



**Dr. Navakanta Bhat**, *Professor*

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TALK : [\*Graphene Transistors : Simulation and Experiment Exploration\*](#)

Navakanta Bhat received his B.E. in Electronics and Communication from University of Mysore in 1989, M.Tech. in Microelectronics from I.I.T. Bombay in 1992 and Ph.D. in Electrical Engineering from Stanford University, Stanford, CA in 1996. Then he worked at Motorola's Networking and Computing Systems Group under Advanced Products R&D Lab (APRDL) in Austin, TX until 1999. At Motorola he worked on logic technology development and he was responsible for developing high performance transistor design and dual gate oxide technology. He joined the Indian Institute of Science, Bangalore in 1999 where he is currently a Professor in the Centre for Nano Science and Engineering and Electrical Communication Engineering department. His current research is focused on Nano-CMOS technology and Integrated CMOS-MEMS sensors. The work spans the domains of process technology, device design, circuit design and modeling. He has more than 170 research publications in international journals and conferences and 4 US patents issued to his credit, along with several patents pending. He was instrumental in creating the National Nanofabrication Centre (NNfC) at IISc, Bangalore, benchmarked against the best university facilities in the world. At present he serves as the chairman of NNfC administration committee.

He has received the Young Engineer Award (2003) from the Indian National Academy of Engineering, Swarnajayanti fellowship (2005) from the Department of Science and Technology, Govt. of India and Prof. Satish Dhavan award (2005) from the Govt. of Karnataka. He is also the recipient of IBM Faculty award 2007 and Outstanding Research Investigator award (2010) from DAE. He is a Fellow of the Indian National Academy of Engineering. He is the Editor of IEEE Transactions on Electron Devices, under MOS Device Technology, since 2013.

He was the founding chair of the IEEE Electron Devices and Solid-State Circuits society, Bangalore chapter which was recognized as the Outstanding Chapter of the Year by the IEEE SSC society (2003) and IEEE EDS society (2005). He has been on the program committees of several international conferences. He was the technical program chair for the International Conference on VLSI design and Embedded Systems (2007) and co- General chair of the International conference on Emerging Electronics (2012). He was a Distinguished Lecturer of the IEEE Electron Devices Society and is the senior member of IEEE. He is currently the Editor of IEEE Transactions on Electron Devices (MOS Device Technology area), a flagship journal of IEEE EDS Society. He is the Chairman of the Human Resource Development and Infrastructure committee of the National Program on Micro and Smart Systems. He was the member of the committee set up by the Principal Scientific Advisor to Govt. of India to recommend strategies to develop semiconductor manufacturing ecosystem in India. He is also the member of the National Innovation Council in Nanoelectronics.