# Reminiscence



# Indian Institute of Technology Guwahati

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# The Beginning

IIT Guwahati was established in the year 1994 by an Act of the Parliament for providing scientific and technological education in the country and is the 6th member of the IIT fraternity. Its academic programme commenced in 1995. The selection process is the same as that of all IITs, i.e. through Joint Entrance Examination (JEE). In 1998, the first batch of students was accepted into the Master of Technology (MTech) programme through Graduate Aptitude Test (GATE).

IIT Guwahati continues to develop and diversify each year, while maintaining its stated aim of improving standards in higher technological education, research and industrial consultancy in the country. Owing to its establishment in the early 1990s, the Institute boasts of providing the best and the latest engineering and computing resources in the entire country. Currently, the Institute has 11 academic departments, 7 advanced research centres with nearly 100 laboratories.

IIT Guwahati was also the first IIT to introduce Design as one of the disciplines at undergraduate level. The Department of Design at the Institute awards the degree of Bachelor of Design (BDes) on completion of the undergraduate academic program.

IIT Guwahati was entrusted the responsibility of mentoring IIT Patna last year and it was for the dedication and hard work of the officials of IIT Guwahati, the Institute was able to put IIT Patna on the road to excellence within a short span of around 10 months.



# Campus and Facilities

IIT Guwahati is on a 700 acres plot of land located on the north bank of the river Brahmaputra, around 20 km from the heart of the Guwahati city. It has the majestic Brahmaputra on one side, and hills and vast open spaces on the others.

IIT Guwahati is a fully residential campus. All the students live in hostels located in the campus. All these hostels have spacious single seat rooms and have all basic amenities like food mess, canteen, lounges, campus wide LAN with internet access etc. The hostels are named after various rivers and tributaries of north-east India.

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# From the Director's Desk

Finally, we have an "official" newsletter! The Institute has grown and now we no longer recognise everyone we cross on the streets. We do not know of many things that are taking places in different parts of the campus. A newsletter will help us in getting to know ourselves better. It will also help visitors to get a glimpse of what goes on at IITG. The newsletter can serve as publicity material for the Institute. We have not been doing very well in projecting our achievements. Reporting what we are doing on a regular basis will, I think, be an excellent way of letting the world know what we can do. Of course, one "official" newsletter is not enough to cover all campus activities.

Students have been bringing out magazines, but none have become regular. There is a need for a "students' rag". The new VP Gymkhana may look into this. A "campus news" type of magazine, with articles, besides items of news can be useful to get the campus community together and can also help in networking with alumni. Maybe this can be co-ordinated by the External Relations Section.

It is my hope that this inaugural issue of the IITG newsletter will be the first of a regular stream of newsletters. Co-operation from all in providing information regularly is essential to make this a success.



**Dr. R. P. Singh** assumed charge on 8 February 2010 as the Hon'ble Chairman, Board of Governors, IIT Guwahati

Dr. Rajendra Prasad Singh holds a Bachelor of Science degree in Engineering (Mechanical) and a Master of Science degree in Engineering (Machine Design) from Banaras Hindu University. He was conferred the degree of Doctor of Science (Honoris Causa) from Banaras Hindu University. Dr. Singh has a career spanning more than 32 years and has served in the power sector in the fields of generation, transmission, large system operation and distribution. He was the Chairman and Managing Director, Power Grid Corporation of India Limited. He has also served in companies including NTPC Limited and Tata Iron & Steel Company. He also serves as a consultant to the World Bank. He is the Chairman and founder member of the International Group of Very Large System Operators (i.e. countries having generation capacity of 60,000 MW or more) and the President of the International Council of Large Electric Systems, India. He has received several awards including the Green Award 2006 from the World Bank, the EPRI Power Delivery Individual Product Champion Award for 2005 from the Electric Power Research Institute, USA and the Eminent Engineer Award by the Institution of Engineers, India. He was also honored with the Dr. Shrikrishna Sinha Award 2005 for outstanding contribution in the Indian power sector in general and for the development of the rural and urban electricity infrastructure in Bihar in particular.

### Laurels



**Professor Subhash C. Mishra**, Dept. of Mechanical Engineering, has been selected for the 'Shiksha Rattan Puraskar'. He will be conferred with the award at a ceremony to be held on 7 April 2010 at New Delhi.



**Dr. Vikash Kumar Dubey**, Associate Professor, Dept. of Biotechnology, has been selected for 'Innovative Young Scientist Award for 2009' by DBT, Government of India for his work on Leishmaniasis.

# Conference Participation and Paper Presentation

**Professor R. Swaminathan**, Dept. of Biotechnology, attended the Biophysical Society 54th Annual Meeting held at San Francisco, California, USA from 20 February to 24 February 2010.

**Professor Anjan Dutta**, Dept. of Civil Engineering, presented a paper titled "Comparative study of Full scale Beam-Column Joints under Cyclic Loading" at the 3rd International Earthquake Symposium held at Dhaka, Bangladesh from 5 March to 6 March 2010.

**Professor S. K. Deb**, Dept. of Civil Engineering, presented a paper titled "Comparative study of Full scale Beam-Column Joints under Cyclic Loading" at the 3rd International Earthquake Symposium held at Dhaka, Bangladesh from 5 March to 6 March 2010.

**Dr. Hemant B. Kaushik**, Assistant Professor, Dept. of Civil Engineering, presented a paper titled "Analytical Investigations of Confined Masonary Constructions" at the 3rd International Earthquake Symposium held at Dhaka, Bangladesh from 5 March to 6 March 2010.

**Dr. Shakuntala Mahanta**, Assistant Professor, Dept. of Humanities & Social Sciences, presented a paper titled "Phonological bias in the learning of Opaque Segments in vowed Harmony" in the 20th Colloquium on Generative Grammar held at Bercelona, Spain from 18 March to 20 March 2010.

**Dr. Shakuntala Mahanta**, Assistant Professor, Dept. of Humanities & Social Sciences, attended an Invited Talk on Phonological Bias in the learning of Opaque Segments in vowed Harmony held at the University of Potsdam, Berlin, Germany from 21 March to 23 March 2010.



A visit by the students of ICFAI University, Mizoram on 15 February 2010

A visit by the students of Ambikagiri Ray Choudhury Jatiya Vidyalaya, Sonitpur on 12 March 2010





The **Department of Biotechnology** recently organized a series of Biotalk seminars

#### 7 January 2010

Topic: Electrophysiology – A powerful tool for studying functions of Biological system

Speaker: Dr. Suhel Parvez, Humbolt Fellow & Group Leader

#### 13 January 2010

Topic: Learning from Nature: Biomolecular Electronic and Biopho-

Speaker: Dr. M.S. Thakur, Department of Fermentation Technology and Bioengineering, CFTRI, Mysore

#### 12 February 2010

Topic: Lactic Acid Bacteria and their impact on Food Safety Speaker: Prof. Iskra Ivanova, Department of General and Applied Microbiology, Sofia University, Bulgaria

#### 17 February 2010

Topic: Lab-on-a-chip Systems for Microchemical Synthetic Speaker: Prof. Dong-Pyo Kim, Centre of Applied Microfluidic Chemistry, Chungnam National University, Korea

#### 5 March 2010

Topic: Multi Process control and coordinated expression of flagella, invasion and adherence gene circuits in Salmonella Speaker: Dr. Supreet Saini, Department of Chemical and Biomolecular Engineering, University of Illions at Urbana-Champaign

#### 26 March 2010

Topic: Geonomics for Genetic Enhancement of Crops Speaker: Dr. T. Mohapatra, National Research Centre on Plant Biotechnology, Indian Agricultural Research Institute (IARI), New Delhi

#### 26 March 2010

Topic: Biotherapeutics: An Industrial Perspective Speaker: Dr. Arnab Kapat, Director, Reliance Institute of Life Sciences, Dhirubhai Ambani Life Sciences Centre, Navi Mumbai

The **Department of Mathematics** organized two talks during January-March 2010.

#### 11 March 2010

Topic: 'Proof of Fundamental Algebra through Linear Algebra'. Speaker: Prof. V. Sree Hari Rao, Jawaharlal Nehru Technological University

#### 25 March 2010

Topic: 'Modeling of Neuronal Activations - Dead Zones - A new paradigm'.

Speaker: Prof. Anant R. Shastri, Department of Mathematics, IIT **Bombay** 

Mechanical Engineering Students' Association (MESA), Department of Mechanical Engineering, recently organized two seminars

#### 11 March 2010

Topic: Revisiting Newton's Laws: Possible Modifications and the **Amazing Cosmological Consequences** Speaker: Prof. Amitabh Ghosh, Department of Mechanical Engineering, IIT Kanpur

#### 12 march 2010

Topic: Scaling Laws and Miniaturization Speaker: Prof. Amitabh Ghosh, Department of Mechanical Engineering, IIT Kanpur

The Centre for Nanotechnology organized series of Corral talks 'Chalk the Talk'

#### 12 February 2010

Topic: "Photophysics of Dual Fluorescent Organic Molecules" Speaker: Mr. Francis Chipem, Research Scholar, Department of Chemistry, IIT Guwahati

#### 26 March 2010

Topic: "pie-Conjugated Polymeric Materials, Applications and Future"

Speaker: Mr. Gunin Saikia, Research Scholar, Department of Chemistry, IIT Guwahati

#### The **Department of Chemistry** organized several seminars

#### 11 January 2010

Topic: 'Chemistry of Nanoclusters: Building-Blocks for Advanced Functional Materials'.

Speaker: Dr. Nirmalya Kumar Chaki, Post-doctoral Fellow, Department of Chemistry, The Pennsylvania State University, USA

#### 18 January 2010

Topic: 'Tera(hertz)-Talk with Artificial and Real Atoms'. Speaker: Dr. Pankaj Kumar Mandal, Post-doctoral Fellow, Rowland Institute at Harvard, Germany, Harvard University, USA

#### 8 February 2010

Topic: 'Design and Synthesis of Novel Heterocyclic molecules of Biological Significance'.

Speaker: Dr. Biswajit Saha, Post-doctoral Fellow, Chemnitz University of Technology, Germany

#### 18 February 2010

Topic: 'Organometallic Chemistry for Functional Surfaces'. Speaker: Prof. Amitabha Sarkar, Department of Organic Chemistry, Indian Association for Cultivation of Science, Kolkata

# **Appointments**



Dr. Anamika Barua joined the Department of Humanities & Social Sciences as Assistant Professor on 6 January 2010



Dr. Debasish Das joined the Department of Biotechnology as Assistant Professor on 17 February 2010



Dr. Sukhomay Pal joined the Department of Mechanical Engineering as Assistant Professor on 01 March 2010



Prof. Manfred Groll joined the Department of Mechanical Engineering as Visiting Professor on 08 March 2010



Dr. Ziauddin Ahammad joined the the Department of Biotechnology as Assistant Professor on 31 March 2010



Dr. Rajshree Bedamatta joined the Department of Humanities & Social Sciences as Assistant Professor on 8 January 2010



Dr. Anand Baskaran joined the Department of Biotechnology as Assistant Professor on 25 February 2010



Dr. Sougata Karmakar joined the Department of Design as Assistant Professor on 01 March 2010



Dr. Amaresh Dalal joined the Department of Mechanical Engineering as Assistant Professor on 08 March 2010



Dr. Atanu Banerjee joined the Department of Mechanical Engineering as Assistant Professor on 31 March 2010



Dr. Rajasekhar Inkulu joined the Department of Computer Science & Engineering as Assistant Professor on 22 January 2010



Dr. Sonali Chouhan joined the Department of Electronics a& Communication Engineering as Assistant Professor on 01 March 2010



Dr. S. Nandkishor Joshi joined the Department of Mechanical Engineering as Assistant Professor on 02 March 2010



Dr. A. S. S. K. Palaparthi joined the Department of Mathematics as Assistant Professor on 23 March 2010



Dr. Lakshmi Haobam joined the Institute as the Student Counsellor on 05 January 2010

Dr. Uttara Devi delivering the keynote lecture



Dr. U. Devi, Prof. A. Khare and Dr. M. Borthakur



Dr. Rakhi Chaturvedi, Convener

# International Women's Day

On 6 March 2010 to mark the occasion of International Women's Day, an awareness program on 'Women's Access to Education' was organized at IIT Guwahati. Dr. Rakhi Chaturvedi, the convener of the said program, delivered the welcome address. Prof. S. Dandapat, Dean of Administration, delivered the inaugural speech.

Dr. Uttara Devi, Institute of Distance & Open Learning, Gauhati University, delivered the keynote lecture on 'Women's Access to Education'. She emphasized that the goals of learning should always be driven towards economic independence, rise in social esteem, acquisition of high level skills, capacity building and to reap better opportunities in life. Empowerment of women through education can positively break the cycle of poverty, may enhance educated political participation and in the sex ratio.

The Concluding remark was given by Prof. S. Nandi, Dean of Academic Affairs and the vote of thanks by Dr. Hemangee K. Kapoor, Member, Women's Complaint Committee.

On the occasion, a play was staged portraying the changing face of Indian working women after independence and the challenges they face in decision making roles as male-centred attitudes continue to prevail. The play was followed by an informative talk on 'Awareness on health related issues of women' by Dr. Mala Borthakur, Senor Medical Officer of the Institute. Mr. L. Shyam Kumar, Asst. Registrar (Establishment), spoke on 'Legal provisions relating to rights of women'. He gave a detailed presentation on all the provisions and Acts of Indian Penal Code to protect the rights and dignity of women. The final talk of the day was by Dr. Sawmya Ray, Asst. Professor, Department of Humanities & Social Sciences, on 'Women's Movement in India'.

After a series of enriching lectures, a group discussion was organized at the end of the programme. All the participants including faculty, staff and students expressed their views and unanimously emphasized that quality education is the basic right of every woman.



# Students' Activity

# Spardha 2010

Spardha, the annual inter-hostel sports competition organized by the Sports Board of IIT Guwahati, is the reflection of sporting sprit and camaraderie of the student fraternity of the Institute. This year the sporting extravaganza started from the month of January 2010. The events included Athletics, Badminton, Basketball, Cricket, Football, Hockey, Volleyball, Lawn Tennis, Table Tennis, Squash, Chess and Weightlifting. By the time the competition came to an end in April, the following were the team standings in various disciplines.







## Hockey

1st Position: Kameng 2nd Position: Kapili 3rd Position: Manas

### Squash

1st Position: Manas 2nd Position: Dihing 3rd Position: Kapili

#### Cricket

1st Position: Dihing 2nd Position: Kapili 3rd Position: Manas

#### Weightlifting

1st Position: Dihing 2nd Position: Manas 3rd Position: Umiam

#### **Athletics**

1st Position: Dihing 2nd Position: Kameng 3rd Position: Kapili

#### **Football**

1st Position: Kapili 2nd Position: Kameng 3rd Position: Umiam

#### Volleyball

1st Position: Kameng 2nd Position: Dihing 3rd Position: Kapili

#### **Table Tennis**

1st Position: Barak 2nd Position: Kameng 3rd Position: Manas

#### Basketball

1st Position: Kameng 2nd Position: Kapili 3rd Position: Dihing

#### **Tennis**

1st Position: Manas 2nd Position: Kameng 3rd Position: Kapili

#### Chess

1st Position: Manas 2nd Position: Kapili 3rd Position: Kameng

#### **Badminton**

1st Position: Manas 2nd Position: Dihing 3rd Position: Kapili





# Alcheringa 2010



ALCHERINGA, meaning dream time in the Australian tongue, is the annual cultural fest of Indian Institute of Technology Guwahati and is the biggest cultural extravaganza in the north east. ALCHERINGA 2010 was held in the month of February and various colleges from across the country headed to Guwahati to be a part of this fest. Heading the list of the most awaited events was the proshows which included a performance by the music 'gurus', the triumvirate of Shankar, Ehsaan and Loy, who have the country grooving to their beats. The rock night 'Juggernaut' had Eluveitie, the Swiss metal band,



mesmerizing the crowd with their blend of heavy metal and Celtic folk numbers. Other well known celebrities like famous comedian Vir Das and Tushar Raheja, author of the best seller 'Anything for you ma'am' were also present for the fest. Competitions such as Electric Heels, the dance and choreography competition where groovy steps, funky beats and rocking performances set the stage ablaze. For the lovers of rock, there was Rock o Phonix, the biggest showdown between rock bands from all across India. The fashion enthusiasts also had their share of fun in Hot Couture, the fashion show where participants strutted the stage in their own creations.

Alcheringa xtreme guaranteed three days of sheer excitement, fun and enjoyment.

By the end of day three: A few did get addicted!





# The sprawling campus of IIT Guwahati is richly stacked with a wide variety of flora and fauna

Pictured below are a few seasonal residents of the Institute



White-breasted Waterhen (Amaurornis phoenicurus)



Indian Pond Heron (Ardeola grayii)



Bronze-winged Jacana (Metopidius indicus)



Cattle Egret (Bubulcus ibis)



Golden Oriole (Oriolus oriolus)



White-throated Kingfisher (Halcyon smyrnensis)