

# THE IITG MONITOR



Indian Institute of Technology Guwahati

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## In this issue

- 14th Convocation ● Publications (Research Journal/ Book/ Book Chapter) ● Library Operation Time
- Conference/Workshop Organised ● Lecture Series on Advances in Seri Biotechnology, and Genomics and Breeding ● Symposium on Environment and Us
- New Research Projects ● New Joinings
- Awards and Honours ● PhDs Completed
- Mathematics Training and Talent Search Programme
- Workshop on Emerging Trends in Geotechnical Engineering ● Technology Vision 2035 for NE Region

## 14th Convocation

The 14th Convocation of IIT Guwahati was held on 25 May 2012 at the Institute's auditorium. His Excellency Dr. A. P. J. Abdul Kalam, former President of the Republic of India, was the Chief Guest and delivered the Convocation address. The Chairman of Board of Governors, IIT Guwahati, Dr. Rajendra Pratap Singh, was present at the convocation and addressed the graduating students and guests.

858 students – including 362 BTech and BDes, 42 MA, 114 MSc, 269 MTech and MDes, and 71 PhD – were conferred their degrees at the Convocation. The number of degree recipients has increased by 16.42% compared to the 13th Convocation.

Degrees	12th Convocation (2010)	13th Convocation (2011)	14th Convocation (2012)
BTech/BDes	329	340	362
MA	-	13	42
MSc	73	87	114
MTech/MDes	205	230	269
PhD	48	60	71
<b>Total</b>	<b>655</b>	<b>737</b>	<b>858</b>



Dr. A. P. J. Abdul Kalam while addressing the gathering

Delivering his Convocation Speech Dr. Kalam shared his views on 'Science is Reciprocating' and deliberated in details how different scientific disciplines were shaping each other without any iron curtain between the technologists. "This reciprocating contribution of sciences to one another is going to shape our future and industry needs to be ready for it," he said. He urged the students to bring down the iron curtain existing between various technological groups. The visionary scientist foresaw a new dimension of the 21st century knowledge society, where science, technology and environment would go together. Thus, the new age model would be a four dimensional bio-nano-info-eco based. He hoped that the Institute will build curricula which will emphasise the convergence of technologies and remove the inter-disciplinary barriers.

Concluding his speech he urged the graduating students to take an oath that Engineering and Technology is a life time mission. Every student will work continuously and succeed. The spirit of nationalism will always run among the students and they will work for the glory of the country.



Dr. Rajendra Pratap Singh, Chairman, BoG, IIT Guwahati, congratulating a degree recipient



*Prof. Gautam Barua, Director, IIT Guwahati, presenting his report*



*A part of the gathering*

The Chairman, Board of Governors, IIT Guwahati, Dr. R. P. Singh, addressed the gathering and spoke on the need of sustainable growth where social, economic and environmental factors converge. He told the students that wealth pertains not to money alone, and knowledge is the biggest wealth.

Prof. Gautam Barua, Director, IIT Guwahati presented a report on the activities and achievements of the Institute during the last year.

Prof. Barua stressed that IITs are good undergraduate institutes but at the same time they place equal emphasis on postgraduate programmes. With 300 faculty, IIT Guwahati has 350 sponsored research projects going on. There have been 580 journal publications in the last year. There are 900 PhD students on campus. All this shows that priority for research is high in IIT Guwahati. He emphasised that industry must be ready to recognise and accept indigenous technology and hoped that with the steady growth of the economy this will happen in the near future.

Shri Patil Pratik Narendra, BTech, Electronics and Communication Engineering, received the President of India Gold Medal for securing the highest Cumulative Performance

Index among all the students of the batch receiving the degrees of Bachelor of Technology and Bachelor of Design.



*Degree recipients*

Shri Anshul Garg, BTech, Mechanical Engineering, received Dr. Shankar Dayal Sharma Gold Medal for the year 2012. The medal is awarded to a graduating student adjudged to be the best in terms of general proficiency including character, conduct, excellence in academic performance, extra-curricular activities and social service.



*Dr. A. P. J. Abdul Kalam, Dr. Rajendra Pratap Singh and Prof. Gautam Barua along with the medal winners at the 14th Convocation*

## Publications (Research Journal/Book/Book Chapter)

### Research Journal

#### Biotechnology

S. Ahmad and P. Goswami, "Enhanced production of cell-bound cholesterol oxidase from *Rhodococcus* sp. NCIM 2891 by the statistical method", *Annals of Microbiology*, DOI 10.1007/s13213-012-0461-4, 2012

A. Kakoti, A. Kiran Kumar and P. Goswami, "Microsome-bound alcohol oxidase catalysed production of carbonyl compounds from alcohol substrates", *Journal of Molecular Catalysis B: Enzymatic*, 78, pp. 98-104, 2012

B. B. Mandal, A. Grinberg, E. S. Gil, B. Panilaitis and D. L. Kaplan, "High-strength silk protein scaffolds for bone repair", *Proceedings of the National Academy of Sciences*, 109 (20), pp. 7699-7704, 2012

A. K. Shukla, S. Patra and V. K. Dubey, "Iridoid glucosides from *Nyctanthes arbortristis* results in increased Reactive Oxygen Species and cellular redox homeostasis imbalance in *Leishmania* parasite", *European Journal of Medicinal Chemistry*, DOI: 10.1016/j.ejmech.2012.04.034, 2012

D. Chakraborty, P. Saravanan, S. Patra and V. K. Dubey, "Studies on ornithine decarboxylase of *Leishmania donovani*: Structure modelling and inhibitor docking", *Medicinal Chemistry Research*, DOI: 10.1007/s00044-012-0035-9, 2012

A. Grover, S. P. Katiyar, J. Jeyakanthan, V. K. Dubey and D. Sundar, "Mechanistic insights into the dual inhibition strategy for checking leishmaniasis", *Journal of Biomolecular Structure and Dynamics*, DOI: 10.1080/07391102.2012.682212, 2012

R. K. Verma, V. K. Prajapati, G. K. Verma, D. Chakraborty, S. Sundar, M. Rai, V. K. Dubey and M. S. Singh, "Molecular docking and in vitro antileishmanial evaluation of chromene-2-thione analogues", *ACS Medicinal Chemistry Letters*, 3, pp. 243-247, 2012

N. Sharma, A. K. Shukla, M. Das and V. K. Dubey, "Evaluation of plumbagin and its derivative as potential modulator of redox thiol metabolism of *Leishmania* parasite", *Parasitology Research*, 110, pp. 341-348, 2012

A. Grover, S. P. Katiyar, S. K. Singh, V. K. Dubey and D. Sundar, "A Leishmaniasis study: structure-based screening and molecular dynamics mechanistic analysis for discovering potent inhibitors of spermidine synthase", *Biochimica et Biophysica Acta - BBA: Proteins and Proteomics*, DOI: 10.1016/j.bbapap.2012.05.016, 2012

#### Chemical Engineering

V. Singh, M. K. Purkait, V. K. Chandaliya, P. P. Biswas, P. K. Banerjee and C. Das, "Development of membrane based technology for the separation of coal from organic solvent", *Desalination*, 299, pp.123-128, 2012

### Civil Engineering

A. Bhattacharjee and A. Murali Krishna, "Seismic response of rigid faced reinforced soil retaining walls using FLAC 3D," *International Journal of Geotechnical Earthquake Engineering*, 3 (2), pp. 10, 2012

S. Bhattacharya, A. Murali Krishna, D. Lombardi and A. Crewe, "Economic MEMS based 3-axis water proof accelerometer for dynamic geo-engineering applications", *Soil Dynamics and Earthquake Engineering*, 36, pp. 111-118, 2012

A. Murali Krishna and G. Madhavi Latha, "Modelling the dynamic response of wrap faced reinforced soil retaining walls", *ASCE International Journal of Geomechanics*, 12 (4), pp. 1-12, 2012

S. Gokhale, "Urban air pollution exposure - measurement, modelling and assessment", *The Open Atmospheric Science Journal*, 6, pp. 61-92, 2012

S. Talukdar, B. Kumar and S. Dutta, "Predictive capability of bedload equations using flume data", *Journal of Hydrology and Hydromechanics*, 60 (1), pp. 45-56, 2012

V. Deshpande and B. Kumar, "Review and assessment of the theories of stable alluvial channel design", *Water Resources*, 39 (4), pp. 481-487, 2012

R. Hiremath and B. Kumar, "Low cost bioenergy options for rural India", *Journal of Management in Engineering, ASCE*, 28 (1), pp. 70-80, 2012

B. Kumar and T. Tamphasana Devi, "Oxygen transfer with circulation flow rate in un baffled surface aerator", *Chemistry and Chemical Technology*, 6 (2), pp. 203-207, 2012

Bimlesh Kumar and T. T. Devi, "Microscale of turbulence and oxygen transfer in surface aerator", *Journal of Environmental Research and Development*, 6 (3), pp. 569-574, 2012

A. S. Kalamdhad, M. Khwairakpam and A. A. Kazmi, "Drum composting of municipal solid waste (MSW)", *Environmental Technology*, 33(3), pp. 299-306, 2012

G. S. Dhal, W. R. Singh, M. Khwairakpam and A. S. Kalamdhad, "Composting of water hyacinth using saw dust/rice straw as a bulking agent", *International Journal of Environmental Sciences*, 2 (3), pp. 1223-1238, 2012

M. Saharia and R. K. Bhattacharjya, "Geomorphology-based time-lagged recurrent neural networks for runoff forecasting", *KSCCE Journal of Civil Engineering*, 16 (5), pp. 862-869, 2012

### Computer Science and Engineering

A. Sur, R. Vignesh and J. Mukherjee, "Pixel rearrangement based statistical restoration scheme reducing embedding noise", *Multimedia Tools and Applications*, DOI: 10.1007/s11042-012-1078-0, 2012

A. Sur, R. Vignesh and J. Mukherjee, "Secure steganography using randomised cropping", *LNCS Transactions on Data Hiding and Multimedia Security*, VII, 7110, pp. 82-95, 2012

P. Roy and P. K. Das, "A hybrid VQ-GMM approach for identifying Indian languages", *International Journal of Speech Technology*, DOI: 10.1007/s10772-012-9152-6, 2012

### Electronics and Electrical Engineering

D. Dixit and P. R. Sahu, "Symbol error rate of rectangular QAM with best-relay selection in cooperative systems over rayleigh fading channels", *IEEE Communication Letters*, 16 (4), pp. 466-469, 2012

D. Padhan and S. Majhi, "An improved parallel cascade control structure for processes with time delay", *Journal of Process Control*, 22 (5), pp. 884-898, 2012

A. Talwai, D. Sengupta and K. Karthik, "A transparent encryption scheme for watermarked biometric and medical images", *International Journal of Computer and Electrical Engineering*, 4 (3), pp. 278-282, 2012

### Humanities and Social Sciences

A. Nath and R. Mokashi-Punekar, "The mother-daughter relationship: Motherhood and sexuality in Manju Kapur's *Difficult Daughters*", *The IUP Journal of Commonwealth Literature*, IV (1), pp. 22-31, 2012

S. Mahanta, "Locality in exceptions and derived environments in vowel harmony", *Natural Language and Linguistic Theory*, DOI:10.1017/S0025100312000096, 2012

S. Mahanta, "Assamese: Language description", *Journal of the International Phonetic Association*, 42 (2), pp. 217-224, 2012

B. Khataniar, A. Barua, and R. Talukdar, "Dwindling forests in Assam, India: Causes and remedies", *The Clarion: International Multidisciplinary Journal*, 1 (2), pp. 149-154, 2012

A. Barua, S. Katyaini, B. Mili, "Understanding the multifaceted attributes to rural poverty while assessing the water-poverty-climate change linkage in the Indian Eastern Himalaya", *International Journal of Green Economics*, 6 (1), pp. 73-94, 2012

### Mathematics

S. Mohapatra and S. N. Bora, "Oblique wave scattering by an impermeable ocean-bed of variable depth in a two-layer fluid with ice-cover", *ZAMP (Zeitschrift fuer Angewandte Mathematik und Physik)*, DOI: 10-1007/s00033-012-0210-3, 2012

M. Hassan and S. N. Bora, "Exciting forces for a pair of coaxial hollow cylinder and bottom-mounted cylinder in water of finite depth", *Ocean Engineering*, 50, pp. 38-43, 2012

D. Kalita and S. Pati, "On the spectrum of 3-coloured digraph", *Linear and Multilinear Algebra*, 60 (6), pp. 743-756, 2012

J. C. Kalita and S. Sen, "Triggering asymmetry for flow past circular cylinder at low Reynolds numbers", *Computers and Fluids*, 59, pp. 44-60, 2012

J. C. Kalita and S. Sen, "The Biharmonic approach for unsteady flow past an impulsively started circular cylinder", *Communications in Computational Physics*, 12 (4), pp. 1163-1182, 2012

K. Mondal, P. S. Mandal and B. P. Sinha, "Localisation in presence of multipath effect in wireless sensor networks", *Lecture Notes in Computer Science*, 7277, pp. 138-149, 2012

### Mechanical Engineering

A. S. Sharma, V. S. Rawat, V. N. Kulkarni and U. K. Saha, "Numerical investigations on flow control over blended wing body transonic aircraft using synthetic-jet actuators", *AIAA Journal of Aircraft*, 49 (2), pp. 532-545, 2012

### Physics

B. R. Boruah, "Axial separation of orthogonally polarised focal field components due to a radially polarised beam", *Journal of the Optical Society of America A: Optics, Image Science and Vision*, 29 (7), pp. 1269-1276, 2012

S. Dhara and P. K. Giri, "Improved fast photoresponse from Al doped ZnO nanowires network decorated with Au nanoparticles", *Chemical Physics Letters*, 541, pp. 39-43, 2012

S. Dhara and P. K. Giri, "Organic CuPc coating induced improved photoluminescence and photoconductivity of ZnO nanowires array", *Functional Materials Letters*, 5 (1), pp. 1250021 (6 pages), 2012

S. Dhara and P. K. Giri, "Stable p-type conduction and enhanced photoconductivity from nitrogen-doped ZnO thin films", *Thin Solid Films*, 520 (15), pp. 5000-5006, 2012

D. K. Singh, P. K. Iyer and P. K. Giri, "Distinguishing defect induced intermediate frequency modes from combination modes in Raman spectrum of single walled carbon nanotubes", *Journal of Applied Physics*, 111, 064304, 2012

P. Kumar and A. K. Sarma, "Gaussian and sinc-shaped few-cycle pulse driven ultrafast coherent population transfer in  $\tilde{E}$ -like atomic systems", *Physical Review A*, 85, pp. 043417, 2012

### Energy

S. Khanna, S. Jaiswal, A. Goyal and V. S. Moholkar, "Ultrasound enhanced bioconversion of glycerol by clostridium pasteurianum: A mechanistic investigation", *Chemical Engineering Journal*, DOI:10.1016/j.cej.2012.06.040, 2012

S. Khanna, A. Goyal and V. S. Moholkar, "Bioconversion of biodiesel derived crude glycerol by immobilised clostridium pasteurianum: Effect of temperature", *International Journal of Chemical and Biological Engineering*, 64, pp. 421-424, 2012

H. A. Choudhury, A. Choudhary, M. Sivakumar and V. S. Moholkar, "Mechanistic investigation of the sonochemical synthesis of zinc ferrite", *Ultrasonic Sonochemistry*, DOI : 10.1016/j.ultsonch.2012.06.006, 2012

## Nanotechnology

Md Palashuddin Sk, A. Jaiswal, A. Paul, S. S. Ghosh and A. Chattopadhyay, "Presence of amorphous carbon nanoparticles in food caramels", *Scientific Reports*, 2, pp. 383, 2012

S. Sharma, P. Sanpui, A. Chattopadhyay and S. S. Ghosh, "Fabrication of antibacterial silver nanoparticle—sodium alginate–chitosan composite films", *RSC Advances*, DOI: 10.1039/c2ra00006g, 2012

## Book / Book Chapter

### Humanities and Social Sciences

M. K. Dutta and S. Borbora (Eds.), *Governance Issues and Gender Aspects in Development: A North East India Perspective*, Papyrus, Guwahati, 2012 (ISBN: 9789381287125)

### Civil Engineering

B. Kumar and R. B. Hiremath, "Energy Planning for Sustainable Development in India" *Handbook of Sustainable Management*, Eds. C. N. Madu and Chu-hua Kuei, Imperial College Press, London, pp. 641-666, 2012 (ISBN: 9789814352813)

B. Kumar and A. R. K. Rao, "Environmental Impacts (Costs) of Hydropower Generation in India", *Environmental Scenario in India: Successes and Predicaments*, Routledge Publications, pp. 135-148, 2012 (ISBN: 0415666554)

### Electronics and Electrical Engineering

S. Majhi, "Control Structures for Time Delay Systems", *PID Control in the Third Millennium*, Eds. Ramon Vilanova, Antonio Visioli, XIV, pp. 235–254, 2012

### Humanities and Social Sciences

P. Dutta and M. K. Dutta "An Analysis of fiscal and Debt sustainability in Assam in Recent Decades", *A Tapestry of Research in Economics in North East India*, Eds. N. Roy and R. Mandal, Assam University, Silchar, 2012

## Library Operation Time Extended

In its continuous effort to provide support to faculty, students, researchers and general reader, the Central Library has extended its operation time from 1 June 2012. Now the library opens 365 days a year from 8 in the morning to 12 midnight .

## Conference/Workshop Organised

Dr. D. Udaya Kumar, Assistant Professor, Design, organised a QIP Short Term Course (STC) on 'Graphic Design' at Department of Design, IIT Guwahati; and conducted a workshop on Magazine Design during Typography Day 2012, an International Conference organised by IDC, IIT Bombay during 3-5 March 2012.

Dr. Keyur Sorathia, Assistant Professor, Design, organised a tutorial on 'Tangible User Interface' at International Conference on Human Computer Interaction India (HCI 2012), 17-22 April 2012.



Inauguration ceremony of the QIP Short Term Course on Graphic Design

## Lecture Series on Advances in Seri Biotechnology, and Genomics and Breeding

IIT Guwahati Biotech Hub, Centre for the Environment, organised a lecture series on two themes - 'Advances in Seri Biotechnology' and 'Advances in Genomics and Breeding' on 25 April and 2 May 2012. Prof. J. Nagaraju, Centre for DNA Fingerprinting and Diagnostics, Hyderabad gave a speech on 'Secrets of Silk' on 25 April 2012. Prof. Yong Pyo Lim, Chungnam National University, Daejeon, Korea gave a speech on 'Brassica genome sequencing and beyond' on 2 May 2012. Furthermore other experts and professionals in these areas gave lectures and shared their experiences.

## Symposium on Environment and Us



A one day symposium on Environment and Us was organised on 5 June 2012 on the occasion of World Environment Day. Lectures on various environmental issues were given by Dr. Utpal Bora, Associate Professor, Biotechnology; Prof. Chandan Mahanta, Civil Engineering; Prof. Ratnajit Bhattacharjee, Electronics and Electrical Engineering; Dr. Mrinal Kanti Dutta, Associate Professor, Humanities and Social Science. The lecture session was followed by sessions of poster presentation. The programme was coordinated by Centre for the Environment.

## New Research Projects

### Biotechnology

**Title:** Studies on structure of enzymes and their interaction with nanostructured materials for bioelectronics devices and other applications; **Sponsor:** DBT; **Principal Investigator:** Pranab Goswami (Collaborating institutes: Institute of Microbial Technology (IMTECH), Chandigarh and Institute of Advance Studies in Science and Technology (IASST), Guwahati)

**Title:** Studies on trypanothione synthetase, a key enzyme of redox metabolism of *Leishmania donovani*; **Sponsor:** DBT; **Principal Investigator:** Vikash Kumar Dubey

### Chemical Engineering

**Title:** Process intensification of flotation by ionic microbubbles; **Sponsor:** CSIR; **Principal Investigator:** S. K. Majumder

**Title:** Flow characterisation and intensification of pressure drop reduction of heavy crude oil-water two-phase flow through inclined conduit; **Sponsor:** CSIR; **Principal Investigator:** T. K. Mandal

### Civil Engineering

**Title:** Composting of water hyacinth using different composting technologies; **Sponsor:** SERC, DST; **Principal Investigator:** Ajay Kalamdhad

### Computer Science and Engineering

**Title:** Development of pronunciation lexicon based on experimental study of phonetics and phonemics of Indian languages; **Sponsor:** Department of Information Technology; **Principal Investigator:** P. K. Das

### Mechanical Engineering

**Title:** Developing light weight, durable and user friendly artificial limbs through nanotechnology-based modification of conventional materials and optimising mechanical component design for enhancing their functional performance; **Sponsor:** DBT; **Principal Investigator:** S. Kanagaraj (Collaborating institute: North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong)

### Physics

**Title:** Design and implementation of confocal microscopes with spatial light modulator based beam scanning and programmable beam manipulation mechanism; **Sponsor:** SERB, DST; **Principal Investigator:** Bosanta R. Boruah

### Energy

**Title:** Algal route to CO<sub>2</sub> capture; **Sponsor:** CSIR; **Principal Investigator:** A. K. Ghoshal

**Title:** Studies on enzymes and interactions of nano particles for bioelectronics and other applications; **Sponsor:** DBT; **Principal Investigator:** P. Goswami

### Nanotechnology

**Title:** Controlled growth and studies on Semiconductor Nanowire heterostructures for Solar Photovoltaic applications; **Sponsor:** BRNS; **Principal Investigator:** P. K. Giri

## New Joinings



S. P. Kanaujia  
Assistant Professor  
Biotechnology



Manish Kumar  
Assistant Professor  
Biotechnology



Sachin Kumar  
Assistant Professor  
Biotechnology



Abinash K. Swain  
Assistant Professor  
Design



Dipankar N. Basu  
Assistant Professor  
Mechanical  
Engineering



Manas Das  
Assistant Professor  
Mechanical  
Engineering



Hrishikesh P. Gadgil  
Assistant Professor  
Mechanical Engineering



Narayana Reddy  
Assistant Professor  
Mechanical Engineering



Gavara Madhusudhana  
Assistant Professor  
Mechanical Engineering



Udit Raha  
Assistant Professor  
Physics

## Awards and Honours

Dr. Vikash Kumar Dubey, Associate Professor, Biotechnology received Bharat Joyoti Award for meritorious services and outstanding performance by India International Friendship Society in May 2012.

Mr. Mitun Chakraborty, a PhD student of Biotechnology, received best poster presentation award at World Congress on Biotechnology held at Hyderabad, during 4-6 May 2012.

Dr. Arindam Dey, Assistant Professor, Civil Engineering, was selected as the Joint Secretary, Indian Geotechnical Society Guwahati North-East Local Chapter for the period 2012-2013.

Dr. Purandar Bhaduri, Associate Professor, Computer Science and Engineering, was selected as part of the DAAD-IIT Exchange of Senior Scientists Programme to visit the Technical University of Munich in June 2012 to work on a project.

Dr. Sougata Karmakar, Assistant Professor, Design has been selected as Editorial Board Member for International Journal of Ergonomics published by CSC Journals, Malaysia.

Dr. D. Udaya Kumar, Assistant Professor, Design, (1) Received Designer of the Year 2012 Award, India Design Forum, (2) Designed the logo for Integrated Guwahati Flood Management Project, DDMA, Guwahati; (3) Designed the logo for District Disaster Management Authority (DDMA), Guwahati; (4) Jury Member, Photography and Slogan writing competition, Assam State Disaster Management Authority, Guwahati; (5) Member of Selection and Assessment Panel, 2012 Post Graduate programme, Welingkar Institute of Management Development and Research, Mumbai

Prof. Manmohan Pandey, Mechanical Engineering, was appointed Member of the Board of Directors of American Nuclear Society - India Section (ANS-IS) in April 2012.

Dr. S. Kanagaraj, Assistant Professor, Mechanical Engineering, chaired a session at the Ninth World Biomaterials Congress, Chengdu, China held during 1-5 June 2012.

Dr. P. K. Giri, Associate Professor, Physics, was awarded the JSPS Invitation fellowship for research (long-term) in Japan by the Japanese Society for Promotion of Science in 2012.

Ms. Amrita Ranjan, research scholar, Centre for Energy received best poster award at the national conference on Energy scene in north-east with special emphasis on renewable energy, organised by SECONE at Guwahati on 28 April 2012.

## PhDs Completed During April–June 2012

Department/Centre	No. of Students
Biotechnology	4
Chemistry	4
Civil Engineering	2
Computer Science and Engineering	2
Design	1
Electronics and Electrical Engineering	1
Mechanical Engineering	3
Physics	3
Centre for the Environment	1
<b>Total</b>	<b>21</b>

## Mathematics Training and Talent Search Programme



A four-week workshop on mathematics titled Mathematics Training and Talent Search (MTTS) Programme was held in the Department of Mathematics during 14 May – 9 June 2012. About thirty undergraduate students drawn from various parts of the country were given intensive training in basic courses in mathematics. The workshop was a part of an annual national programme supported by the National Board for Higher Mathematics, DAE, Govt. of India, and held at several centres in the country including IIT Guwahati, IIT Kanpur and Bharathidasan University, Tiruchirapalli. Prof. S. Natesan, Mathematics, was the coordinator of the programme.

## Workshop on Emerging Trends in Geotechnical Engineering



*Dignitaries on the dias at the inaugural ceremony of ETGE-2012*

A national workshop on Emerging Trends in Geotechnical Engineering (ETGE-2012) was organised at IIT Guwahati on 8 June 2012 by the Department of Civil Engineering

in association with Indian Geotechnical Society Guwahati Chapter (NE). Prof. M. R. Madhav, Past Vice-President (Asia), ISSMGE; Prof. A. Sridharan, ISA Honorary Scientist; Prof. K. S. Rao, President IGS New Delhi; Prof. U. C. Kalita, Chairman IGS Guwahati Chapter (NE); and Prof. A. K. Sarma, Head, Dept of Civil Engineering, IIT Guwahati participated in the inauguration and release of the CD workshop proceedings. The workshop presented 12 lectures on topics related to some of the emerging trends in geotechnical engineering practice and research activities by eminent researchers and practitioners in geotechnical engineering. About 135 academicians, practitioners/professionals and students participated in the workshop. The national executive committee meeting of the Indian Geotechnical Society and general body meeting of IGS Guwahati Chapter (NE) were held, separately, on the same day after the workshop. Dr. A. Murali Krishna, Assistant Professor, Civil Engineering, IIT Guwahati; Dr. Diganta Goswami, AEC Guwahati; and Dr. Utpal K. Barua, AEI Guwahati were the organising secretaries of the workshop.

## Technology Vision 2035 for NE Region

IIT Guwahati organised a brainstorming meeting on 'Technology Vision 2035' to capture the aspiration and vision of the people of north-eastern states on 19 June 2012. The meeting was organised in association with the TIFAC (Technology Information,

Forecasting and Assessment Council), an autonomous body under the Department of Science and Technology, Govt. of India.

Over 40 invited experts, stakeholders, intellectuals and institution heads from all over the Northeast participated in the brainstorming session to generate the vision. Dr. Anil Kakodkar, eminent scientist and currently Chairman, TIFAC conducted the proceedings of the high powered



*Dr. Anil Kakodkar (2L) and Prof. Gauam Barua (1L) along with others during the proceedings of the meeting*

event. The aim of the session was to gather comprehensive insights that will be included in the vision document. Experts and intellectuals from the region came up with over a hundred innovative ideas after raising and discussing issues that will mould the future of NE region by 2035. The brainstorming exercise is one amongst others being conducted region wise all over the country by TIFAC.

The themes covered in this day-long session ranged from Information Communication Technology and its use in Education, Health, Transportation and Environment to Indigenous Knowledge Protection, Energy, Food and Agriculture. Experts, including Dr. A.K. Goswami, former Director of ASTEC, Dr. N.C. Bora, CMD, GNRC, Dr. A. Santa Singh, Director, NEIGRIHMS, Dr. P. Bharali, former Director, Exploration, OIL India Ltd., and many other eminent personalities actively participated in the thought provoking daylong exercise and stated their visions for 2035.

Chairing the session panels — that included Prof. Gautam Barua, Director, IIT Guwahati, Dr. Gautam Goswami, Director TIFAC and Prof. Pradeep Yammiyavar, Head CET, IIT Guwahati — Dr. Kakodkar expressed satisfaction on the deliberations and pointed out the importance of forethought for the future under each of the themes as expressed by the delegates.

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