

Prof. Amalendu Bhushan Bhattacharyya



Prof. Amalendu Bhushan Bhattacharyya received his BSc and MSc degrees from Banaras Hindu University (BHU). Subsequently, he pursued his research work in the area of solid-state electronics for his PhD degree (1961) from BHU. He joined the Department of Electrical Engineering, BHU as a Lecturer (1961) and then was on deputation to USSR (Moscow Power Institute) for about three years to carry out research in power electronics. He joined Indian Institute of Technology, Delhi in the Department of Physics as Assistant Professor (1967) to spearhead the microelectronics programme and subsequently became Professor (1973) at the Centre for Applied Research in Electronics, IIT, Delhi. Prof. Bhattacharyya has been a Visiting Fellow/Professor at the University of Rochester (USA), University of California at Los Angeles, University of Fierre and Marie Curie (Paris, France), University of South Hampton (UK), University of Twente (The Netherlands), and the Moscow Power Institute. He was the first Director of Institute of Technology and Management, Gurgaon (1998-2000), Director VLSI Design Programme, Goa University (2000-03), and Emeritus Professor at Jaypee Institute of Information Technology, India (Apr-2004 to June-2015). Presently, Prof. Bhattacharyya is Chairperson, Board of Governance, NIT Durgapur.

Academic and Research Achievements: Prof. Bhattacharyya was involved in the development of wide range of activities at IIT, Delhi related to microelectronics technology. He initiated and steered major national projects on the development of charge-coupled devices, surface acoustic wave devices, silicon-on-insulator technology and CMOS analog design. He also initiated non-destructive measurement techniques originally for microelectronics area, which has now emerged as a major activity applied to wide range of industrial problems. Voltage controlled area variable MOS Varicap, partially illuminated SAW interdigital structures and VLSI interconnect models are some of the illustrative areas where his contributions are closely related to live industrial problems. He has published more than 150 research papers in international professional journals. A comprehensive summary of compact MOSFET models for VLSI design is under publication (Wiley International, 2009). He has supervised 30 PhD students.

Other Contributions: During his Deanship of Industrial Research at IIT-Delhi, Prof. Bhattacharyya compiled the intellectual property right guidelines for an academic institute, which has now been accepted as a model for a number of institutions in the country. He has been a Member of the Indo-US Committee for microelectronics development and electronics commission. He is one of the Founding Members of Indian Academy of Engineering. He has been on the Board of Directors of Semiconductor Complex Limited (Punjab) for several years.

Awards and Honours: Prof. Bhattacharyya has been the recipient of Vikram Sarabhai Award, Bhasin Award, Khosla National Award, SN Mitra Award of INAE and Indian Semiconductor Association (ISA) Techno Visionary Award.