



# THE BPPIMT - NEWSLETTER

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of

**B.P. Poddar Institute of Management and Technology**

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## Remembering P. C. Mahalanobis -The Great Statistician



Prasanta Chandra Mahalanobis, born on 29 June 1893, was an Indian Scientist and Applied Statistician. He is best remembered for the Mahalanobis distance, a statistical measure. He made pioneering studies in anthropometry in India. He founded the Indian Statistical Institute, and also contributed to the design of large-scale sample surveys. He passed matriculation examination in 1908 from the Brahmo Boys School in Calcutta. Entering Presidency College, Calcutta in 1908, Mahalanobis passed the Intermediate Examination in science two years later and graduated with a B.Sc. with honours in physics in 1912. He matriculated from King's College in Cambridge in October 1913 and passed Part I of the mathematical tripos in 1914. He then transferred to the natural sciences tripos, obtained a first class pass in Part II in 1915 and was awarded a Senior Scholarship by King's College. In Cambridge, he became friendly with Srinivasa Ramanujan.

He returned to India in July 1915 to take a short holiday before beginning his research project. And here he was introduced to the Principal of Presidency College and was invited to take classes in Physics. He went back to England and was introduced to the journal *Biometrika*. This journal created great interest in him and he returned India with a complete set of this journal. He discovered the utility of Statistics in the problems of Meteorology, Anthropology and began working on it on his journey back to India. This interest in Statistics did not change the career path of Mahalanobis who was appointed as Professor of Physics at Presidency College in 1922. He continued to teach Physics at the College for the next thirty years but during this time he brought about profound changes which influenced the future development of Statistics in India. Many colleagues of Mahalanobis took an interest in Statistics and the group grew in the Statistical Laboratory located in his room at the Presidency College, Calcutta. Gradually the Indian Statistical Institute (ISI) was established and formally registered on 28 April 1932. The other major achievement of Mahalanobis was the founding of the Statistics journal *Sankhya* in 1933. Mahalanobis received many honours for his remarkable contributions to the development of Statistics and to life in India. For example he was awarded the Weldon Medal and prize from Oxford University (1944), the Sir Deviprasad Sarvadhikari Gold Medal (1957), the Gold Medal from the Czech Academy of Sciences (1964), and the Durgaprasad Khaitan Gold Medal from the Asiatic Society (1968). He was the President of the Indian Science Congress in 1950 and President of the International Statistical Institute in 1957. He was elected a fellow of many societies and academies such as: the Royal Society of London (1945), the Econometric Society, United States (1951), the Pakistan Statistical Association (1952), the Royal Statistical Society, U.K. (1954), the USSR Academy of Sciences (1958), and the American Statistical Association (1961). He received honorary degrees from the University of Calcutta (1957), Sofia University (1961) and the University of Delhi (1964). In 1959 he was elected an Honorary Fellow of King's College, Cambridge. In 1968 the Government of India awarded him the Padma Vibhushan. This great son of India passed away on 28 June 1972.



## ACADEMIC NEWS:

### Publications:

#### Books:

**Jayeeta Chanda, Ananya Kanjilal, Sabnam Sengupta, Swapan Bhattacharya**, "Transformation Framework for Consistent Evolution of UML Behavioral Elements into BPMN Design Element", Handbook on Web Services Foundations, Springer, pp. 273-289, ISBN: 978-1-4614-7517-0.

**Rikhiya Dhar, Piyanka Dhar, & Ranajit Dhar**, "Optimal Control Problems in Hyperthermia", Lap Lambert Academic Publishing, ISBN-13: 978-3659490484.

#### Journals:

**M. H. Khan, S. Pal, E. Bose**, "A study on magnetic, specific heat and resistivity properties in  $\text{Ca}_{0.85}\text{Eu}_{0.15}\text{MnO}_3$  around the phase transition temperature", Journal of Magnetism and Magnetic Materials **357**, 24-28 (May 2014), Impact factor: 1.826, ISSN: 0304-8853.

**Amlan Raychaudhuri, Arkadev Roy, Ashesh Das, Gourav Kumar Shaw, Pratik Kumar Mitra**, "Moving Object Detection using Differential Evolution", International Journal of Soft Computing & Engg. (IJSCE), **4** (2), 170-173 (May 2014), Impact factor: 1.117, Global impact factor: 0.415, ISSN (Online): 2231-2307.

**Soumitra Singh, Partha Sarathi Chakraborty**, "Datamining for generation, fetching & display of production data of a large scale organization", International Journal of Information Systems Management Research and Development, **4** (1), 25-28 (June 2014), Impact factor (JCC): 1.4174, ISSN: 2250-236X



**Balaram Ghosal, Asim Kumar Panda**, "Li-Fi A Green Energy Initiative", International Journal of Computer Applications, **95** (11), 1-4 (June 14), Impact Factor: 0.821, ISBN: 973-93-80882-11-6

**Pratap Chanda Mandal**, "Study of Steganography Techniques Using Discrete Wavelet Transform", Journal of Global research in Computer Science, **5** (5), 7-14 (May 2014), Impact Factor: 0.92, , ISSN: 2229-371X

**Sudipta Pal, Esa Bose**, "Structural, magnetic and transport properties of  $\text{Gd}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$  and  $\text{Gd}_{0.7}\text{Ca}_{0.3}\text{CrO}_3$ : A comparative study", Physics Express, 2014, **4**: 3 (without Impact Factor).



#### Conference:

**Anindita Ray** and **Debashis De**, "Level Wise Initial Energy Assignment in Wireless Sensor Network for Better Network Lifetime", 2<sup>nd</sup> International Conference on Advanced Computing, Networking and Informatics (ICACNI) **2**, 67-74, (24-26 June 2014), ISBN (Print) 978-3-319-07349-1, ISBN (Online) 978-3-319-07350-7.

#### Participation

**Pratap Chandra Mandal**, Assistant Professor, Dept. of Computer Application attended a workshop on "Mobile Application Development using Android" conducted by Infosys Limited, Bhubaneswar at Netaji Subhash Engineering College from 21<sup>st</sup> to 23<sup>rd</sup> April 2014.

## INSTITUTIONAL NEWS:

### PATW 2014



The inauguration ceremony of PATW-2014 was held in our Institute on 5th April 2014. PATW is a three level competition organized by IET-UK to encourage young, aspiring, budding engineers to showcase their skills and technical knowhow. The three stages are Regional level, National Level and International Level. The Regional Level competition was organized by IET YP Section Kolkata Local Network from 5th April to 23rd April 2014.

Four Engineering Colleges of West Bengal have been selected as venues for Technical Sessions. Prof. (Dr.) Sutapa Mukherjee, our Principal was member of the Advisory panel and Ms. Tista Banerjee, Asst. Prof. (EE) was present as organizing chair of the Regional Level Programme.

Twenty five students of BPPIMT took part in the competition. Six of them qualified for contesting in the final round of the Regional Level Competition which was held at the auditorium of Greenland Inn, Kolkata on 23rd April 2014. Among them Nayanranjan Das (EE 2<sup>nd</sup> Year) was selected as best speaker and short listed for participation at National Level competition He presented a paper on 'Development of Batteries in Automobile Industries.'

### University Semester Exam

The semester examination of WBUT was held successfully from 27th May - 10th June 2014. The Practical Examination was conducted during 10-13th May, 2014. Ms. Nandita Sanyal was the officer-in-charge, and Dr. Papri Saha and Mr. Surajit Mandal served in the capacity of supervisors.



## Training

Soft skill development training has started from 14th April, 2014 for the 3rd year students.

## Sponsored Project

The sponsored project titled *Spectroscopic study of nuclei near proton dripline - 109,111l*, funded by UGC-DAE-CSR-KC has started from January 2014. The Principal Investigator is Dr. Ranjana Goswami, HOD, Dept of Physics, BPPIMT.

Another sponsored project titled *On the Study of Pattern Formation in Spatiotemporal Systems and Network of Nonlinear Oscillators in External Environment*, funded by Department of Science & Technology (SERB) has started from March 2014. The Principal Investigator is Dr. Papri Saha, Assistant Professor, Dept of Physics, BPPIMT.

## Prize distribution ceremony

The prize distribution ceremony for Annual Sports and Cricket Tournament was organized on 12th April, 2014 in the Institute seminar hall.

## Pre-Counseling Activities 2014



This year the pre-counseling session for the admission of students in B. Tech course was held at the Netaji Indoor Stadium, Kolkata, during 13th to 15th June, 2014. The pre-counseling team of BPPIMT consisting of faculty members and administrative staffs worked sincerely to draw the attention of bright young students to our Institute to ensure good quality input. Another session of Edfair was also



organized at the same venue during 20th June to 22nd June. Our Institute actively participated in the event.

## Bicycle driven mobile charger



In rural areas in India, bicycle is a popular mode of transport. Now a days mobile phone is used in a large scale. Hence, a mobile charger driven by bicycle will be a popular method of charging. With this idea a bicycle driven mobile charger was developed by Mr. Pramathes Das, HOD, Electrical Engineering Department, BPPIMT and Coordinator E.D. Cell and Mr. Ranjit Paul, Senior Laboratory Assistant, Electrical Engineering Department, BPPIMT. This is a project which might be very suitable for use in Indian villages where no electricity is available.



## FOCUS ON VARIOUS STREAMS OF BPPIMT

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The department of Computer Science & Engineering provides a strong foundation in the domain of Computer Science and Engineering by offering education at the undergraduate level (4 years B. Tech in Computer Science and Engineering) and constantly strives to evolve to cater to the constantly changing industry demands through research oriented projects and development work encompassing all aspects of Computer Science.



Faculty and Technical Staff members

The Department has an intake of 120 students. Additionally, the diploma students are enrolled in the 2<sup>nd</sup> year as lateral entry to the undergraduate course. They are nurtured by a strong team of nineteen qualified faculty members (including three PhDs), with proven excellence in academics as well as research. They are actively engaged in research in diverse domains of Image Processing, Data Mining, Software Engineering, VLSI Design, Artificial Intelligence, etc. having a collection of over 250 publications in several reputed journals and conferences of National and International stature as well as around 15 books and book chapters. The faculty members actively participate in Workshops, Faculty Development Programs, Conferences and Seminars to enhance their academic potential thus expanding their knowledge in various current technologies and domains.

The Department owns four well-equipped Computer Laboratories with state of the art PCs and a hardware laboratory. All the PCs are connected and enabled with Campus LAN and high speed Internet Connection using 15 Mbps Leased-Line Connectivity. The students are given access in a 1:1 ratio for hands-on experience and be abreast with the latest software and hardware technologies. A highly qualified team of technical staffs assist the students in their laboratory classes as well as with projects sharing their experience and knowledge in hardware as well as software. The Department operates its own Library with requisite stock of textbooks and references. The department also has an archive of project reports of the final year project for reference purpose.

The Department is honoured to have Prof. B. N. Chatterji as a Professor who has significant research contributions in Pattern Recognition, Image Processing and Computer Vision. He has received the Lifetime Achievement award by IEEE in 2006 apart from numerous other awards and recognitions from National and International forums.





DAA lab in progress

The Department is also involved in organizing seminars and workshops on various cutting edge technologies and current research domains, be it in the domain of hacking and its protection or application of algorithms. A Seminar on "Network Security" in April 2013 featured industry speakers and student speakers who shared the forum for a very interactive session enriching the knowledge of all participants. The "Python" workshop organized in collaboration with PyCon India and CampusHash on 8<sup>th</sup> August 2013 gave the students an opportunity to acquaint themselves with beyond curriculum industry relevant technologies. The Seminar on *Algorithms & its Applications* organized in February, 2014 invited eminent academicians who shared their knowledge in the domain of algorithms and it provided an excellent forum for all the participants to learn and appreciate this growing interest in Algorithms in the context of big data and analytics in this new era of computing. It also conducts in-house seminars to enable knowledge sharing for the benefit of the teachers and students within the department and other departments as well.



Computer Organization lab in progress

Students are placed in responsible roles in MNCs and corporate giants like Microsoft, Credit Suisse, Intel, Erickson, CTS, IBM, Capgemini, Oracle to name but a few. One of our students is working as research scientist at NASA Ames Research Centre after completing PhD in CSE (Data Mining) from University of Maryland, Baltimore County, USA. Many more students are pursuing various reputed foreign universities like Harvard University, National University of Singapore, University of Oklahoma, USA, Michigan State University, USA, University of New Mexico, Univ. of Helsinki, University of Georgia, Delft University of Technology, and IITs like IIT KGP, IIT Guwahati etc.

Dr. Ananya Kanjilal who presently heads the department takes keen interest in research and within her long span of 15 years at the college; she had worked as a post doctoral researcher in the domain of software engineering at Hong Kong University of Science & Technology. Under her guidance the 1<sup>st</sup> Industry-Academia collaborative project "Pragati" started with TCS-iON in 2013-2014, and its successful completion has led to four new batches of projects under "Pragati" in 2014-2015 which gives the students a unique opportunity to learn the industry standards & practices working within a live project environment. Recently another industry-collaboration project started with Cognizant Technology Solutions (CTS) under the mentorship of Dr. Jayeeta Chanda with students from CSE and IT working together.



Inauguration of Seminar

The students of CSE have always played a lead role in various on-campus activities as well as inter-college events. They have coordinated the annual fest of our college, created & maintained the corresponding websites of these events, organized various events of the technical fest Techstorm held every year and several championships in cocurricular and extracurricular activities. The students have also brought in accolades by their hard work & performance in inter college events held in various campus across the state. Many students have initiated startups and have proved their mettle as successful entrepreneurs contributing to the society.

They have also raised the flag high in both corporate and research fields.

### An attempt towards effective energy saving – Need for the day

Electrical Energy is indispensable in domestic domain as well as in industrial arena. An increase in demand for electrical energy to cater to the requirements in various sectors spells the necessity for setting up of power plants to increase the amount of energy generated. However, a developing country like India always faces the challenge to meet the ever increasing gap between supply and demand of energy. This situation calls for a general consciousness about minimization of energy loss.



It is a well-established notion that Charity begins at home. Keeping in view the huge energy loss incurred in our daily lives, we, the members of BPPIMT have decided on using LED Lamps instead of Fluorescent Tubes in the circulatory areas. With time we hope to implement the same in other areas as a beginning of a humble initiative from our part towards saving energy for future.

Pramathes Das, HOD EE

- **Editorial Committee:** The Editorial Committee consists of a team of Faculty Members headed by Prof (Dr) N. K. Datta, with Prof (Dr.) B.N. Chatterji, Dean Academics as Chief Editor, Prof (Dr.) Sutapa Mukherjee, Principal as the Chief Advisor and Dr. Arijit Saha Associate 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: [bppimnewsletter@bppimt.ac.in](mailto:bppimnewsletter@bppimt.ac.in). Publication in the Newsletter is at the full discretion of the Editorial Committee.