. Leading artists of the region performed on both the cultural evenings. The residents participated in all the programmes and enjoyed these two days of fun and gaiety.



Campus children participating in the painting competition

New office of IIT Club, IIT Guwahati inaugurated

The new office of IIT Club was inaugurated on 4 May 2010 by the Director of the Institute, Prof. Gautam Barua in IIT Guwahati market complex. The new office houses a mini gymnasium, table tennis board, carrom boards and a library. The occasion was marked by an 'Antakshari' competition among the members of the Club.



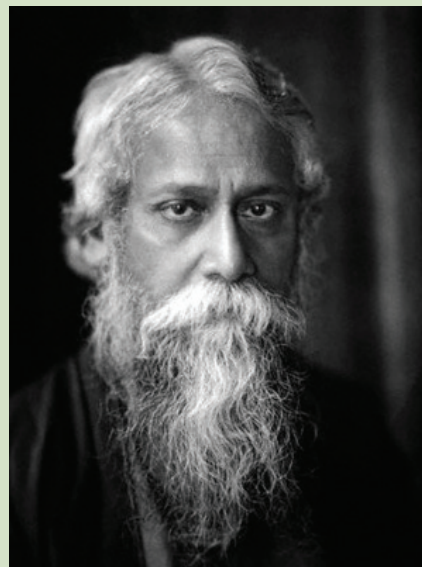
Prof. Gautam Barua, Director, IIT Guwahati inaugurating the new office of IIT Club

Yoga Camp at IIT Guwahati campus



More than 60 participants took part in a Yoga and Pranayam camp organised by IITG Non-Teaching Employees Association during 25 June to 27 June 2010. The camp was supervised by Yoga teachers of Patanjali Yogapeeth, Haridwar assisted by trained residents of the campus.

Rabindra Jayanti Celebration at IIT Guwahati



The 150th Birth anniversary of Rabindra Nath Tagore, the first Nobel laureate of India in literature was celebrated by the IIT Club on 15 May 2010. Members of the IITG fraternity participated in the function. The cultural programme included dance performances by a group of campus children based on Rabindra Sangeet, chorus, recitation of poems penned by the maestro and rendition of a few Rabindra Sangeet.



Campus residents performing during Rabindra Jayanti celebration

Rabha Divas observed in Campus

Bishnu Prasad Rabha, born in Dhaka on 31st January 1909, was a multifaceted artist and revolutionary singer of Assam. A doyen of the Arts, he is popularly known as 'Kalaguru'. He was awarded the title by Dr. Sarvapalli Radhakrishnan at Varanasi for his mesmerizing 'Tandava' dance of Lord Shiva. Bishnuprasad Rabha was an extremely talented actor, film director and dancer. His stage performances in 'Ban Theater'

were absolutely stunning. He was the director and music composer of the Assamese film 'Siraj'. He was involved in the freedom movement from his student life and was an eminent leader. For him, freedom meant freedom from poverty and all social evils. He dedicated his entire life towards achieving this objective. He donated his inherited estate of 2500 bighas of land in favour of the poor tenants where a number of institutions stand today.



Bishnu Rabha always worked for the upliftment of the society. All his writings, songs and arts are an outcome of his unique creativity and contribution towards the greater society of Assam. The books written by him like Axomiyaa Kristir Somu Abhaax (An outline of the Assamese culture), Axomiyaa Kristi (The Assamese culture), and Mukti Deol (The temple of freedom) are reflections of his socialistic notions.

IIT Club, IIT Guwahati organised a play based on his life titled 'Bishnu Rabha' on 19 June 2010 to commemorate his 41st death anniversary. A cultural evening based on his works was organised the following day in the campus by the Rongali Bihu Celebration Committee 2010, IIT Guwahati.



A scene from the play 'Bishnu Rabha'

Students win laurels for IIT Guwahati



The 4th Styling and Design Conclave 2010 was organised by the Styling and Design Group of Society of Indian Automobile Manufacturers (SIAM) - the body that looks after issues covering vehicle styling aspects and its changing status in India at the sidelines of Auto Expo 2010 and the team of Ketan Chaturmutha, Menoulhoulie Kire and Shantanu Joshi of IIT Guwahati won the 2nd Runner Up trophy for their concept car named 'Figo'. The students were inspired by the way fish move and communicate as a group in the sea. 'Figo' is a concept of clean, safe, intelligent and eco-friendly vehicle which can be used for commuting between home and work. Figo was developed as a two seater (front and back) car to enable it to zoom through Indian roads as well as having the concept of retraction to solve parking problems.



Shantanu Joshi, Menoulhoulie Kire and Ketan Chaturmutha with the prototype of their award winning model 'FIGO'

IIT Guwahati- an amalgamation of nature, tradition and modernity



Students coming out of the Lecture Hall Complex of IIT Guwahati



Sports fields with Girls' Hostel in the foreground and Boys' Hostels in the background



Panaromic view of the Academic Complex and the Computer and Communication Centre, IIT Guwahati



Night view of IIT Guwahati



The Administrative Building



Central Workshop