



THE BPPIMT - NEWSLETTER

A Quarterly In-House Magazine

of

B.P. Poddar Institute of Management and Technology

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Issue - VII | July 2010 Chief Advisor: Prof (Dr.) Sutapa Mukherjee, Editor in Chief: Prof Emeritus (Dr) S.C. Chakravarty,
Prof (Dr) B. N. Chatterjee



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

Remembering Rabindranath Tagore on his 150th Birth Centenary

Rabindranath Tagore (1861 – 1941)

*The highest education is that
which does not merely gives
us information but makes our
life in harmony with all
existence.*

*I slept and dreamt that life
was joy.*

*I awoke and saw that life was
service.*

*I acted and behold, service
was joy.*



The Editorial Committee expresses Homage and respect to our great Nobel laureate poet by remembering and reciting few lines from his poem or song singing the might of the all-mighty Master the Creator:

"I know not how thou sing,

My Master!

I ever listen in silent amazement.

The light of thy music illuminates the world.

The life breath of thy music runs from sky to sky.

The holy stream of thy music breaks through all stony

Obstacles and rushes on"

(The First English translation published in *The Nation* (UK) on 16-11-1912)

ACADEMIC NEWS:

FACULTY PUBLICATIONS

Books:

Prof. (Dr.) N. K. Datta of the Department of Electrical Engineering got the text book titled "Digital Electronics and Microprocessor" published from New Central Book Agency (P) Ltd for B. Tech Course in April 2010.

Journals:

Ms. Jayeeta Chanda of the Department of Computer Science & Engineering got her paper titled "Performance Evaluation of CAMA for Agriculture Domain" published in Infocomp Journal of Computer science in June 2010.

Mr. Indra K Maitra of Computer Centre got his paper titled "Hiding of Data using Reserved Field of Palette for Steganography" published in the Journal of Computer Science and Engineering (ISSN 2043-9091), Volume 1, Issue 2, pp. 1-6.

Mr. Indra K Maitra of Computer Centre got his paper titled "An Alternative Approach of Steganography using Reference Image" published in the International Journal of Advancements in Technology (ISSN 0976-4860), Volume 1, No 1, pp. 95 102.

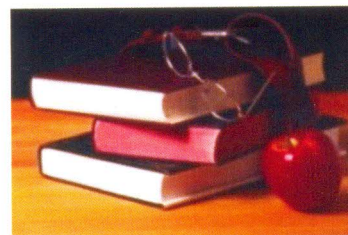
Conferences:

Ms. Jayeeta Chanda of the Department of Computer Science & Engineering and Ms. Sabnam Sengupta and Ms. Ananya Kanjilal of the Department of Information Technology presented their paper titled "Formalization of the Design Phase of Software Lifecycle: A Grammar Based Approach" in the International Workshop on Formalization of Modeling Languages, Colocated with Ecoop, Maribor, Slovenia held in June 2010.



Ms. Ananya Kanjilal and Ms. Sabnam Sengupta of the Department of Information Technology presented their paper titled "Scenario Path Identification in Distributed Environment: A Model Based Approach" in the 21st IEEE Symposium on Rapid System Prototyping (RSP 2010), Fairfax, VA and got it published in the proceedings.

Mr. Indra K Maitra of Computer Centre presented his paper titled "Handwritten Signature Extraction and Identification" in All India Seminar on Role of ICT in Improving Quality of Life held in June 2010.



Articles in Magazines:

Dr. Uddipan Mukherjee of the Department of Physics got his articles titled:

- "The Bad War (shorter version)" published in Newsline in April 2010.
- "Nuclear Energy from 823 Corpses" published in Global Politician on 01 April 2010.
- "What Blocks Global Investment in India", published in Uday India, Vol 1, No 16, pp 24-25, April 03 2010.
- "All Jungle No Mahal" published in Uday India, Volume 1, No 18, on 17 April 2010.
- "The Bad War (full version)" published in Uday India on 08 May 2010, Volume 1, No 21, pp 22-24.
- "Kyrgyzstan, After the April Upsurge" published in Diplomatic Courier on 22 May 2010.
- "The Last Gamble" published in Geopolitics", pp 61-63, June 2010, Vol. I, Issue II.
- From Bishkek to Ganges" published in News Central Asia, 22 May 2010.

INSTITUTIONAL NEWS:

STAFF DEVELOPMENT PROGRAM

A seven day staff development program was held at the Institute. The program was divided into three segments ECE & EE departments conducted a 3 day session, CSE, IT & MCA conducted another 3 day session. Finally Mission 10X workshop participants conducted 1 day session on Teaching Methodology. Senior faculty members and experts in the respective fields conducted the program. Almost all the faculty members and technical staffs attended the program.

SPECIAL TECHNICAL SEMINARS

Ms. Sagarika Das, Assistant Professor of the Department of Electronics and Communication Engineering delivered a seminar talk on "Study of analog circuit design using CDBS block at the seminar room of BPPIMT on 27th April 2010. This is being delivered under the faculty seminar scheme of BPPIMT.

Dr. Soumya Sankar Basu of IBM India delivered a talk on "Architecting for Non functional requirements" on July 24, 2010 under the Institute seminar scheme.

IET UK MEMBERSHIP DRIVE WORKSHOP

A membership drive workshop for IET UK was organized by Electronics & Communication Engineering Dept. The workshop was attended by a large number of students. Some of the students have already become a member of the International organization. The ECE department is actively engaged to open a student chapter of the organization on the campus.

SPIE STUDENT CHAPTER

The ECE department is actively engaged to open a student chapter of the Society for Photo-Optical Instrumentation Engineers (SPIE) an International organization based in USA. The appeal has been accepted and it is due to be opened in August 2010. Already 21 students from the department have become members of SPIE

STUDENTS' ACHIEVEMENTS

About 21 students of ECE dept., 10 from EE dept and 4 from CSE dept. have cleared the GATE examinations of 2010 with the highest of 99.9 percentile by Isha Das of ECE Dept. Another 21 students of ECE dept., 2 from EE dept. and 2 from CSE dept. cleared various management entrance exams viz. CAT, XAT, JEST, NMAT, SNAP, GRE etc.

CRICKET TOURNAMENT

An intra-college cricket tournament was held in the month of April. The tournament was a grand success. On 23rd April 2010, CSE department of BPPIMT defeated the BBA department in the final to become the champion

SEMESTER EXAMS

The Institutional exam committee consisting of Prof (Dr) Shila Ghosh as the Officer-in-charge, Prof. Ms. Nandita Sanyal and Mr. Sibasis Senapati as supervisors conducted the semester exams as per the guidelines from WBUT. With support from all members of the Institute the exam was a success and was highly praised by the USS.

FOCUS ON VARIOUS STREAMS OF BPPIMT ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

We start this section with focus on the ECE Dept, perhaps one of the most efficiently organized departments at BPPIMT. ECE Dept. is organized under the guidance of well renowned persons like Prof (Dr) B.N. Chatterji (Former Dean of IIT Kharagpur, presently Dean Academic Affairs of BPPIMT), Prof (Dr) Bhaskar Som, Prof (Dr) Sutapa Mukherjee (Former HOD and presently Principal of the Institute) and Prof (Dr) Shila Ghosh (Presently HOD and Associate Professor of the Department). Other than the 3 senior professors and 1 associate professor mentioned, the department consists of 5 Assistant Professors Mrs. Ivy Majumdar, Mr. Arijit Saha, Mr. Surajit Mandal, Mrs. Rashmita Mishra and Mrs. Sagarika Das, and 12 lecturers Mrs. Somali Sikder, Mrs. Anamika Basu (Das), Mrs. Sujata Pal, Mr. Pantadeb Saha, Mr. Hrishikesh Sarkar, Mr. Mausam Chatterjee, Mrs. Banhi Dutta Chowdhury, Mr. Pallab Kumar Nath, Ms. Madhumita Sarkar, Mr. Pushpendu Kanjilal, Mrs. Debarati Dey and Mrs. Alakananda Baral who are experts in their fields. 4 faculty members are PhD degree holders and some among the rest are in the advance stages of their PhD work. All other faculty members are PG degree holders. The department strictly maintains 1:15 teacher-student ratio. There is knowledge up gradation scheme within the department. Senior faculty members deliver talks and take classes of the faculty members and technical assistants.

The total publications of the faculty members during the last five years in various refereed journals and conferences are more than 50. Mr. Arijit Saha has already published a book on *Digital Principles and logic design techniques* from USA and New Delhi. He has also received acceptance for an International patent on monochromatic optical retarders. Dr. Shila Ghosh has been selected as the program committee member for SPIE International conference at California, USA. She has also acted as chairperson in the conference at USA. Students of this department have also presented papers in conferences. Many students have gone abroad for higher studies. Recently Mr. Srinjoy Ghosh has been selected for achievement award New Eng graduate students at Florida University. Mr. Soumya Deep Rakshit completed his MS and PhD from University of Bath, UK and Mr. Anupam Samui completed his MS form University of Leeds, UK. Other than those mentioned Ms. Ria Mukherjee and Ms. Saonnah Mondal has also gone to USA for completing MS/PhD.

The department also has a departmental library with vast collection of books and journals. ECE department also consists of two research groups in the areas of optoelectronics & optical communication and image processing, who are actively engaged in research activities. Many of the faculty members are members of professional bodies. The department conducts faculty seminars at the departmental level. Also a good number of students of the department are the members of professional bodies. The ECE department is actively engaged in opening a student chapter of the International organization SPIE. The department consists of eleven well equipped labs. There are eleven well qualified technical staffs Mr Debasish Sharma, Mr. Soumita Singha, Mr. Mrinanka Chakrabarty, Mr. Arindam Biswas, Ms Bhaswati Sadhkhana, Mrs. Mousumi Ganguly, Mr. Sakya Saha, Mrs. Mousumi Dutta, Mr. Partha Saha, Mr. Abhijeet Manna and Ms. Sanghamitra Manna in ECE department. In many of the labs the designs of the experimental kits have been provided by the faculty members indigenously and those were fabricated by vendors. The lab status report is taken regularly and updated as and when required.

Many of the faculty members are also actively engaged in administrative activities of the Institute. Prof. (Dr.) Shila Ghosh is the Officer-In-Charge for the WBUT exams and is the Chairperson of the anti-ragging committee. Mrs. Ivy Majumdar is engaged with institutional purchase, library, anti-ragging and industry-institute interaction committee. Mr. Arijit Saha is associated with institutional anti-ragging and editorial committee of newsletter. Mr. Surajit Mandal is a core member of the exam committee. Mrs. Rashmita Mishra is also a member of the industry-institute interaction committee. ECE department believes in decentralization of power. The department consists of several committees with participation from both the faculty as well as the technical assistants.

Quality of teaching in the department is of very high standard. That is reflected by the fact that a good number of students from the department has been achieving brilliant results in the university exams and international or national competitive exams in educational and as well as corporate sectors. Regular attendance monitoring of the students is a feature of the department. Result analysis of the tests taken along with the histograms is made to judge the progress of the students and measures are taken accordingly. Remedial classes are arranged by the department for the academically weak students. The department also organizes co-curricular classes for the students to appear in different competitive exams like GATE, CAT etc. Regular interaction with the alumni is being conducted as well as alumni meetings are held within the department. Feedbacks from the students are taken every semester and measures are taken to improve the department

Students of ECE department have been awarded with various recognitions at the National level for technical as well as extra-curricular activities. To mention a few during the last five years, Mr. S Banerjee, Mr. A Dutta, Mr. M Abedin, Mr. S Bhattacharya presented a paper on *Human Recognition by Iris Image Processing* in Conference on *Recent Trends in Emerging Technologies*, held at Kolkata in 2006. They also presented a poster on *Recognition by Iris Image Processing* in Conference on *Recent Trends in Applied Optics & Photonics* at C.U. in 2006. Somnath Prodhana & Souvik Samanta received award for Best Team Project on *Spy ROBO* at Science talent Search & Exhibition, BITM in 2005-06. They were also awarded the Second best team project on *Advanced version of Spy ROBO* at Engineering Fair 2006. Mr. Rampranna Bhattacharya received scholarship from the Govt. of India, Ministry of Tourism & Culture for Sitar recital.

Alumni of this department are well placed in renowned corporate sectors like CTS, Tech Mahindra, ITC Infotech, Capgemini, Wipro, L & T Infotech, Infosys, TCS, Accenture, Tata Elxsi, IBM to mention a few. Many of the students are placed as various PSUs. Mr. Soumyadip Chakkraborty (Haldia Petrochem), Mr. Prosenjit Pramanik (Indian Airforce), Mr Anirban Datta and Mr. Dibyendu Dam (BSNL) are to name a few who are quite successful in their area. Major of the alumni like Soumyadeep Rakshit, Subhojyoti Chakraborty are well settled abroad. Entrepreneurship development is one of the major areas where the department gives stress and as a result many of the students are now successful entrepreneurs. Some of the successful entrepreneurs of the department in recent years are Mr. Priyanka Talukdar, Mr. Suvendu Das, and Mr. Ritesh Chowdhury.

ECE department has organized seminars at the National level and in the process of organizing similar events in future. And last but not the least; ECE department organizes an annual picnic cum get-together every year to maintain close bonding among all the members. The motto of the department is to excel and establish itself as one of the best departments in the country.



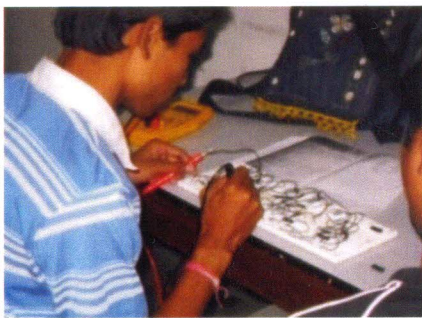
Faculty members with HOD.



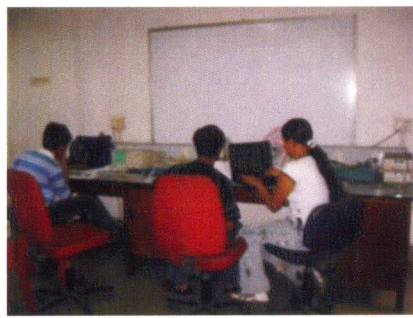
Technical Assistants with HOD.



Students working in Microwave lab.



Students in Electronic Design lab.



Students engaged in Project Lab

GREAT MEN & THEIR MESSAGES WITH HUMOUR

Once Rabindranath was invited to preside a cultural program organized by one of the local clubs at Jorasanko at half past five pm. Rabindranath was present just at 5.30 p.m. to see that the hall was full of audience, but organizers were not to be found any where. The nobel winner poet waited for sometime then left the hall with a note on a piece of paper: I came; I sat on the chair, waited for about fifteen minutes, but found organizers are still not present. So I left. Note my half past five was Five thirty and Five thirty pm only.



One fine evening in a romantic mood Bernard Shaw presented the very first copy of his new book to his dearest lady friend with a note: With Author's Love Bernard Shaw. After a few months Shaw found to his surprise, the same book in an old book stall on Oxford Street. With a broken heart he bought the book and again presented the book to his Lady-Love, but this time with a note: "With Renewed Love Shaw."

NEWS OF INDIA ON MOVE

INDIA ON THE ROAD OF WEALTH

We know wealth is required to create roads. But it is also true that in modern world of fast economic growth roads create wealth. Better infrastructure of a nation means better and faster communication: Communication of information knowledge and materials. Most economically developed nations have most developed and designed roads of more lanes, like six lane and even eight lane roads. India is also on the move since last one decade with state of Quadrangle and Gram Sadak Yojana. The road ahead is long as the progress of these 'Yojanas' were not satisfactory for various factors. Despite it all, India plans to build 20 kms of good quality roads a day, which will not collapse after every rain by using new advanced technology like 45 high-tech processes and machinery to ensure heavy traffics of more weights and speeds.

B.Tech Project (Electronics & Communication Engineering)

OPTICAL BRIDGE & ITS APPLICATIONS

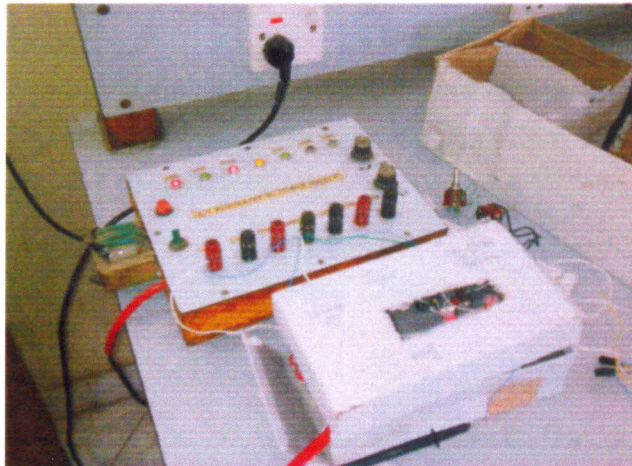
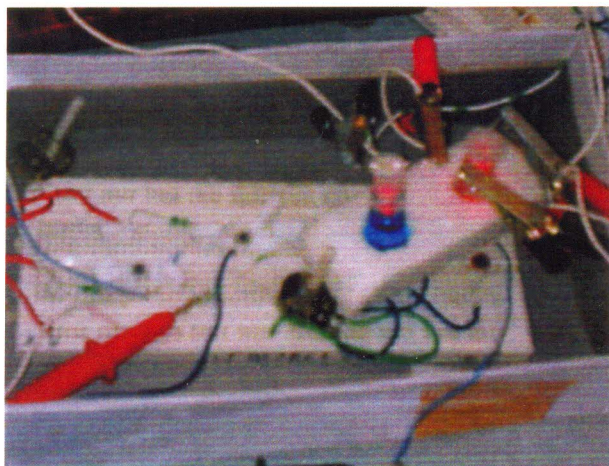
Objective: To construct an optical bridge and to study different applications for the same.

Brief Description: The basic principle of optical bridge is same as simple Wheatstone bridge, where voltage output is zero when bridge is balanced. Here light balancing of different bridges or measurement of differences in light intensity is done. Optical bridge generally uses two light beams one of which acts as a reference, while the others are modulated or varied by passing through a sample. This project involves the realization of the following applications:

Thickness Sensor: The thickness of transparent and colour films were measured in the range of 35 μm to 0.5 mm.

Colorimeter: The concentrations of coloured but transparent solutions were measured in the range of 0.01 to 1 M.

The project was carried out by the B.Tech (Electronics and Communication Engineering) 4th year students: Oli Chakraborty, Kushan Chakraborty, Anwesha Chakraborty and Isha Das under the guidance of Prof. (Dr.) Shila Ghosh.



▪ **Editorial Committee** : The Editorial Committee consists of a team of Faculty Members headed by Prof (Dr) N. K. Datta, with Prof. Emeritus Dr S.C. Chakravartty as Chief Editor, Prof (Dr.) Sutapa Mukherjee, Principal and Prof (Dr.) B.N. Chatterji, Dean as the Chief Advisors and Mr. Arijit Saha Assistant Professor as Editor of the Newsletter.

▪ **Call for Contributions** : Contribution for the Newsletter on the global and national news related to technical, economical, philosophical and general science etc. is solicited from all the members of the BPPIMT family and the students. The prospective contributors are requested to send their writings in about 200 words electronically to the mail address: newsletter@bppimt.ac.in. Publication in the Newsletter is at the full discretion of the Editorial Committee.