



Rhythm

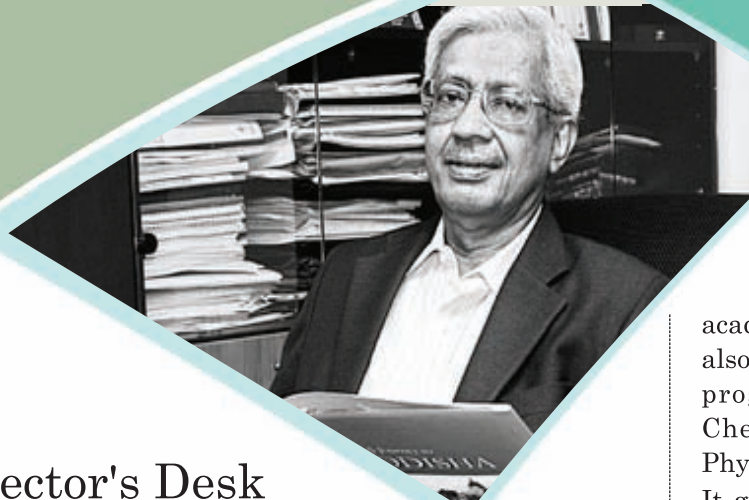
The Newsletter

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Indian Institute of Technology Bhubaneswar

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From the Director's Desk

I have set myself out on a pilgrimage with the sole mission of carrying the dreams and aspirations of not only the Odishan people but also my countrymen to a state of fruition in making IIT Bhubaneswar the premier institute of learning, research, innovation and the hub of technological creativity. With the sincerity of staff, commitment of my faculty members and dynamic students we have earned a small feather on our cap in the form of the coveted ET Now Outstanding Engineering Institute (East) Award by Economic Times. It is heartening to note that our efforts towards

achieving a state of excellence and maintaining the brand IIT has been appreciated and recognized by the outside world.

There are a lot of positives this year. A second batch of students is on the threshold of beginning their careers as technocrats. Work on the new campus at Argul is progressing well and the construction of the main building will begin shortly. The coming months will see new programs in the academic curriculum. We are starting B.Tech. in Computer Science Engineering from the next

academic session. Besides, we are also starting joint M.Sc.-Ph.D. program in Earth Sciences, Chemistry, Mathematics and Physics soon.

It gives me immense satisfaction to state that despite all road blocks IIT Bhubaneswar is forging ahead. May it continue to grow and flourish with your blessings!

Prof. Madhusudhan Chakraborty
Director, Indian Institute of
Technology Bhubaneswar

Outreach

ET Now National Education Leadership Award-2013 awarded to Director, IIT Bhubaneswar Prof. M. Chakraborty



It was a moment of pride and glory for IIT Bhubaneswar, one of the youngest yet prolific of the new IITs when Prof. Madhusudan Chakraborty, Director, IIT Bhubaneswar was chosen by ET NOW for the ET Now National Education Leadership Award. This award was given to Prof. Chakraborty in recognition of his leadership in developing IIT Bhubaneswar as a premier Institute of national importance. The award was given in recognition of the creation of a strong Academic & Industry interface of IIT Bhubaneswar known for its uniquely innovative yet industry relevant curriculum in the areas of Science, Engineering & Technology.

Design Construction and Maintenance of Rural Roads under PMGSY

The School of Infrastructure successfully organized its first training programme on Design, Construction and Maintenance of Rural Roads Under PMGSY during 11-13 January 2013. The programme was sponsored by National Rural Roads Development Agency (NRRDA), Ministry of Rural Development, Govt. of India. IIT



Bhubaneswar is presently working as a State Technical Agency (STA) for PMGSY Roads for the state of Odisha and Jharkhand to provide technical support to the state executing agencies. The team comprises Dr U.C. Sahoo (Coordinator STA), Dr. P. P. Dey, Dr. D. Basu and Dr S.R. Dash as members of STA from the School of Infrastructure. As a part of the responsibility of STA, the training programme was organized at IIT Bhubaneswar as a refreshers' course covering various aspects of design, construction and maintenance of rural roads under PMGSY Programme. Lectures were delivered by faculties of the School and eminent experts from IIT Kharagpur, NIT Rourkela and industry.

Workshop on Indian Water Management (IWMSID 2013)



The School of Infrastructure, IIT Bhubaneswar successfully organized a Workshop on Indian Water Management in 2011. As a continuation of the same, this year a joint event consisting of a one day Workshop on Indian Water Management followed by a two day Symposium on Sustainable Infrastructure Development was organized from 7- 9 February, 2013. The joint event was inaugurated by Prof. Ganapati Panda, Dy. Director in the presence of Honorary Guests Er. Nanda Kumar Mohapatra (Chief Engineer, M.I.

Govt. of Orissa), Mr. Vibhu Goel (Sr. Vice-President, Ultra-Tech Cement) and Prof. S.C. Dutta (Dean, AA,IR & CE, and Chairman, IWMSID 2013). The conveners of the event were Dr. A. Sarkar, Dr. R.R. Dash, Dr. P. Bhunia and Dr. S. Haldar, and the members of organizing committee were Dr. D. Pasla, Dr. P.P. Dey, Dr. U.C. Sahoo, Dr. S.R. Dash, Dr. D. Basu, Dr. B.H. Rao, Dr. N.C. Sahoo and Dr. A. Barve. Eighty-seven participants attended these events and 55 research papers were presented. Experts from other IITs and reputed institutes and organizations delivered keynote addresses. The objective of this workshop was to bring together industry, R&D and Academic specialists and experts to provide an excellent opportunity for interaction and discussion of problems and solutions of mutual interest. The event was also aimed to create awareness of advanced technologies used in water resources management and sustainable infrastructural developments. The joint event was sponsored by M/s IDCO, M/s S. M. Consultants, M/s Ultra Tech. Ltd., M/s Qualicom Solutions Pvt. Ltd., M/s Swayine Associates, Golden Anchor, M/s Transys Consulting Pvt. Ltd., M/s

IDAX Consulting and Research Group, M/s HL Infrastructure, M/s Dion Construction, M/s Aimil Ltd., M/s Innovation India and M/s CETEST for sponsoring the joint event.

Institute Foundation Day



The Institute celebrated its Foundation Day, the 5th anniversary of its inception on 12 February 2013. Since the advent of new IITs in the year 2008, IIT Bhubaneswar embarked on a new journey guiding itself towards pinnacles of technological advancement to achieve constructive and qualitative education.

The Institute was honoured with the presence of Shri R. Gopalakrishnan, Executive Director, Tata Sons Ltd. as the Chief Guest of the evening who made the occasion special by interacting with the students. The Foundation Day celebrations began with the tree plantation at Argul with a belief that the prosperity of the budding institute needs to be synchronous with sustainable and green development. The Institute honoured the singular contributions of the eminent personalities who have left their lasting imprints as the architects and the EOI members of the Institute. Celebrating the success of the students at the Inter IIT Sports Meet – 2012 held at IIT Roorkee, the Institute conferred the players with cash awards and medals for their brilliant show at the Sports meet.

As part of the vibrant culture of Odisha, the Sambalpuri dance was the highlight of the evening. The music and the dramatics societies played an instrumental part in creating a spectacular evening with their unique cultural performances which were an artistic blend of entertainment and social propaganda.



MBLM tower installed at Argul Campus



The School of Earth, Ocean and Climate Sciences of the Institute in association with Indian Space Research Organization (ISRO) has installed and operationalized the Mini Boundary Layer Mast (MBLM) at the Argul Campus. It is one of the observation premises out of 28 such installations being

step up all over the country by ISRO under Prediction of Regional Weather with Observational Meso-Network and Atmospheric Modelling (PRWONAM) Program. The mast is a 15 meter tower which records various meteorological parameters such as temperature, wind speed/direction, humidity at 4 meter, 8 meter and 15 meter heights respectively. In addition to that the tower installation premises consist of a rain gauge, soil moisture / temperature and net solar radiation (both shortwave and longwave) sensors. All these data are recorded at every 1 second and averaged over 4 minutes. At every 4 minutes interval data sets are retrieved with the help of a data logger installed within the premises and powered by a solar panel. These data sets are also

transmitted directly to ISRO headquarters in Bengaluru through satellite at every 4 minutes. These observations will provide instantaneous and rapidly changing weather situation over the location as well as facilitate regional climate change research over the region from long term observation data sets.

School of Minerals, Metallurgical and Materials Engineering Educational Tour

The School of Minerals, Metallurgical and Materials Engineering organised educational trips to Orissa Sands Complex (OSCOM) Plant of Indian Rare Earths Limited, Chhatrapur, Odisha on 12 October 2012 and Jindal Stainless Limited (JSL),



Kalinganagar, Odisha on 23 March 2013. These visits gave the students a first-hand experience of rare-earth and stainless steel production starting from the ore to the finished product. Keeping in mind the Academic-Industry interface of IIT Bhubaneswar, the faculty members of the school had fruitful discussions regarding future research collaboration between IIT Bhubaneswar and these industries.

Eminent Visitors at IIT Bhubaneswar

11 January 2013

Speaker

Prof. Debjyoti Banerjee,
Ph.D. Mechanical
Engineering Department,
Texas A&M University,
USA

Topic

Nano-devices for
Enhanced Thermal
Energy Storage,
Cooling and Sensing

28 February 2013

Speaker

Prof. U. R. Rao
Former Chairman,
Indian Space
Research Organization

Topic

Delivered the
National
Science Day
Lecture

26 - 28 February 2013

Speaker

Prof. Avijit Gangopadhyay
University of Massachusetts,
Dartmouth and Dr. Glen Gawarkiewicz
Woods Hole Oceanographic Institute
(U.S.A.)

Topic

Visited the School
of Earth, Ocean and
Climate Sciences

Faculty Activity

Prof. M. Chakraborty, Director, Prof. S. Tripathy Dean (Academic Affairs and Head, School of Earth, Ocean and Climate Sciences) and Prof. P.C Pandey visited the National Oceanography Centre, Southampton and University of Southampton under the UKIERI project from 2 - 10 March 2013. A joint supervision mechanism for M. Tech. project is being worked out.

Prof. M. Chakraborty, Director, Prof. S. Tripathy, Dean (Academic Affairs and Head, School of Earth, Ocean and Climate Sciences), Dr. A. Mandal, Dr. Arun Pradhan, Dr. P. S. Dey and Dr. M. Pandit visited the Warwick Manufacturing Group, University of Warwick under the UKIERI funded joint programme during 2-10 March 2013.

Dr. Soobhankar Pati of School of Minerals, Metallurgical and Materials Engineering organized “Energy Technology 2013 Symposium” at TMS 2013 held at San Antonio, Texas, USA (3-7 March, 2013).

Dr. Animesh Mandal and Dr. Partha Sarathi De of School of Minerals, Metallurgical and Materials Engineering visited the Warwick Manufacturing Group, University of Warwick, UK from 3-9 March 2013 under the UKIERI projects “Low Carbon Material Technologies Innovation and Applications” and “Integrated Doctoral and Masters Program”.



Dr. Bharathram Ramkumar joined the School of Electrical Sciences as Assistant Professor on 11 December 2012. His research areas are Wireless Communication, Signal Processing.



Dr. Soumendra Rana joined the School of Basic Sciences as Assistant Professor on 01 February 2013. His research areas are G-protein Coupled Receptor, G-proteins, Signal Transduction, Protein Design and Engineering, Protein-Protein Interactions, Molecular Modeling and Computational Biology, Chemical & Cellular Biology, Drug Design and Discovery.



Dr. K. Ram joined the School of Earth, Ocean and Climate Sciences as DST-INSPIRE Faculty on 1 February 2013. His areas of research are Aerosol chemistry and air-quality, Chemical, optical and microphysical properties of aerosols, Carbonaceous aerosols with

emphasis on black carbon and Long-range transport of aerosols.



Dr. Chandra Sekhar Rout joined the School of Basic Sciences as Ramanujan Fellow on 4 February 2013. His research areas are Energy storage devices and Supercapacitors, biosensors, Resistive memory devices, Surface enhanced Raman spectroscopy.

Gymkhana Activities

Alma Fiesta 2013



The fourth edition of Alma Fiesta, the annual socio-cultural fest of the Institute was organized from 11-13 January 2013. The theme of this edition was,

“Dawn of Pirates”. Dr. Kiran Seth, Founder SPIC-MACAY and eminent novelist Ira Trivedi were the Chief Guests for the inaugural evening. The official inauguration was followed by a rejuvenating santoor-performance by Padmashree Pt. Bhajan Sopori. Various events from different genres like fine arts, literary, music and dance were held for the next two days. Euphony, a rock band competition, one of the flagship events of Alma Fiesta saw a huge participation. A workshop on “Ethical Hacking” was also conducted. Going with lines of the social theme of Alma Fiesta- “Save Water”, a Youth Marathon was organized with the motive of spreading awareness amongst the masses. Along with these events, the second and final day of Alma Fiesta concluded with the dynamic and spirited performance of “Ganesh Talkies”, an indi-pop band from Kolkata and a mesmerizing performance by “Indian Ocean”, one of the leading fusion-rock bands in India.

Wissenaire 2013

The third edition of Wissenaire, the annual techno-management fest was organized during 18 -20 January 2013 with a theme “Indian Space Odyssey” aptly honouring 50-years of Indian Space Journey. The fest was inaugurated by Dr. P.J. Bhat, Chief Scientist of Chandrayaan Mission who spoke about the recent developments in the field of Space Technology.



The Inauguration was followed by Hand Shadowgraphy and Sand Animation by Amar Sen and Sabyasachi Sen.

Events like paper presentation, Robowars, coding were conducted, along with workshops in “Motion Sensing”, “Android Operating System” and “Low Power-Embedded Systems”. Wissenaire 2013 also witnessed guest lectures by Dr. G.S.Mani, former DRDO scientist and Mr. Suhas Gopinath, world’s youngest CEO. While Dr. Mani gave an insight into the working of DRDO, Mr. Gopinath spoke about the experience and difficulties he faced in his journey as a young and successful entrepreneur. A Bubble-Show was organised for the first time in the Institute. Dr. Bubble from Israel not only showed his amazing skills with bubbles but also thoroughly entertained a jam-packed Auditorium. The fest was concluded by the captivating 3D Laser Show and Pyroacrobatics Show.

Republic Day

The 64th Republic Day was celebrated in the Institute in a unique way this year. After the flag hoisting and the National Anthem, the Director, Dr. Madhusudan Chakraborty gave an illuminating speech about the role of IITs in the development of the nation. This was followed by a cricket match between the fourth year students and the faculties at the IMMT Grounds. The match was won by the students though only after a spectacular performance by Dr. Swarup Kumar Mohapatra.



Research Scholars' Day

IIT Bhubaneswar observed its 3rd Research Scholars' Day on the occasion of National Science Day on 28 February, 2013. The research scholars of IIT Bhubaneswar made poster presentations on their research work during the day. Prof U. R. Rao, internationally renowned space scientist and former



Chairman, Indian Space Research Organization inaugurated the poster session at 9.30 AM and delivered the National Science Day Lecture in the Institute Auditorium at 4.30 PM. Then there were the declaration and distribution of Prizes for Poster Presentation Competition. Swapna Sarita Mohapatra (School of Basic Sciences) received the 1st prize, Akshay Verma (School of Infrastructure) and Pradeep Kumar Maharana (School of Basic Sciences) were the joint 2nd Prize winners and



Sulagna Mohanty (School of Humanities, Social Sciences and Management) and Hemalata Jena (School of Mechanical Science) were the joint 3rd prize winners. A colorful cultural function was organized in the evening by the research scholars to mark the day.

One Jazzy Evening at IIT



“One chord is fine. Two chords are pushing it. Three chords and you’re into jazz.”

The Society for Promotion of Indian Classical Music and Culture among Youth (SPIC-MACAY) organized a Jazz Concert in the institute on 4 March. This was the first time that a Jazz concert was organized in the Institute. The European trio of Paolo Vinaccia, Arild Andersen and Tommy Smith mesmerized the crowd with their soul-pleasing music.

International Women's Day



The Institute observed the International Women's Day on 8 March. An art exhibition, celebrating womanhood was on display at the Institute Auditorium. Many students expressed their views in the form of write-ups, speeches and poems during this event. A Quiz was conducted by the Literary Society and a ‘nukkad-natak’- a street play focusing on social evils against women was staged by the Dramatic Society.

Art Exhibition



The Fine Arts Society conducted its Annual Exhibition, the first of its kind on 19 March. The main objective of the exhibition was to provide students a platform to showcase their talents. The exhibition covered various aspects of fine arts like sketching, painting, photography and many more

Dance Society

A joint musical production was organised on 18 March 2013 by the fourth year students. The production started off with the tunes of John Lennon’s ‘Imagine’ and moved on to other popular songs like “lukachuppi”, “likhe jo khat tujhe”. There were dance performances on various hits also. Highlighting the event was an all-girl dance performance which was followed by a stage-play depicting “Ideologies of Bhagat Singh”. The show-stopper event was a dance-drama, which was very well received by the crowd.

Literary Society

A “Model United Nations (MUN)” workshop was organised by the Literary Society in association with the Odisha Debating Society on 16 and 17 March. While the first session covered the basic rules and structure of a MUN, the second session witnessed a mock-MUN amongst the students.

Student Activity

Ms. Sulagna Mohanty, Research Scholar (School of Humanities, Social Sciences and Management), received the Best Paper Award for his paper titled “Using the Language of Canon as a Mode of Interrogative Discourse” on the basis of oral and poster presentation held on IIST Research Scholars’ Day organized by Indian Institute of Space Science and Technology (IIST), Valiamala, Thiruvananthapuram, from 17-19 December 2012.

Besides many papers were presented by students and research scholars in national and international conferences:

- Pradeep Kumar Maharana, Research Scholar (School of Basic Sciences), presented a paper titled “Plasmonic Biosensor based on Graphene Multilayer” in the XXXVII National Symposium of Optical Society of India in Pondicherry University from 23-25 January 2013.
- Punzag Padhy, B. Tech. (School of Electrical Sciences), presented a paper titled “A Circuit Model for Plasmonic Nanosphere” in the XXXVII National Symposium of Optical Society of India in Pondicherry University from 23-25 January 2013.
- Lakshman Pappula, Research Scholar, (School of Electrical Sciences), presented a paper titled “Linear Antenna Array Synthesis for Wireless Communications using Particle Swarm Optimization” in the 15th International Conference on Advanced Communications Technology in Pyeongchang, South Korea from 7 - 30 January 2013.
- Soma Parija, Research Scholar (School of Humanities, Social Sciences and Management), presented a paper titled “Loneliness, Happiness and Satisfaction in Virtual Experience” in the International Research Conference organized by International Association of Academicians and Researchers, Bangkok, Thailand, from 5-6 March 2013.
- Sulagna Mohanty, Research Scholar (School of Humanities, Social Sciences and Management), presented a paper titled “Myth and Storytelling: the New Language of Postcolonial Voices” in the International Research Conference organized by International Association of Academicians and Researchers, Bangkok, Thailand, from 5-6 March 2013.
- Varigunda Vishwanath, B. Tech. (School of Mechanical Sciences), presented a paper titled “Sustainable Development Practices in Mining Supply Chains: An Indian Coal Mining Perspective” in the National Conference on Manufacturing and Logistics Management (NCMLM-2013) Malaviya National Institute of Technology, Jaipur from 8-9 March, 2013.

