



THE BPPIMT - NEWSLETTER

A Quarterly In-House Magazine

of

B.P. Poddar Institute of Management and Technology

Email: bppimtnewsletter@bppimt.ac.in

Issue - XXXV, APRIL 2017

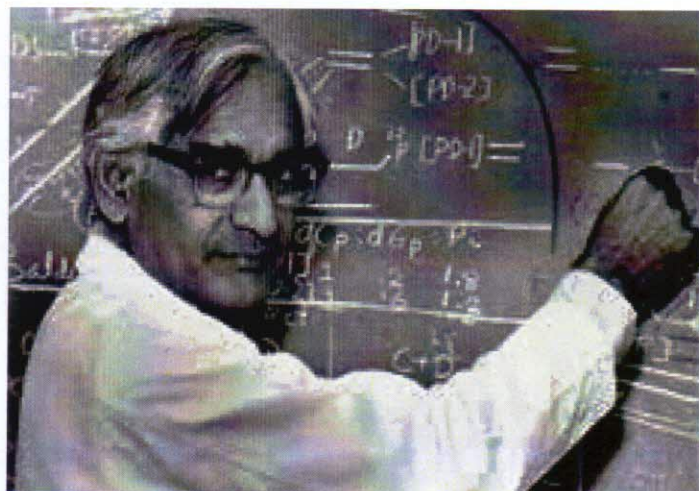
Chief Advisor: Prof (Dr.) Sutapa Mukherjee

Editor in Chief: Prof (Dr.) B.N. Chatterji



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

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 Sibler, 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 rhodospin, 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 3rd-21st 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 3rd February 2017.

Abhigyan



Abhigyan, 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 21st February 2017. Dr. Siddhart Pandey, V.P. EMC Ltd delivered a lecture on "Industry Readiness" on 17th March 2017.

Virtual Laboratory Workshop



Virtual Laboratory is a project developed under the aegis of National Mission on Education through ICT (NMEICT), MHRD. On 17th 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.

