THE BPPIMT - NEWSLETTER

A Quarterly In -House Magazine
of
B.P. Poddar Institute of Mana gement and Technology
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Issue - VI, January 2010 **Editor in Chief: Prof Emeritus (Dr) S.C. Chakravartty**

HAPPY
NEW YEAR
2010

Message from the Principal

I feel privileged to write in this coveted column of an institution named after the great philanthropist and educationist Late Shri B. P. Pod dar, an institution himself in his lifetime. I am honoured to take the charge as the Principal of this great institution wherein illustrious academicians like Prof. K. N. Chakraborty and Prof. S. C. Chakravartty served as my predecessors and obviously this would give me an additional inspiration.

In this time of change when each stream is evolving to newer streams of inter disciplines in the horizon, our responsibility increase manifold as academicians to deliver to the students to cope up with the challe nges ahead.

I believe we would be able to take up the challenge to make the institution a great seat of learning through teaching, learning and pioneering research. In all our endeavors, I am confident to receive unstinted support and advice from our Management.

I wish you all a very Happy and Prosperous New Year.

Prof (Dr.) Sutapa Mukherjee

From the Editorial Desk:

Every New Year gives us New Hopes and New Scopes.

The Year 2010 has given us a New Principal and a New Professor Emeritus. We are thankful to the Management for these New Year Gifts.

These gifts will certainly bring newer ideas, hopes and scopes in the field of Edu cation, Management, Research and Development so that BPPIMT can become a world-class center of learning in Technology and Management.

To achieve this mission, quality is to be maintained. Universally, quality is what gives satisfaction to the global society. On this New Year's Day, let us all promise that we give all our best to maintain quality of our Institute delivering quality education to our students and developing them as the responsible human beings of the future.

Academic News:

Degrees Achieved:

1. Mr. Tamal Ghosh of the Department of Electronics and Communication Engineering Department has been awarded the M.Tech Degree from Calcutta University.

2. Mr. Hrishikesh Sarkar of the Department of Electronics and Communication Engineering Department has been awarded the M.Tech Degree from Calcutta University.

3. Ms. Sarbari Banerjee of the Department of Electronics and Communication Engineering Department has been awarded the M.E. Degree from the West Bengal University of Technology

4. Mr. Pallab Kumar Nath of the Department of Electronics and Communication Engineering Department has been awarded the M.E. Degree from the Bengal Engineering & Science University.

5. Mr. Shyamal Mandal of the Department of Electronics and Communication Engineering Department has been awarded the M.E. Degree from Jadavpur University.

6. Ms. Sujata Pal Sadhukhan of the Department of Electronics and Communication Engineering Department has been awarded the M.E. Degree from Jadavpur University

7. Ms. Porcia Choudhury of the Computer Science & Engineering Department has been awarded the M.E. Degree from Bengal Engineering & Science University

8. Md. Alamgir Hussain of the Computer Science & Engineering Department has been awarded the MCSE Degree from Jadavpur University

9. Ms. Suprabhat Maity of the Computer Science & Engineering Department has been awarded the MCSE Degree from Jadavpur University

10. Mr. Arghya Mitra of Electrical Engineering Department has been selected as Institute Scholar in the field of Power System in the department of Electrical Engineering at IIT, Kharagpur.

11. Mr. Shymal Mondal of Electronics and Communication Engineering Department has been selected as Institute Scholar at IIT Kharagpur

12. Mr. Sujoy Mondal of Electronics and Communication Engineering Department has been selected as Institute Scholar at IISc, Bangalore in the field of Digital Signal Processing

13. Ms. Sharbari Banerjee of Electronics and Communication Engineering Department has been selected at IIT, Delhi for Research Work

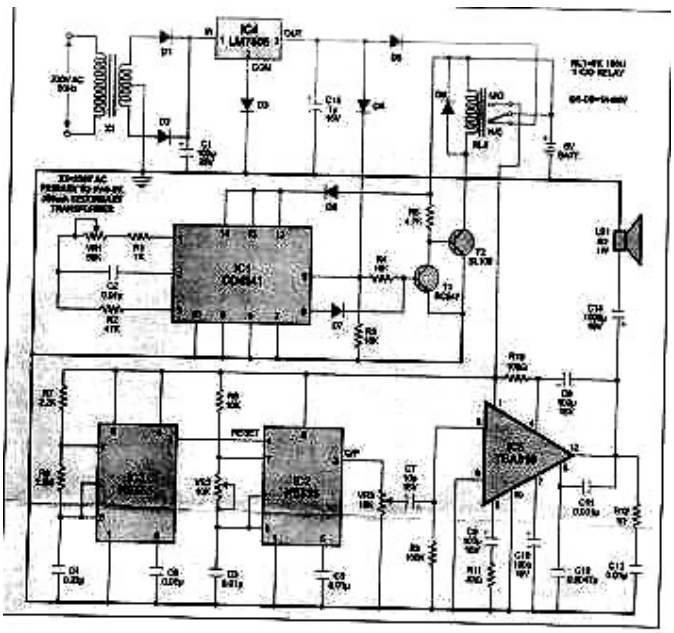
14. Ms. Dolon Champa Das of the Department of Humanities completed her M.Phil Degree in the year 2009.

Odd Semester Examination 2009 - 10

The Odd Semester 2009-10 was held in the Institute 8th December till 26th December 2009. The Laboratory Exams were held prior to the Theory Exams, which were held from 14 th to 26th December. Our Examination Control Unit headed by Dr. Shila Ghosh deserves thanks for their creditable performance.

In-house Projects & Developments

Remote Emergency Alarm for Unmanned Lifts
(Published in Electronics for You, National Magazine)



The above remote Emergency Alarm for Unmanned Lift has been conceived and designed by our senior Laboratory Assistant of the Electrical Engineering Department: Mr. Ranjit Kumar Paul at the Project Lab of the Electrical Engineering Department.

This newly designed circuit was published in the premier Electronics Magazine of India: 'Electronics for You'. This magazine entertains and encourages only the innovative ideas in the industrial application.

In fact this circuit has become very useful in the Automatic Lift Operation for lift users when they get stuck due to any un-foreseen problems like Load Shedding, Circuit Defects etc. Hence it has been incorporated by Lift-Manufacturers like OTIS. Electrical Engineering Department feels honored that it could contribute in the Industrial Applications.

Other Institutional News

- Prof (Dr) Sutapa Mukherjee has taken the charge as the Principal of the Institute from Nov 2009.
- Prof. (Dr.) S.C. Chakravartty has been given an appointment as the Professor Emeritus of the Institute subsequent to his relinquishing his office of the Principal of the Institute
- Dr. Sabnam Sengupta, Assistant Professor of the D epartment of Information Technology has taken the charge of the Department from September 2009.
- Dr. Ranjana Goswami in the post of Assistant Professor has taken the charge of Department of Physics.
- Mr. Sanjoy Bhattacharyya has taken the charge of the Department of Humanities who is holding the post of Assistant Professor in the same Department.
- Mr. Binoy Krishna Biswas has taken the charge of the Department of Mechanical Sciences.
- Ms. Swagata Gyan Kundu has joined as a lecturer in the Department of Information Technology.
- Ms. Simi Chakraborty has re-joined the Institute from as the Personal Assistant to the Director and Principal.

National/ International Academic Publications and Participations

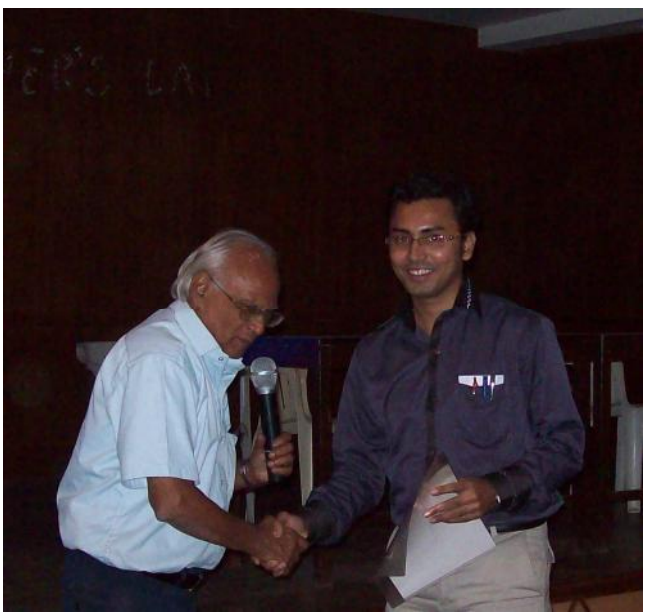
- Mr. Arijit Saha has got a paper published in November-December 2009, vol. 75, No. 11-12 of Science and Culture titled "Combination of birefringent plates forming a retarder having marginal chromatic error"
- A paper tilted "Realization of Polarization-based optical code division multiple access system using code-hopping technique" has been selected for oral presentation at SPIE International Symposium on Defense, Security and Sensing on Polarizatiuon: Measurement, Analysis, and Remote Sensing IX at Orlando, Florida, USA on 8th April 2010. Arijit Saha, Surajit Mandal and Shila Ghosh have authored the paper. This paper is the only Selected Indian Paper in this conference.
- Another paper tilted "A novel technique for data security in optical code division multiple access network using code-hopping technique ", has been selected for oral presentation at SPIE International Symposium on Defense, Security and Sensing on Signal Processing, Sensor Fusion and Target Recognition XIX at Orlando, Florida, USA on 7th April 2010. Surajit Mandal, Arijit Saha and Shila Ghosh have authored the paper. This paper is also the only Selected Indian Paper in this conference.
- A paper titled "A Study on Diverse Nanostructure for Implementing Logic Gate Design for QCA" is published in the International Conference ICANN'09, held on 09th Dec'09 to 11th Dec'09 at IIT Guwahati. Kunal Das of the Department Information Technology authors it.
- A paper titled "A Novel Approach of And-Or-Inverter (AOI) Gate Design for QCA" is published in the IEEE International Conference CODEC'09, held on 14th Dec'09 to 16th Dec'09 at Kolkata. Kunal Das of the Department Information Technology authors it.
- A paper titled "Novel Approach to Design A Testable Conservative Logic Gate for QCA Implementation" Accepted for publication in IEEE Intr. Conf. of IACC'2010, to be held on 18th Feb.-20th Feb. 2010. Kunal Das of the Department Information Technology authored it.

Invited Talk

Prof. S.C. Chakravartty, Principal of the Institute is presenting a Certificate of Honour to Dr. N. Biswas

Dr. N. Biswas, Senior Associate Dean of Engineering (Research and Planning), University of Windsor presented a talk on "Studies, Life and Careers in Canada" on 5th Nov 2009 at the seminar hall of the institute. He focuses on the prospects of higher studies in Canada; inform ation regarding fees/ scholarships and the lifestyle of Canada .The final and pre final year students attended the talk. The session was very interactive as well as informative providing a clear picture of the scopes and prospects of higher studies in Cana da to our students.

Faculty Seminar Program



Sri Shyamol Mondal of the Department of Electronics and Communication Engineering delivered talk in the seminar on **INTRODUCTION TO FinFET AND ITS APPLICATIONS** on 6th Nov 2009. The idea behind the talk was to describe the progress of device technology and compare FinFET against other bulk CMOS devices such as Double gate MOSFET, Tri-gate MOSFET etc. It was interesting and educating session ended with lots of questions from the audience.

~CONTRIBUTORY~

150 Years of Darwin's Theory

Phultuli Guha

One hundred fifty years ago, a book that was published in England has changed the world. Charles Darwin's *On the Origin of Species* has been declared the most important book ever written. Introducing the theory of evolution by natural selection, Darwin's book altered how scientists look at the natural world, and continues to frame biological research today. Even 150 years after it first appeared in print, Charles Darwin's "On The Origin of Species" still impinges differences of opinion amongst scientists convinced of its truth and critics.
The Year 2010: "Darwin Year" so named because February 12 was the 200th anniversary of the British naturalist's birth and November 24 the 150th anniversary of his book has brought about a flood of books, articles and conferences debating the theory of evolution. While many covered well-trodden ground, some have taken new paths.

Darwinian evolution is both a powerful scientific theory describing how life forms develop through natural selection. It also forms a basis for philosophies and social views that often include atheism. The social perspective plays an immense role in establishing the theory of evolution rather it's a powerful aspect to fight with the concept, belief and principles of Darwinian theory.

Still after 150 yrs of "The Theory Of The Fittest " we are arranging, participating, producing views and even drawing conclusive lines for Darwinian Theory. These activities itself give enough importance now and even time t o come to produce our views about the principles of one man CHARLES DARWIN cited 150 yrs ago.

~ World Environment and Copenhagen 2009: An Effort to Ensure Better Climate ~

- **Sudipta Chakraborty**

Catastrophes like tornadoes and floods triggered by g lobal warming and climate changes, followed by repeated warnings of the scientists and environmentalists necessitated the search for an equitable and scientifically adequate agreement to prevent disastrous climate change.

By 2012, the legal commitments under the Kyoto Protocol would run out thereby creating an acute urgency for the formulation of a new climate protocol. The 15th COP (Conference of Parties, as the signatory nations are called) was held at the snow drenched Danish Capital, **Copenhagen from 6-18th Dec, 2009**. Stalwarts from 193 nations boarded the green plane to savour the organic Coffee at the Bella Center.

The signs of acrimony and conflict among the different groups were obvious during the first week of the summit. The climate talks were stalemated for some time but finally the hard bargains of the four powerful emerging nations for an ambitious climate deal in the face of stiff opposition of the developed nations mellowed with the acceptance of the **Copenhagen Accord** by **26 influential countries** including India. A US led pack of architects and the three page comprehensive pact constituted on the "pledge and review" formula demands emission cuts globally as well as nationally to restrict the increase of global temperature within 2° on the basis of equity while addressing the key issues.

By the time the meeting was wound up many wondered whether the real agenda lost its ground in the battle of diplomats and politicians and the debate over who played their cards the best ceased to die. The million-dollar question that whether "climate" was the real victor or the loser of the summit remains unanswered!

- **Ananya Kanjilal**

The recent Climate Change Conference in Copenhagen, the capital of Denmark, has once again portrayed a dismal pic ture of how the world has failed to unite on an issue which touches on the very existence of the earth and by extension, man.

The Copenhagen summit set a commitment to limit global warming to two degrees. But many people fighting climate change were disappointed because it failed to spell out specific targets that will enable the world to hold down temperatures.

Though the conference failed to adopt a binding treaty on emission cuts, as a face saver it decided to "take note" of a US - brokered deal with Br azil, South Africa, India, China (BASIC). The US-BASIC accord promised to limit gas emissions to two degrees Celsius of pre-industrial levels and peaking of global and national emissions at the earlies, among other things.

Given the threat posed by climat e change to the entire world, countries must show more commitment to the fight against greenhouse gases. There is no doubt that the world will be better for it as further delay will amount to not only trivializing a critical issue that demands urgent actio n, but postponing doomsday.

The Copenhagen climate summit however was successful in the sense that it has initiated a mass movement of ordinary citizens across the world to work towards a better tomorrow of hope and peace and pressurize politicians to tak e bold steps in the next climate summit at Mexico in 2010.

- **Editorial Committee**: The Editorial Committee consists of a team of Faculty Members headed by Prof (Dr) N. K. Datta, with Prof. S.C. Chakravartty as Editor-In-Chief.
- **Call for Contributions:** Contribution for the Newsletter is solicited from all the members of the BPPIMT family. The prospective contributors are requested to send their writings electronically to the mail address: newsletter.bppimt@gmail.com. Contributions may also be submitted as hard copy in about 200 words to the Editorial Committee for publication in the newsletter. Publication in the Newsletter is at the full discretion of the Editorial Committee.