



# THE BPPIMT - NEWSLETTER

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of

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

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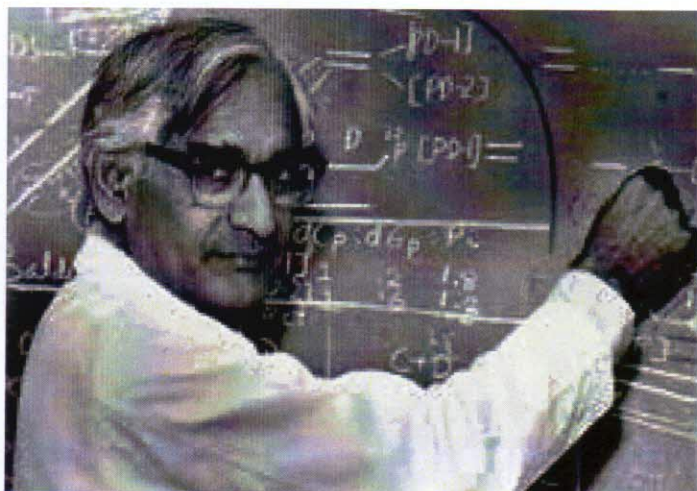
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## Remembering Har Gobind Khorana



**Har Gobind Khorana**, an Indian-American biochemist was born on 9 January 1922 in Raipur, a small village in Punjab, which is now part of eastern Pakistan. Although poor, his father was dedicated to educating his children and they were practically the only literate family in the village inhabited by about 100 people. He attended D.A.V. High School in Multan (now West Punjab). Later, he studied at the Punjab University in Lahore where he obtained an M.Sc. degree. Mahan Singh, a great teacher and accurate experimentalist, was his supervisor. Khorana lived in India until 1945, when the award of a Government of India Fellowship made it possible for him to go to England and he studied for a Ph.D. degree at the University of Liverpool. Roger J. S. Beer supervised his research. Khorana spent a postdoctoral year (1948-1949) at the Eidgenössische Technische Hochschule in Zurich with Professor Vladimir Prelog. After a brief period in India in the fall of 1949, Khorana returned to England where he obtained

a fellowship to work with Professor G. W. Kenner and Professor A. R. Todd. A job offer in 1952 from Dr. Gordon M. Shrum of British Columbia took him to Vancouver. He co-directed the Institute for Enzyme Research, became a professor of biochemistry in 1962 and was named Conrad A. Elvehjem Professor of Life Sciences at University of Wisconsin-Madison. He became a naturalized citizen of the United States in 1966. As of the fall of 1970 Khorana has been Alfred P. Sloan Professor of Biology and Chemistry at the Massachusetts Institute of Technology. He was a member of the Board of Scientific Governors at The Scripps Research Institute. He was married in 1952 to Esther Elizabeth Sibling, who is of Swiss origin.

Har Gobind Khorana was a world renowned biochemist famous for his work in the field of genetics and DNA. He was the first person to demonstrate the role of nucleotides in protein synthesis. In 1968 the Nobel Prize in Physiology or Medicine was awarded jointly to Har Gobind Khorana, Robert W. Holley, and Marshall W. Nirenberg "for their interpretation of the genetic code and its function in protein synthesis". He was successful in constructing the first ever artificial gene in 1972. A few years later he made the artificial gene function in a bacteria cell. Genetic engineering has been made possible only due to the ability to synthesize DNA. During his later years he experimented on the molecular mechanisms underlying the cell signaling pathways of vision in vertebrates. He primarily studied the structure and function of rhodopsin, a light sensitive protein found in the eye. He proved that the nucleotide code is transmitted in groups of three—called codons—to the cells. Some codons are responsible for signaling to the cells to start or stop the manufacture of proteins. Khorana died of natural causes on 9 November 2011 in Concord, Massachusetts, aged 89.

Khorana was elected as Foreign Member of the Royal Society (ForMemRS) in 1978. The University of Wisconsin-Madison, the Government of India (DBT Department of Biotechnology), and the Indo-US Science and Technology Forum jointly created the Khorana Program in 2007. The mission of the Khorana Program is to build a seamless community of scientists, industrialists, and social entrepreneurs in the United States and India.



## ACADEMIC NEWS:

### Publications:

#### Journals:

**S. Cakraborty**, S. Chattaraj, A. Mukherjee, "Performance evaluation of particle filter resampling techniques for improved estimation of misalignment and trajectory deviation", *Multidimensional Systems and Signal Processing* **26**(4), pp. 1-18, (January 2017), ISSN 0923-6082, Impact Factor: 1.37 (both SCI and Scopus indexed).

**S. Dey**, R. Sarkar, K. Chatterjee, P. Datta, A. Barui, S. P. Maity, "Pre-cancer risk assessment in habitual smokers from DIC images of oral exfoliative cells using active contour and SVM analysis", *Tissue & Cell* **49**(2), pp. 296-306, (February 2017), ISSN 0040-8166, Impact Factor: 1.232 (SCI indexed).

**Vedatrayee Chakraborty**, Swagata Dey, Rikmantra Basu, Bratati Mukhopadhyay, P. K. Basu, "Current gain and external quantum efficiency modeling of GeSn based direct bandgap multiple quantum well heterojunction phototransistor", *Optical and Quantum Electronics* **49**(5), pp. 125 (March 2017), ISSN 0306-8919 (Print), ISSN 1572-817X (Online), Impact Factor:



1.29 (both SCI and Scopus indexed).

**Anindita Ray**, Debashis De, "Performance evaluation of tree based data aggregation for real time indoor environment monitoring using wireless sensor network", *Microsystem Technologies* **23**(9), pp. 4307-4318, pp. 1-12 (March 2017), ISSN: 0946-7076 (Print) 1432-1858 (Online), Impact Factor: 1.195 (SCI indexed).

**Sutapa Mukherjee**, "Simulation of daylight and artificial lighting integration and energy savings", *Environmental and Earth Sciences Research Journal* **4**(1), pp. 17-22 (March 2017), ISSN 2369-5668, SJR Impact Factor: 0.574 (non SCI or Scopus indexed)



#### Conferences:

**Sayantani Saha**, Tanusree Parbat, Sarmistha Neogy, "Designing a secure data retrieval strategy using NoSQL database", *International Conference on Distributed Computing and Internet Technology*, Bhubaneswar, Odisha, 13-16 Jan 2017, Proceedings published by Springer, pp. 235-238. The conference is organized by KIIT University. The paper was presented by Sayantani Saha.

## INSTITUTIONAL NEWS:

### Participation

Ms. Inadyuti Dutt, Assistant Professor, Dept. of Computer Application, attended a Workshop on "Data Science and Machine Learning", organized by Centre for Soft Computing and Research, ISI, Kolkata, 28-31 March, 2017.

### University Semester Exam

The semester examination of MAKAUT was held successfully from 3<sup>rd</sup>-21<sup>st</sup> January 2017. Dr. Nandita Sanyal, Associate Professor, Department of Electrical Engineering was the officer-in-charge, and Mr. Balaram Ghosal, Assistant Professor, Department of Information Technology; and Mr. Abhijit Bhattacharya, Assistant Professor, Department of Computer Application served in the capacity of supervisors. Dr. Surajit Mandal Associate Professor, Department of Electronics and Communication Engineering, Mr. Arindrajit Chowdhury, Assistant Professor, Department of Electronics and Communication Engineering, Mr. Sudip Kundu and Mr. Suprabhat Maity, Assistant Professors, Department of Computer Science and Engineering, Dr. Papri Saha, Assistant Professor, Department of Engineering Physics were other committee members.

### New Academic Session

New academic session commenced from 3<sup>rd</sup> February 2017.

### Abhigyan



Avigyan, the annual technical quiz competition held by SPIE BPPIMT Student Chapter, was organized on 11th March 2017. This year more than 60 teams participated in the quiz competition. The quiz was held in two rounds – written prelim round followed by final on-stage round. 6 teams qualified for the final round. The finals consisted of 4 rounds, including one round dedicated to recent advancements in the field of optics and photonics.

### Seminar

Mr. Abhijit Datta, Senior Director, Capgemini delivered a talk on "Big Data Technology" on 21<sup>st</sup> February 2017. Dr. Siddhart Pandey, V.P. EMC Ltd delivered a lecture on "Industry Readiness" on 17<sup>th</sup> March 2017.

### Virtual Laboratory Workshop



Virtual Laboratory is a project developed under the aegis of National Mission on Education through ICT (NMEICT), MHRD. On 17<sup>th</sup> March 2017, a one-day workshop on "Virtual Laboratory" was held at BPPIMT in collaboration with IIT Guwahati. Faculty members and students of the institute attended the workshop. Twenty different labs were demonstrated and in addition, the participants performed 30 experiments in the hands-on session. The primary objective of this project is to arouse the curiosity of the students and permit them to learn at their own place and at their own time. In this project, web-enabled experiments have been designed for remote operation and viewing.



## Symposium (ACCBE2017)



A Symposium on Advanced Computing, Communication and Biomedical Engineering (ACCBE 2017) was organized by Dept of Information Technology, B. P. Poddar Institute of Management and Technology in collaboration with Center of Excellence for Systems Biology and Biomedical Engineering, University of Calcutta on March 27-29, 2017. The symposium was aimed to address current state of the technology and the domains of the ongoing research in the area of advanced computing, communication and Biomedical Engineering. Many eminent speakers graced the symposium with their august presence. The inaugural speech on Higher Education Perspectives of India was

delivered by the Chief guest Dr. Swapan Bhattacharya, Professor, Jadavpur University, Kolkata, Former Director, NITK Surathkal, Former Director, NIT Durgapur. Lecture on "Typical architecture of distributed computing" was delivered by Dr. Pradip Kr. Das, Former Professor & Head, Dept. of Computer Sc. & Engineering, Founder Director, School of Mobile Computing & Communication, Jadavpur University. A lecture was delivered by Dr. Sabnam Sengupta, Associate Professor & HOD IT Dept. on "Enterprise Cloud Bus: A Layered Architectural Model". Dr. Nandini Mukherjee, Professor, Department of Computer Science and Engineering, Jadavpur University, Kolkata delivered a lecture on "Building Internet of Things with Sensing and Cloud Technologies". Dr. Anirban Sarkar, Assistant Professor and Head, Department of Computer Applications, National Institute of Technology, Durgapur delivered a lecture on "Domain Specific Modelling and Ontology". Dr. Kallol Bhattacharya, Professor, Department of Applied Optics and Photonics, University of Calcutta delivered a lecture on "Advances in Information Acquisition and Retrieval in Microscopy". Padma Shri Dr. Bimal Kumar Roy, Head, R C Bose Centre for Cryptology and Security, Indian Statistical Institute delivered a lecture on "Secret Sharing: Encryption and Decryption Technique". Dr. Jayanta Mukhopadhyay, Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur delivered the lecture on "Neurological examinations of infants using image and video processing". Dr. Santi Prasad Maity, Professor, Department of Information Technology, IIST, Shibpur delivered the lecture on "Energy Efficiency in Cooperative Cognitive Radio Networks in Presence of Malicious Operations". Two industrial talks were delivered by Dr. Arijit Mukherjee, Senior Scientist, Embedded Systems & Robotics, TCS Research & Innovation delivered a lecture on "IoT and Beyond - The Future Industries" and Mr. Uttiya Paul, Manager, Financial Services Analytics, Genpact, Kolkata, on "Overview of Business Analytics". A tutorial session on "The IoT Landscape: Technologies and Applications" was conducted by Dr. Amlan Chakrabarti, Dean, Faculty of Engineering and Technology, Professor and Director, A.K. Choudhury School of I.T. University of Calcutta.



## Workshop



A workshop on "Art of writing technical research paper and publication ethics" was conducted on 18<sup>th</sup> February 2017 by SPIE BPPIMT Student Chapter to spread awareness regarding the importance of research among students and to motivate them to write research papers. Dr. Arijit Saha, Associate Professor, Dept. of ECE, BPPIMT delivered a talk on "How to write technical research papers". Dr. Surajit Mandal, Associate Professor, Dept. of ECE, BPPIMT delivered a talk on "Plagiarism - its consequences and preventive measures". A talk on "Value of Conference Proceedings and Important Resources for Writing Research Paper" was delivered by Mr. Debdyut Hajra, President, SPIE

BPPIMT Student Chapter, BPPIMT. Students attended to workshop and gained knowledge on the topic.

## Spoken Tutorial Nodal Centre

Spoken Tutorial project is the initiative of the National Mission on Education through Information and Communication technology (ICT) and promoted by MHRD. Spoken Tutorials are an educational initiative of IIT Bombay and adopted by MAKAUT for all its affiliated colleges in West Bengal. Our Institute had been one of the first Institutes to adopt these tutorials in 2013. Now IIT Bombay has selected our Institute as one of the 5 Nodal centres in the state and we have around 35 colleges in our cluster to help IIT Bombay and MAKAUT to conduct these courses in this region. The inauguration of the Nodal Centre along with Awareness Event by IIT Bombay was organized at BPPIMT on 30th March, 2017.



## Saraswati Puja

Like every year, the Saraswati Puja of the Institute, celebrated on 2<sup>nd</sup> February 2017, was full of fun, frolic, colours and exuberance galore. The goddess of knowledge was offered the Puspanjali, the sacred flower offering by all present. It was



followed by the distribution of 'Prasad' (blessing of the Goddess in the form of sweet and fruit offerings) and a lunch. In a nutshell, the occasion was complete with active participation of the faculty and student members alike.

### Cancer Awareness Programme

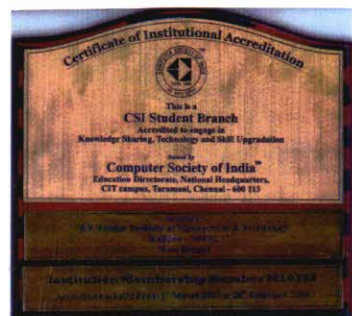


NSS Unit of BPPIMT in association with Visual Art Forum of the Institute organized "**Cancer Awareness Program**" on 7<sup>th</sup> March 2017. The program started with "Sketch Competition" among students on the theme "Fight Against Cancer" at 11.30 a.m. At 2.30 p.m. delegates from HITAISHINI (a voluntary non-profit Breast Cancer Support Network) delivered lecture on Cancer at Seminar Hall of the Institute.

### Participation

B. P. Poddar Institute of Management & Technology participated in Industry-Academia Conclave organized by MAKAUT at 'Milan Mela Prangan' during 27<sup>th</sup>-29<sup>th</sup> March 2017. Our alumni entrepreneurs showcased their products related to Progressive Learning Approach. Also robotic models were displayed.

### CSI Student Chapter



Computer Society of India (CSI) is the first and largest body of computer professionals in India. The wide spectrum of members is committed to the advancement of theory and practice of Computer Engineering and Technology Systems, Science and Engineering, Information Processing and related Arts and Sciences. B. P. Poddar Institute of Management and Technology is an active Educational Institute Member of CSI (Membership Number M10356). Our Institute has an active CSI student branch consisting of 112 students from Computer Science & Engineering Department, Information Technology Department and Computer Application Department. The inauguration ceremony of CSI student branch at our institute was held on 25<sup>th</sup> March 2017. The program was illuminated by Professor A. K. Nayak (Hon. Secretary, CSI) and other dignitaries like Mr. D. P. Sinha, VP Region II, Dr. Bipin Tyagi, VP

Region III, and Mr. Subimal Kundu, Life Member CSI from Computer Society of India.

### Women's Day Celebration

Women's day was celebrated in our Institute on 8<sup>th</sup> March 2017. A power point presentation showing the role of women as a mother, girl child, sister, wife and contribution of women achievers of India followed by a short film made by NSS volunteers to show women empowerment were displayed at seminar hall of the Institute.

### Workshop on Photography

A workshop on Photographs was held on 31<sup>st</sup> March 2017 was organized in our Institute by *Drisham* the Visual Arts Forum. Mr. Biswatosh Sengupta, Jt. Secretary, Photographic Association was present in the occasion.

### Cricket Tournament



The Sports forum of BPPIMT, Kridyayoga, organized their Annual Intra College Cricket Tournament in the month of February 2017. The league matches were held on 14<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup> and 21<sup>st</sup> February 2017. Teams from the departments of ECE, EE, CSE, IT, MCA,



BCA and BBA participated in tournament. There were wonderful responses from the students to play the matches. The final match was played between CSE and ECE, on 23<sup>rd</sup> February 2017 in the NKDA stadium, Newtown. Department of ECE was the champions. Apart from the players, there was a huge crowd of the enthusiastic audience, who had come to cheer their team members.

- **Editorial Committee:** The Editorial Committee consists of a team of Faculty Members with Prof. (Dr.) B.N. Chatterji, Dean Academics as the Chief Editor, Prof. (Dr.) Sutapa Mukherjee, Principal as the Chief Advisor and Dr. Arijit Saha Associate Professor as the 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.