



THE BPPIMT - NEWSLETTER

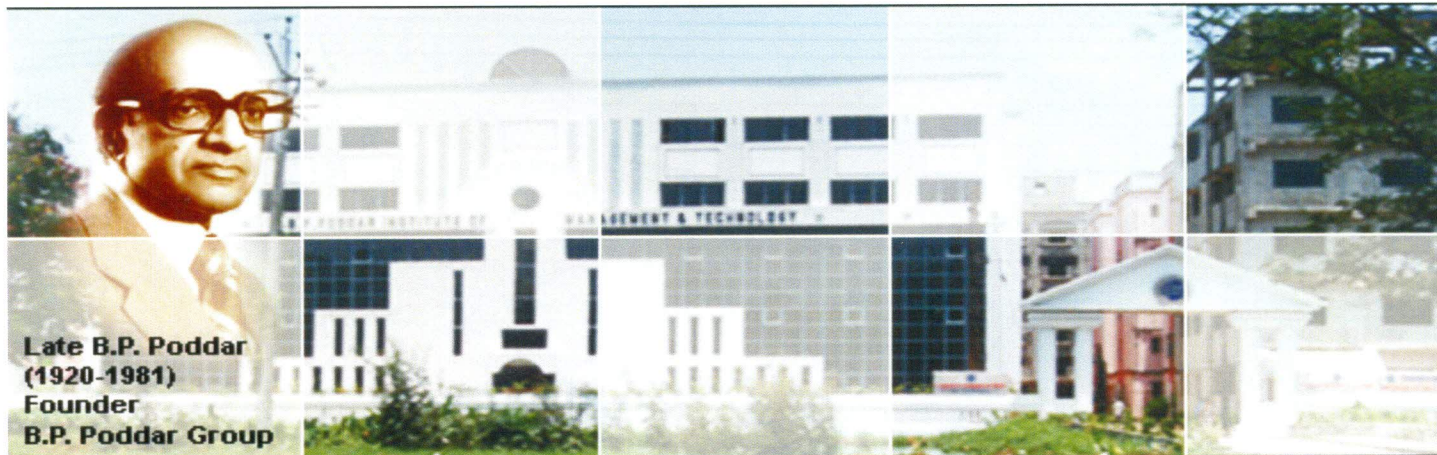
A Quarterly In-House Magazine
of

B.P. Poddar Institute of Management and Technology

Email: newsletter.bppimt@gmail.com

Issue - IV, April 2009

Editor in Chief: Prof (Dr) S.C. Chakravartty



**Late B.P. Poddar
(1920-1981)
Founder
B.P. Poddar Group**



Lamp Lighting Ceremony: RTCT-2009

Seen in Photo (Left to Right): Wng. Cdr R.S. Sen, Registrar, Prof. Amitava Sinha, Director of the School of IT, WBUT, Ms. G. Khan, Ms. P. Guha, Prof. S.C. Chakraborty, Principal and Prof. M. Bhattacharya, Member of the Board of Governors of the Institute



Technical Paper Presentation: RTCT-2009

Seen in Photo: Prof. Ranjana Goswami and Ms. Inadyuti Dutt



Audience at the RTCT-2009 Conference

Seen in the first row from Right to Left: Prof. Soumya Paul, Prof. S.S. Barat, Prof. Mrityunjay Bhattacharya, Prof. Amitava Sinha and Prof. Pramathes Das

Message from the Convener of RTCT Conference:

Information Technology offers extensive scope for Research & Development. As such it becomes necessary to bring Industrialists, Academicians, Scientists in the same platform to know the Recent Trends in Computing Technologies. With this thought it was decided by the academic community of BPPIMT to have a conference on emerging trends in Computing Technologies. First of all we thank the CSI Kolkata Chapter for their sponsorship. We would like to express our gratitude to the Chief Patron Shri Arun Poddar and Patrons Shri Ayush Poddar and Dr. S Choudhury for their constant support. We also thank Chairperson Prof. S.C.Chakravartty and Admin. Co-ordinator Wg. Cdr. R.S. Sen and the members of Advisory Committee for their valuable suggestions and all the staffs of BPPIMT who directly or indirectly helped us in making the conference a grand success.

- Prof. D. Datta, Convever, RTCT-2009

Academic News: Degrees Achieved:

Ms Rupa Pal of the Department of Engineering Chemistry received her PhD degree from Kalyani University in January 2008.

Invited Lectures

Dr A Kanjilal of the Dept of Comp. Sc and Engg and Dr S Sengupta of the Dept of Information Tech. presented an invited talk at the National Seminar organized at the NIT-Durgapur on "Engineering of Software Products: Perspectives of Research & Applications", January 2009

National/ International Academic Publications and Participations:

Prof. S. Chakraborty of the Department of Electrical Engineering got her paper titled "Symmetric Edge Cracks in an Orthotropic Strip Under Normal Point Loading" published in the International Journal of Fracture, Springer, 2008

Prof. S. Chakraborty of the Department of Electrical Engineering presented a paper titled "Solution of Non-Linear Vibration Equation Homotopy Analysis Method" in ICCSA-2009 held at the University of Le Havre, Normandy, France.

Prof. N. Sanyal, Prof. S. Chakraborty, Sri A. Mitra and Ms S. Choudhury (De) of the Department of Electrical Engineering participated at the Winter School on "Integrated Operation of Large Scale Modern Power Systems" in January 2009 organized at the NIT Durgapur and sponsored by MHRD/AICTE under the Staff Development Program.

Prof. S. Metia of the Department of Electrical Engineering got his paper "Fracture Order Modeling and GA Based Tuning for Analogous Realization with Lossy Capacitors for a PID Controller" published in IMECS-2009 held at Hong-Kong.

Ms. P Guha of the Dept of Comp Sc & Engg and Ms. G. Khan of the Dept of Information Tech. attended the IEEE Educational Program on Wireless Networking & Mobile Computing in March 2009

Conference organized at BPPIMT: RTCT 2009

A conference on Recent Trends in Computing Technology was organized at our institute, B.P. Podder Institute of Management and Technology on association with the Computer Society of India. The program was convened by Prof. Debasis Datta, Head of the Department of Information Technology, Prof. Soumya Paul, Head of the Department of Computer Applications and Prof. Somenath Roy Choudhury, Head of the Department of Computer Science and Engineering.

The program was initiated by an Inaugural Speech by Prof S.C. Chakravarty, Principal of the Institute, followed by a short speech by the Registrar, Wg. Cdr. R.S. Sen. Thereafter the convener of the conference Prof. Debasis Datta delivered his speech followed by a vote of thanks by Prof. Soumya Paul, the Joint Convener.

The first Technical Session was chaired by Prof. Debasis Datta and Ms. Sumana Sinha, where Prof. Amitava Sinha, Director of the School of Information Technology, West Bengal University of Technology, Kolkata delivered his talk. The talk by Prof. Sinha was followed by a second talk by Prof. Aditya Bagchi of, Dean of the Indian Statistical Institute, Kolkata. The session was concluded by a presentation by Mr. A.K. Sengupta, CE, Marathon Electric.

The second technical session was chaired by Prof. Soumya Paul and Ms. Inadyuti Dutt, where Prof. Utpal Biswas of Kalyani University delivered his talk, followed by a second talk by Prof. Ashish Kr. Chakraborty of QROR, Indian Statistical Institute, Kolkata.

The third technical session was chaired by Prof. (Dr) Ranjana Goswami and Prof. (Dr) Shila Ghosh, where Prof. Paramartha Dutta of Visva Bharati University delivered his talk, followed by a second talk by Prof. Amlan Chakraborty of the University of Calcutta.

The fourth technical session was chaired by Prof. Debasis Datta and Prof. Soumya Paul, where the contributory papers were presented.

The program proved to be a grand success having a wide band of participants attending the program both from the institute and outside. The papers in their originality were presented by some of the institutional faculty members. A subset of the list is presented as follows:

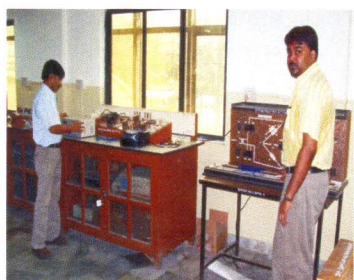
▪ Prof (Dr) S.C. Chakravarty, Prof (Dr) R. Goswami, Prof (Dr) S. Mukherjee, Prof (Dr) P. Saha, Prof (Dr) U. Mukherjee and Sri S. Chatterjee presented their paper titled "Electromagnetic Response of Nano-Composited Composites made of Graphite and Clay"

- Sri P. Biswas of the Department of Information Technology presented his paper titled "AD-HOC Demand Multi-path Routing using QoS constraints"
- Sri S. Chakraborty of the Department of Comp. Sc & Engg, Ms. I. Dutt and Prof. S. Paul of the Department of Comp. Appl presented their paper titled "ERP Solution to the recruitment of Soldiers during Recruitment Rallies"
- Prof. N. Sanyal of the Department of Electrical Engineering along with Ex-Student Sri A. Ray presented her paper titled "Wavelet-Artificial Neural Network based Virtual Instrument Too, for EEG Classification and Diagnosis of Epilepsy"
- Prof. J. Chanda of the Department of Comp. Sc and Engg presented her paper titled "CAMA: Context Aware Middleware Architecture for Agriculture Domain"
- Md. I Quraishi of the Department of Information Tech. presented his paper titled "An Improved OLSR Protocol"
- Prof. S Paul and Ms. I. Dutt presented their paper titled "A Comprehensive Study on Integrating the Desktop and Windows Mobile to send SMS"
- Sri B. Mondal of the Department of Comp. Sc and Engg along with 4th Year Students Ms. R. Chatterjee and Ms. P De presented their paper titled "Data Hiding in multiple shares using Image Size invariant Visual-Cryptography"
- Sri S. Chakraborty of the Department of Comp. Sc and Engg presented his paper titled "Information Security in the Light of Artificial Intelligence"
- Prof. A Saha and Prof. (Dr) S Ghosh of the Department of Electronics and Comm Engg presented their paper titled "Digital Computing using all Optical Technique"
- Sri P. Biswas of the Department of Information Technology presented his paper titled "The performance of various Routing Protocols of AD-HOC Network"
- Prof. I. Majumdar of the Department of Electronics and Comm Engg and Prof B.N. Chatterji of the Department of Comp. Sc and Engg presented their paper titled "Matching Algorithm for Content based Image Retrieval"
- Sri A Sukla, Sri A Kumar, Sri. G Singh and Sri SK Yadav presented their paper titled "Consistency analysis between Design and Code"
- Sri S. Chakraborty of the Department of Comp. Sc and Engg presented his paper titled "Approaches Towards Realizing Mathematical Aspects in Data Mining"
- Sri B. Mondal of the Department of Comp. Sc and Engg along with 4th Year Students Sri S Majumdar and Sri D Mukherjee presented their paper titled "Dynamic Channel Allocation in Cellular Mobile Environment Using Improvised RSU Algorithm"
- Prof. P Das and Prof. S. Chakraborty of the Department of Electrical Engineering presented their paper titled "Distributed Digital Control in Process Industries"
- Sri S. Senapati of the Department of Computer Science and Engineering along with 4th Year Students Ms P Ash, Sri S.S. Bag and Sri S. Banthia presented their paper titled "Staganography At the Cyber Space"

The program concluded with a highly impressive valedictory session, where the participation and presentation certificates were given out by the Conference-Dignitaries: Prof S. C. Chakravarty, Principal of the Institute and Chairperson of the Conference, Prof. Debasis Datta, Head of the Department of Information Technology and Convener of the Conference, Prof. Soumya Paul, Head of the Department of Computer Applications and Joint-Convener of the Conference and Ms Inadyuti Dutt, member of the Program Committee of the Conference.

Institutional Infrastructure:

The Department of Electrical Engineering is functioning at full swing in the Institute since the inception. The Major Laboratories along with a classroom-view is shown below.



Electrical Measurement Lab: In this Lab, students can measure unknown electrical parameters like self-inductance, capacitance, low-resistance by AC and DC Bridges of a given setup. Also single-phase and 3-phase power measurement facility is available here. Frequency measurement & calibration of different meters are also done here. The picture shows a CT-PT Trainer Kit and Setup Kit for capacitance measurement by Schering Bridge



Electrical Circuit Theory Lab: In this laboratory, students perform various experiments building their basic understanding on Circuit Theory. This laboratory caters for the students of all streams of B. Tech namely: The Electrical Engineering, The Electronics and Communication Engineering, The Computer Science and Engineering and The Information Technology. Here they prepare circuits with unknown parameters and test them against known load.



Control System Lab: This lab is equipped with high-end machines, hardware kits and state of art software to impart the required skills of a budding engineer. The lab comprises of kits like Servomotor, Linear Simulator, Phase Plane Analyzer Digital Controller and the like. The students are offered hands on training for operating the hardware equipments and verifying the results by simulation using MATLAB Software



Power Electronics Lab: This lab is equipped with machines, hardware kits and software packages that are modern and based on latest technologies available in the market to impart the required skills of a budding engineer. The setup shows an AC Variable Speed drives panel in our Power Electronics Laboratory. About twelve hardware and software simulation experiments are done here with power semiconductor switching circuits.

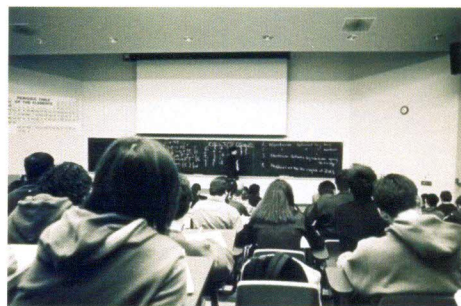


Power System Lab: This lab offers hands-on experiences in the field of Power Systems to the students of Electrical Engineering. The picture shows a setup of a directional over-current relay that senses the direction of the current and provides a tripping signal to the circuit breaker if the actuating quantity exceeds the pickup value



Electrical Engg Classroom: The picture shows Prof. Pramathes Das teaching the students of Electrical Engineering. Prof. Das is a highly qualified and experienced teacher. He is an expert in the field of Electrical Engineering and therefore an asset not only for his Department but also for the Institute as well.

Faculty Seminar Program:



Sri Bikromaditya Mondal of the Department of Computer Science and Engineering delivered a seminar titled "Visual Cryptography" on 6th March 2009. For his presentation Sri Mondal was given a certificate of appreciation.

The Institutional Seminar Management Authorities, Prof (Dr) Sabnam Sengupta and Prof Jayeeta Chanda organized the program in a decent manner thereby encouraging and promoting the already prevailing research and development mindset amongst the faculty members of the institute.

Sri Mondal enlightened on the technique of 'Visual Cryptography' to implement data hiding, data-encryption for storage and transmission of data into and through physical devices.

In-house Developments:

PC Based Remote Controlled Robot Mr AVO:

A PC based remote controlled Robot was developed by the final year students, 2008 at the Electrical Engineering Project Laboratory.


Jointly guided by Prof. Sudipta Chakraborty and Prof Nandita Sanyal and assisted by Sri Ranjit Kumar Paul of the Department of Electrical Engineering.



The Remote Controlled Robot Mr AVO

Here a PC based remote controlled circuit is used for operating a stepper motor using the software program STEPPER-C, which in return is making the robot "Mr AVO" to walk forward. The circuit works on the principle of Infrared (IR) Signal for Remote Control.

The program is run on the computer with transmitter attached to the parallel port of the PC and oriented properly towards the IR receiver. The program has a user interface to enter the mode of operation and to specify the controlled parameters including the angle of rotation of the stepper motor. The choice is supposed to be entered followed by pressing the return key.

<p>US Gets its new Democrat President:</p> <p>- Dr Rupa Pal</p> <p>Barack Obama Hussain the first Afro-American became the 44th president of the United States. He began his run for the presidency in the year 2007. In the year 2008 general election, he defeated Republican nominee John McCain and took the charge of the Presidents Office on 20th January, 2009.</p> <p>In his inaugural speech, President Obama reached out to the Muslim-World using his middle name Hussian and acknowledged the Hindu stating 'We are a nation of Christians, Muslims, Jews, Hindus and Non-Believers'. He said that the purpose of his address was to seek a new beginning between the U.S. and the Muslims all around the world based upon mutual interest and mutual respect.</p> <p>He unveiled his vision of inter-faith reconciliation and outlined an agenda inclusive of partnership on a global scale. His message brings a new hope to build up a new world of peace amity and co-operation.</p>	<p>The 123 Civil-Nuclear-Agreement:</p> <p>- Jayeeta Chanda</p> <p>The Indo-U.S. civilian nuclear agreement, known also as the Indo-U.S. nuclear deal is a bilateral accord on civil nuclear cooperation between the America and India. The framework for this agreement was a July 18, 2005 joint statement by Indian Prime Minister Manmohan Singh and then U.S. President George W. Bush, under which India agreed to separate its civil and military nuclear facilities and place all its civil nuclear facilities under International Atomic Energy Agency (IAEA) safeguards and in exchange, the United States agreed to work toward full civil nuclear cooperation with India. The deal places under permanent safeguards those nuclear facilities that India has identified as civil and permits broad civil nuclear cooperation, while excluding the transfer of sensitive equipment and technologies, including civil enrichment and reprocessing items even under IAEA safeguards. On August 18, 2008 the IAEA Board of Governors approved, and on February 2, 2009, India signed the agreement with the IAEA.</p>	<p>WWW Celebrating its 20th Anniversary:</p> <p>- Dr Rupa Pal</p> <p>The World Wide Web (WWW) celebrated its 20th Anniversary on 13th March 2009. In 1989, Tim Berner Lee, a British computer software genius wrote a document titled 'Information Management: A Proposal' and handed over to his supervisor on this day. Later he was allowed to develop his idea at CERN Conseil Européen pour la Recherche Nucléaire (European Council for Nuclear Research), one of the biggest European particle physics laboratory situated at Geneva at Switzerland. The web first began in CERN as a network of in-house computer sites. After its tremendous success Mr. Berners Lee and his CERN colleagues Robert Cailliau, a Belgian computer scientist, set up a system of interlinked hypertext documents accessed via internet and released in Dec 1991 to allow thousands of scientists, professionals around the world to stay in touch with one another. Since then Berner Lee has played an active role in guiding the development of the Web Standards. Now-a-days, WWW has changed the daily lives of millions in the world.</p>	<p>Editorial Committee:</p>  <p>The Editorial Committee consists of the following members:</p> <ul style="list-style-type: none"> ▪ Prof (Dr) S.C. Chakravartty ▪ Prof. (Dr) N K Dutta ▪ Dipankar Majumdar ▪ Kalyan Mahanto ▪ Dr. Uddipan Mukherjee <p>Call for Contributions: Contribution for the Newsletter is always welcome from all the members of the BPPIMT family. The prospective contributors are requested to send their writings electronically to the following mail address:</p> <p>newsletter.bppimt@gmail.com Contributions should be within 100 words on interesting and intelligent news on science, technology and general topics related to our institute and the world at large. Contributions within 100 words may also be submitted as hard copy to Dipankar Majumdar of the Department of Information Technology for publication in the newsletter.</p>
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EDITORIAL WORDS

The Power of Mind:

Swami Vivekananda said, "The ideal of all education, all training should be the man-making and making of good human beings. But instead of that we are always trying to polish up the outside. What is the use in polishing up the outside when there is no inside?" At the end and the aim of all teaching and training is to make a person grow. The person who influences, the person who throws his or her magic as it were upon his or her fellow beings is a dynamo of power, and when that person is ready, he or she can do anything and everything good he or she likes and that personality put upon anything will make it work.

Think of the great leaders of mankind. We always find that it was the personality of the person that counted. Think of the writings that have been left to us by the past leaders of mankind. Take each one of their writings they left for us in literatures, songs and sermons. In fact the real new, innovative and revolutionary thoughts in this world for the advancement in Science, Technology, Philosophy and on Life, Living and on Life "before and after" Death came from the mind of a very few who had an extraordinary power of mind. These authors became great and extraordinary not simply from the thoughts they thought, not simply from the books and sermons they left for us, but for the personality they developed due to the extraordinary power of their mind.

Hence students of our institute are taught by our teachers not only the subjects as per the syllabus of the University but they are also taught to be good human beings with good personality developed by the power of their minds, and thus become useful for the betterment of the society.

At the end it must be also said that in one society not everyone can reach the same standard, not everyone becomes highly successful. Failure is a part of our life. Generally we complain of others in our failure. The moment we are unsuccessful we say so and so is the cause of our failure, but we hardly confess our weaknesses and faults. We have to learn this also and also learn to rectify our fault, then only we can be more successful in the exams of our life.