

Director's Report

Fifteenth Convocation Saturday, 8 June 2013

Indian Institute of Technology Guwahati

Dr. M. M. Pallam Raju, Honourable Union Minister of Human Resource Development, Government of India, Dr. R. P. Singh, Chairman, Board of Governors, members of the Board of Governors, members of the Senate, invited guests, graduating students, faculty and staff of the Institute, parents and guardians, ladies and gentlemen – it is my pleasure to welcome you all to the Fifteenth Convocation of IIT Guwahati.

I take this opportunity to thank Dr. Pallam Raju for accepting our invitation to be the Chief Guest of this Convocation and for kindly agreeing to deliver the Convocation Address.

Today, BTech, BDes, MTech, MDes, MSc, MA and PhD degrees are going to be awarded to **940** students. I extend my heartiest congratulations to all of them.

Now I am going to present a brief report on the activities and achievements of the Institute during the year 2012-2013.

THE BOARD OF GOVERNORS

Dr. R. P. Singh has been appointed as Chairman, Board of Governors of IIT Guwahati for another term of three years, till February 2016. Prof. Mihir Kanti Chaudhuri, Vice-Chancellor, Tezpur University, Mr. Pydah Venkatanarayana, Member, Pydah Educational Academy, and Dr. D. B. Goel, former Professor, IIT Roorkee joined the Board as nominees of the IIT Council in April 2013. Prof. P. S. Robi, Department of Mechanical Engineering, IIT Guwahati joined the Board in January 2013 as a nominee of the Senate. On behalf of the Board, I welcome them all to the Board and I thank the outgoing Board members, Mr. Provash Chandra Neogy, Mr. K. Shankar Narayanan, Shri N. K. Sinha and Prof Samaren Dandapat, for their contributions during their tenure.

ACADEMIC ACTIVITIES

The Institute offers

 Bachelor of Technology (BTech) Programmes in Biotechnology (BT), Chemical Engineering (CL), Chemical Science and Technology (CT), Civil Engineering (CE), Computer Science and Engineering (CS), Electronics and Communication Engineering (EC), Electronics and Electrical Engineering (EE), Engineering Physics (EP), Mathematics and Computing (MC), and Mechanical Engineering (ME);

- Bachelor of Design (BDes) programme in Design (DD);
- Master of Technology (MTech) programmes in BT, CL, CE, CS, EE, and ME;
- Master of Design (MDes) programme in Design;
- Master of Science (MSc) programmes in Chemistry (CH), Mathematics and Computing (MC), and Physics (PH);
- Master of Arts (MA) programme in Development Studies (DS) in the Department of Humanities and Social Sciences (HS);
- Doctor of Philosophy (PhD) programmes in all departments and in the Centres for Energy (EN), the Environment (EV), and Nanotechnology (NT);
- Dual (MTech+PhD) programme in the Department of Computer Science and Engineering (CS)

The total number of enrolled students in 2012-2013 is 4506. Of these, 48.36% are post-graduate students. The detailed break up is –

Preparatory Programme: 07

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Batch	BT	CE	CL	CS	СТ	DD	EC	EE	EP	МС	ME	Total
Fourth Year (2009 Batch)	32	50	47	68	30	23	59	29	27	32	68	465
Third Year (2010 Batch)	38	58	57	80	30	41	73	44	28	42	80	571
Second Year (2011 Batch)	40	64	57	80	34	34	80	44	33	45	79	590
First Year (2012 Batch)	51	79	66	80	44	46	72	42	40	45	80	645
From Earlier Batches									49			
Total									2320			

Four Year BTech and BDes: 2320

Two -year MSc: 229

Batch	СН	МС	PH	Total
Second Year (2011 Batch)	30	34	37	101
First Year (2012 Batch)	39	48	38	125
From Earlier Batches				3
Total				229

Two-year MA: 72

Batch	DS	Total
Second Year (2011 Batch)	46	46
First Year (2012 Batch)	26	26
Total		72

Two-year MTech: 711

Batch	BT	CE	CL	CS	EE	ME	Total	
Second Year (2011 Batch)	27	73	46	54	44	74	318	
First Year (2012 Batch)		90	55	56	57	91	381	
From Earlier Batches						12		
Total	Total							

Two-year MDes: 48

Batch	DD	Total
Second Year (2011 Batch)	20	20
First Year (2012 Batch)	28	28
Total		48

Dual Degree (MTech + PhD): 06

Batch	CS	Total
Second Year (2011 Batch	03	03
First Year (2012 Batch	03	03
Total		06

PhD: 1113

BT	CE	СН	CL	CS	DD	EE	EN	EV	HS	MA	ME	NT	PH
123	104	164	93	45	33	139	26	16	77	55	124	18	96

The new academic session (2012-2013) commenced from July 2012. 1468 students were admitted in various programmes across all the Departments/Academic Centres in July 2012. This includes 7 students in the Preparatory Programme. Another set of 73 students were admitted in PhD programmes in various Departments/Academic Centres in January 2013. Thus a total of **1534** students were admitted in the academic year 2012-2013. The details of new admission are given in the table below:

Doportmont/Contro	BTech/	MSc/	MTech/	חאם
Department/Centre	BDes	MA	MDes	PND
Biotechnology	51	-	32	35
Chemical Engineering	66	-	55	32
Chemistry	44	39	-	42
Civil Engineering	79	-	90	38
Computer Science and Engineering	80	-	56	8
Design	46	-	28	8
Electronics and Electrical Engineering	114*	-	57	31
Humanities and Social Sciences	-	26	-	17
Mathematics	45	48	-	18
Mechanical Engineering	80	-	91	43
Physics	40	38	-	28
Centre for Energy	-	-	-	9
Centre for the Environment	-	-	-	7
Centre for Nanotechnology	-	-	-	6
Total	645	151	409	322

* BTech in Electronics and Communication Engineering: 72, and BTech in Electronics and Electrical Engineering: 42.

Today, **940** students, who have successfully completed their programmes will receive their degrees in the following disciplines:

Number of students obtaining degrees in 2013

Four Year BTech and BDes

Total	BT	CE	CL	CS	СТ	DD	EC	EE	EP	MC	ME
431	32	46	44	59	27	23	57	24	26	31	62

Two year MA

Total	DS
44	44

Two year MSc

Total	CH	MC	PH
95	31	32	32

MTech/MDes

Total	BT	CE	CL	CS	DD	EE	ME
305	30	59	38	57	20	46	55

PhD

Department	No. of Students
BT	4
CE	5
CL	2
СН	18
CS	1
DD	2
EE	8
EN	4
EV	3
HS	3
MA	3
ME	3
NT	1
PH	8
TOTAL	65

ACADEMIC INFRASTRUCTURE DEVELOPMENT

A number of new equipment have been added to the laboratories of the Departments and Centres. Some of the major equipment and facilities acquired by the Institute during the last year are –

- Radio Frequency Impedance / Material Analyser ₹ 78 lakhs (CIF)
- Surface Area and Pore Size Analyser and High Pressure Surface Analyser ₹ 76.14 lakhs (CIF)
- High Precision Non Contact Computerised Measurement of Surface Texture Apparatus – ₹ 50.5 lakhs (ME)
- Servo-Pneumatic Universal Testing Machine ₹ 47.8 lakhs (CE)
- Optical Coherence Tomography (OCT) Machine ₹ 46.4 lakhs (EEE)
- Multi Channel Analysis of Surface Wave Apparatus (MASW) ₹ 46.3 lakhs (CE)
- Cyclic Triaxial Apparatus ₹45 lakhs (CE)

RESEARCH AND DEVELOPMENT

The number of PhD students on campus is increasing every year. This year has seen a big jump in numbers, growing from 895 students last year to 1113 this year. The current faculty to PhD students' ratio stands at a satisfactory 3.43. The number of graduating PhD students is still low at 65. This will increase in the coming years as we have been admitting more than 200 students since the last three years.

The other component of our research programme is sponsored (or directed) research. There are 240 research personnel engaged in various research projects at the Institute.

We offer a 'Start-up Research Grant' to newly-joined faculty members of the Institute to start their research activities. During this year, 22 projects worth ₹ 1.08 crores have been sanctioned under this scheme. A total of 116 projects were sanctioned till date.

During the year 2012-2013 over 350 research and development projects were in progress, having a total sanctioned value of ₹ 151 crores. In the year 2012-2013,

IIT Guwahati received new projects of about ₹ 42.6 crores. This is in comparison to ₹ 28.35 crores last year, while the total funds received were ₹ 37.4 crores as compared to ₹ 27.2 crores. The R&D projects were mainly sponsored by Government Ministries and Departments with major support coming from Ministries of Environment (MoE), Human Resource Development (MHRD), Steel, Departments of Science and Technology (DST), Biotechnology (DBT), Atomic Energy (DAE), Electronics and Information Technology (DeitY), Council of Scientific and Industrial Research (CSIR) and Defence Research Labs (DRL). The following table provides a comparison of this year's R&D project profile with that of last year. The numbers of new sponsored research projects have increased considerably from last year. Similarly, the total sanctioned value of the projects has also increased from ₹ 28.35 crores to ₹ 42.60 crores.

Particulars	2011-2012	2012-2013
New sponsored projects received	67	103
New consultancies received	120	133
Total sanctioned value of the new sponsored	28.35	42.60
projects (in crores of ₹)	20.55	42.00
Total sanctioned value of the new consultancy	2 20	2.30
projects and others (in crores of ₹)	2.20	
Total amount received for all projects (new and	27.19	37.36
ongoing) (in crores of ₹)	27.10	57.50
Total amount received for all consultancy		
projects and others (new and ongoing) (in	2.62	3.08
crores of ₹)		

Some of the major research projects received during the year are -

Project Title	Funding Agency	Dept./ Centre	Amount Sanctioned (₹ in lakhs)
X-ray crystallographic structure elucidation of key drug target enzymes of <i>Leishmania donovani</i>	DBT	ВТ	72.69
Design and application of a robust process analytical technology (PAT) platform for real-time monitoring and	DBT	BT	71.45

control of hyaluronic acid production			
Development of bioplastic based sustainable nanobiocomposite food packaging 'Sustain-NanoPACK'	DBT	CL	97.43
Super critical fluid extraction of natural antioxidants for food preservation from spices and non-conventional fruits endemic in North Eastern region	DBT	CL	75.65
CO2 capturer by CO2 selective thin film composite polymeric membrane containing amine carrier	DST	CL	73.96
Developing of new conjugated materials for optoelectronic devices	DST	CH	84.00
New aminocatalytic asymmetric transformations	DST	СН	55.66
Development of Indo-Highway capacity manual (HCM)	CSIR- CRRI	CE	100.45
Design, development of a watermarking system for scalable video authentication	DeitY	CSE	102.05
Reducing cache access time in tiled chip multi processors	DeitY	CSE	79.00
Online testing of complex VLSI circuits using FDD theory of discrete event system	DeitY	CSE	124.00
Multi-model broadcast analytics- structured evidence visualisation for event of security concern	DeitY	EEE	139.51
Design and implementation of a blind assistance system using FPGAs and sensors	DeitY	EEE	70.26
Acoustic and tonal features based analysis of Mizo	DeitY	HSS	73.68
Development of a general purpose CFD solver over a hybrid unstructured grid	BARC	ME	342.16
Design development of a controller for bridge configured based bearing less motor	DeitY	ME	90.35
Setting-up Rural Technology Action Group-North-East (RuTAG-NE)	Prin. Sc.Advis	ME	110.85

	er to the Cabinet		
Development of copper (Cu)- carbon nanomaterial (CN) based nanocomposite formulations for heat recovery in different processes in a steel plant	Ministry of Steel	ME	336.00
Design and implementation of confocal microscopes with spatial light modulator based beam scanning and programmable beam manipulation mechanism	DST	PH	89.66
Molecular investigation of epigenetic modification in exposure to environmental polluting using Neurospora crassa as a model system	DBT	ENV	55.00

DBT – Department of Biotechnology, Govt. of India

DST - Department of Science and Technology, Govt. of India

BARC – Bhabha Atomic Research Centre

CSIR-CRRI – Council of Scientific and Industrial Research-Central Road Research Institute

DeitY – Department Electronics and Information Technology

In addition to sponsored Research Projects, IIT Guwahati undertakes consultancy assignments for various State Government Departments, Railways, National Highways Authority of India, Oil and Gas Sector, Construction and Infrastructure Companies, Power Sector, Educational Institutes, Health and Pharmaceutical Industries and Financial Institutions. Consultancy projects are contributing to the industrial, economic and social growth of the country with special emphasis on this region.

A total of 133 consultancy projects were carried out during the year. The total value of consultancy projects undertaken during this year is ₹ 2.30 crores, and ₹ 3.08 crores was received for all consultancies.

The IIT Guwahati Technology Incubation Centre (IITG-TIC) was established to facilitate co-operation and interaction between the Institute and entrepreneurs

in various sectors of science and engineering and promote innovation. Four incubatees are currently working in IT and Electronics related projects. Two more incubatees are to join very soon.

IIT Guwahati houses the regional National Board for Higher Mathematics (NBHM) library for North East Region to facilitate studies of higher mathematics. A grant of ₹ 26.55 lakhs was received from Department of Atomic Energy, Govt. of India to procure books, journals and periodicals during the reported year under this project.

FACULTY AND STAFF

The faculty strength at the end of March 2013 was 325. This is an increase of 29 from 296 at the end of last year.

The number of non-faculty staff increased by 21 to reach a total number of 357 at the end of financial year 2012-13. This is a jump from 336 in the previous year.

PUBLICATIONS

The faculty members of the Institute have been actively publishing research papers in international and national journals as well as in conference proceedings. The number of publications during the past one year is:

Papers in Journals:	592
Papers in Conference Proceedings:	548

In the previous year 577 papers in journals and 583 papers in conference proceedings were published by the faculty of the Institute.

CONFERENCES/WORKSHOPS/SCHOOLS/COURSES

Various conferences, seminars, workshops and schools were organised by the Departments and Centres of the Institute during the year. A few of them are –

- Technology Vision 2035 Brainstorming Session, North East Region, 19 June 2012.
- 13th Indo-US Cytometry Workshop (IUCW 2012), 8-10 October 2012.
- Workshop on Mathematical Finance (WMF 2012), 29 October 3 November 2012.

- Workshop on Analysis of Biological Networks, 6-7 November 2012.
- The first IIT Guwahati OSA (The Optical Society) Student Chapter Workshop on Optics, 15-17 November 2012.
- National Conference on Frontiers in Chemical Sciences (FICS 2012), 2-4 December 2012.
- 21st International Symposium on Processing and Fabrication of Advanced Materials (PFAM-21), 10-13 December 2012.
- International Conference on Information System Security (ICISS 2012), 15-19 December 2012.
- Theoretical Chemistry Symposium (TCS2012), 19-22 December 2012.
- International Conference on Numerical Linear Algebra and its Applications (NLAA 2013), 15-18 January 2013.
- Typography Day 2013, 7-9 March 2013.
- National conference on Recent Trends in the study of the Compact Objects: Theory and Observation (RETCO-2013), 11-13 March 2013.

MEMORANDA OF UNDERSTANDING

10 new Memoranda of Understanding (MoU) were signed with various educational and research institutes across the world during 2012-13. The MoUs are mainly on academic and research collaborations. Some of these institutes are RWTH Aachen University (Germany), Politechno de Milano (Italy), Chubu University (Japan), Chung Yuan Christian University (Taiwan), Victoria University of Wellington (New-Zealand), and GIFU University (Japan). Four MoUs have been renewed. At present the Institute has 36 active MoUs.

Currently there are 14 foreign students enrolled for various fulltime programmes at IIT Guwahati. A student from the National University of Singapore (NUS) attended IIT Guwahati for one semester during 2012-2013 under the student exchange programme. Besides, 10 students and 3 faculty members of the Institute obtained fellowships under Erasmus Mundus Programme which aims at enhancing quality in higher education through scholarships and academic cooperation between Europe and the rest of the world.

FACULTY ACHIEVEMENTS

A number of faculty received awards during their year. Some of the major awards were:

Dr. V. V. Dasu, Biotechnology, received 'Talented Industrial Biotechnologist Award' for 2012 by Association of Biotechnology and Pharmacy, India.

Dr. V. K. Dubey, Biotechnology, received Malviya Memorial Young Faculty Award for 2011 by Biotech Research Society of India in November 2012.

Dr. L. Rangan, Biotechnology, won National Academy of Biological Sciences (NABS) Women Scientist Award for the year 2011-2012 in May 2012.

Dr. G. Pugazhenthi, Chemical Engineering, received IEI Young Engineers Award in Chemical Engineering for year 2012-2013 from Institution of Engineers (India).

Prof. A. Chattopadhyay, Chemistry, received the first Young Career Award in Nano Science and Technology (2013), instituted by the Nanomission of the Department of Science and Technology, Govt. of India.

Dr. C. K Jana and Dr. S. C. Pan, Chemistry received Young Scientist Research Awards in Basic Sciences from Department of Atomic Energy (DAE), Govt. of India.

Dr. A. Kalamdhad, Civil Engineering, received 'ISTE- GSITS national award for best research by young teachers (below 35 years) of engineering colleges for the year 2012' from Indian Society for Technical Education India.

Prof. S. Dutta, Civil Engineering, was awarded the R. J. Garde research award of Indian Society of Hydraulics.

Dr. S. Karmakar, Design was awarded Professor Sachidananda Banerjee Memorial Young Scientist Research Award for the year 2012 by Physiological Society of India. Dr. D. Udaya Kumar, Design, was awarded Bharat Ratna Rajiv Gandhi Yuva Shakti National Award for the year 2012 by Academy of Grassroots Studies and Research of India.

Dr. D. Udaya Kumar, Design, received Designer of the Year 2012 award given by India Design Forum.

Mr. K. Sorathia, Design, Amit Ranjan, and Jagriti (both alumni of the Institute) won Gandhian Young Technological Innovation Award 2013.

Dr. M. K. Bhuyan, Electronics and Electrical Engineering, received the National Award for Best Applied Research/Technological Innovation by Government of India.

Prof. S. C. Mishra, Mechanical Engineering, has been elected a Fellow of American Society of Mechanical Engineers (ASME).

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

Our congratulations to all of them.

CONSTRUCTION AND CAMPUS DEVELOPMENT

The construction activities of the Institute are increasing considerably in conformity with the increase in student intake. There are now nine hostels for men and one hostel for women.

The ninth boys' hostel (named Brahmaputra) with a capacity of 1000 was occupied in July 2012. The construction work of the eighth boys' hostel with a capacity of 504 is almost complete. Construction of the tenth boys' hostel was begun this year. This hostel will have 184 rooms with attached toilets for research / foreign students and 772 normal single rooms. On the completion of the above boys' hostels the total capacity of boys' hostels would be 5160.

The women's hostel has a current capacity of 514 seats. The expansion of the kitchen and dining hall of the hostel has been completed. Extension of another block with an additional 156 rooms is in progress. Another hostel with 168 single and 174 double rooms with kitchen, dining and other common facilities has already been started. On completion, the total capacity of women's hostels will be 1186.

The Academic Complex which houses all departments and centres of the Institute had an initial floor area of about 74,000 m². With the gradual increase in student strength the Academic Complex is being extended in a phased manner. In Phase-I, 4460 m² area was extended and in Phase-2, 6000 m² area has been added. Construction work of the third phase of 8025 m² is nearly complete. Phase-IV of the extension of the Academic Complex with area of 7240 m² has already started. Further, it has been decided, to construct a multi storey Research Building for housing research facilities. The building is designed as a 10 storey framed structure with 1850 m² per floor.

Based on the projected student intake for the next five years and available class rooms, an assessment of required class rooms has been made. A class room complex having 6 lecture halls of 200 capacity and 18 class rooms of 120 capacity with the provision of future vertical expansion has been planned. The area proposed to be constructed in this phase is 9875 m².

Phase-II construction activities of the Kendriya Vidyalaya are in progress. Expansion of the school building, auditorium and residential quarters that was started in March 2010 is already completed and the facilities are ready for use.

Construction activities of the residences for faculty and non-faculty staff are also going on. On completion of all these by the end of 2013, the number of quarters will be 79 F-type; 114 E-type; 168 D-type; 72 C-type and 175 B-type adding up to a total of 608 residences. In order to meet the demand of residential buildings for faculty as well as for staff the Institute is planning to construct 100 units of F-type quarters in the new financial year. This is intended to be a multi storey building of nine floors.

The construction of a second Student's Activity Centre is under way to make space for the activities of the welfare, cultural and technical boards. Also being constructed are two food courts, one of which is for students. A covered stage near the cricket ground which can be used for cultural activities as well as a pavilion during cricket matches has been constructed. A separate indoor sports complex with a Badminton Hall having 6 courts with wooden base and a weight lifting hall is under construction. All these constructions will be completed before the next Inter-IIT Sports meet which will be held at IIT Guwahati in December 2013.

The existing guest house is also being expanded with 153 general rooms and 8 suites. For social get-togethers and different cultural activities of IIT Guwahati community, two community halls have been constructed till date. A third community hall is under construction.

The expansion of the electrical infrastructure and of the air-conditioning capacity has also been undertaken. A number of Diesel Generating sets and a new AC plant have been installed. In order to enhance the security of the campus, a road along the boundary wall of the campus is being built. This will allow patrolling of the campus perimeter by the security staff.

INSTITUTE EXPENDITURE

The details of expenditure during the year 2012-2013 are as follows (in crores of ₹):

Recurring:	93.58
Non-recurring:	133.14
Sponsored Research:	44.95
Total Expenditure:	271.67
In comparison, in 2011-12, ₹ 227 crores were spent.	

STUDENTS' ACTIVITIES

Alcheringa 2013

Alcheringa, the annual cultural festival of IIT Guwahati, was held during 31 January – 2 February this year. Alcheringa is now regarded as one of the major

students' cultural event of the North-East where thousands of students from across the country take part in various youth oriented competitions, workshops, seminars and informal events. Events featuring performances by various artistes of repute are the real crowd pullers. This year the well known singer Mohit Chauhan and the dance group Indian Jazz Suites performed before huge crowds.

Techniche 2012

Techniche-2012 – the annual techno-management festival of the Institute – was held during 30 August–2 September 2012.

One of the main attractions of Techniche is the Lecture Series. Among the speakers were Dr. R. Chidambaram, nuclear scientist and the principal scientific adviser to the Government of India; Dr. Samuel R. Chand, President Emeritus of Beulah Heights University; Rashmi Bansal, author of four bestselling books on entrepreneurship including *Stay Hungry Stay Foolish*; George Kourounis, adventurer, known for his television series Angry Planet; Prabhu Chawla, Editorial Director of The New Indian Express Group.

Following are the other regular events organised by the students during the year:

Manthan	-	the intra-IIT cultural festival
Spirit	-	the inter-college invitation sports competition
Spardha	-	the annual sports meet
Zest	-	the annual athletics meet

Along with these, there have been regular events and competitions organised by the various clubs and societies of the Institute such as the Movie Club, the Fine Arts Club, the Literary Club, the Photography Club, etc.

STUDENTS' ACHIEVEMENTS

Mr. Parag Agarwal, BTech student of Computer Science and Engineering received TCS-100 Best Student Award for the academic year 2012-2013.

Ms. Jashmini Deka, an alumnus and a research associate in the department of Chemistry, has been selected for the 'DST INSPIRE Faculty Award 2012'.

Ms. Raihana Begum, a research student, department of Chemistry, has received 'MRSI Young Scientists' Award 2012' at 'Young Scientists' Colloquium 2012' organised by Materials Research Society of India (MRSI) Kolkata Chapter, Kolkata.

The IIT Guwahati students' team (Tushar Krishnan, Vineel Kambala, Vivek Gunawat) won the National Finals of the MISB Bocconi Business Quiz. The winners won a trip to Milan, Italy.

Mr. Abhishek Panigrahi, alumnus of Chemical Engineering, (BTech 2011 batch) received the prestigious Panasonic Fellowship for higher study in Japan. He is among the four students receiving this award from India for the year 2013 chosen from a total of 6186 applicants on the basis of a rigorous selection process.

IIT Guwahati's students 'Team Aarogya' won the fifth edition of the GE Edison Challenge held at the GE India Technology Centre, Bangalore. The winning team's project proposes wireless EEG (Electroencephalography) for monitoring of autistic patients. The team members were Jayesh Bhaskar Yerrapragada, Aditi Olemann, Abhinav Agarwal, and Abhijeet Singh. They are BTech students of the Department of Electronics and Electrical Engineering.

Four student teams of the Department of Design have won best design awards in Rich Interactive Narrative competition sponsored by Microsoft Research. The teams comprise of Minal Jain, Mannu Amrit, Anvay Meshram, Ranju Ravindran, Ishpreet Batra, Raina Agarwal, Nishtha Mehrotra, Himanshu Seth, Anjali, Yuva Raj, Jatin Bajaj.

A group of students of IIT Guwahati has won the silver medal for their project 'Chemically triggered release of molecular cargo encapsulated within the DNA icosahedron' in Biomolecular Design (BIOMOD) 2012 held at Wyss Institute, Harvard University. The team comprised of Shaunak Kar, Harsha, Bharath (BTech, Biotechnology), S. Anand (BTech, Chemical Science and Technology), Bharath Srikanth (BTech, Chemical Engineering) and Anusuya Banerjee (National Centre for Biological Sciences in Bangalore, Karnataka).

Mr. Somasekhar Bondalapati, research student, Department of Chemistry, received the first prize of Eli Lilly Outstanding Thesis Awards 2012.

TRAINING AND PLACEMENT

The placement scenario at IIT Guwahati for the year 2012-2013 has been good so far. A total of 101 companies from various sectors have participated in the recruitment process. Out of a total of 909 students [BTech (408), BDes (23), MTech (287), MDes (20), MSc (70), MA (39) and PhD (62)] registered for placement, 72% BTech and 100% BDes have been placed so far.

The percentage of placement till now for the MTech and MDes is reasonable and stands at 43% and 70% respectively.

For MSc programmes, 2 students have been placed out of the 70 registered candidates. 11 PhD students have also received job offers through the Institute placement cell in education and research sectors.

Companies from various sectors have participated in the campus recruitment process. The percentages of participation from various sectors are 32% in Core Engineering, 54% in IT and 14% in others. Among the core sector companies, 19% are PSUs and Government organisations.

	UG (BTech/BDes)			PG (MTech/MDes/MA/MSc)		
Discipline	No. of Student Reg.	No. Student Placed	% of Student Placed	No. of Student Reg.	No. Student Placed	% of Student Placed
CS	62	57	92	48	43	90
EC	55	42	76	43	23	53
EE	28	23	79			

The branch-wise placement details are:

	UG (BTech/BDes)			PG (MTech/MDes/MA/MSc)		
Discipline	No. of Student Reg.	No. Student Placed	% of Student Placed	No. of Student Reg.	No. Student Placed	% of Student Placed
ME	63	53	84	66	32	48
CE	46	26	57	64	19	30
CL	45	28	62	41	5	12
вт	29	11	38	25		
MC	31	24	77			
CST	28	16	57			
EP	21	8	38			
DD	23	23	100	20	14	70
PH (MSc)				20		
CH (MSc)				25		
MC (MSc)				25	2	8
DS (MA)				39	3	8

CLOSING REMARKS

This is the season of evaluation of Institutions and of rankings. A lot has been written in the media about the absence of Indian Institutions in the list of top institutions of the world or even Asia. Our institution is young, and so we fall short on many categories. Thus, if the average research output of the last five years is compared with the current year's, there will be a big difference. We also lose out on parameters such as reputation among academicains and among industry because we are not that well known. Indian institutions in general also fall short when it comes to internationalization. We do not have too many foreign students and faculty from other countries are few and far in between. Another area we lose out is in the faculty to student ratio, although IIT Guwahati's position is better than many other IITs. Nevertheless, our goal is to continuously assess our achievements and shortcomings, and to try and improve wherever we are lagging behind. For example, while we find that the number of papers that are being published is satisfactory, we know we fall short

when it comes to technology transfer and patenting. I am confident our institute will continue to improve every year as we work as a team to help each other.

On a personal note, the time has come for me to move on from my current responsibilities. This is my last convocation as Director of the Institute as my term ends soon. I have been in the institute from almost the beginning and I have been in various administrative roles for the last 18 years, including the last ten as Director. I know a change is required now, and I am confident that the change will only take the Institute further forward.

My dear students, you too are going in for a change. You are entering the real world full of anticipation, excitement, and maybe a little bit of trepidation. This is natural, and I am confident that, as have the previous batches, you will do very well in whatever career awaits you and you will make us proud. Please do ensure that you do not take any short cuts as they can never help you or anyone. My best wishes go with you.

Jai Hind.

Gautam Barua Director Indian Institute of Technology Guwahati