

Dr. Amit Banerjee joined the Advanced Device Research Division, Research Institute of Electronics, Shizuoka University, National University Corporation, Japan as a Scientific Researcher in 2016 and was also part of the Innovative Photonics Evolution Research Center at Hamamatsu, Japan. He later joined the Microelectronic Technologies & Devices, Department of Electrical and Computer Engineering of the prestigious National University of Singapore, as Scientist in 2017. Currently Amit is member of 30+ international advisory boards, technical program committees in various countries, acted as panel editor, reviewer for reputed journals and scientific book volumes, member of Japan Society of Applied Physics, Indian Physical Society; External Adviser, Bioelectronics and Biomedical Technologies, Oculo Science and Technology (biomed-startup); Scientific Adviser to Ominar Innovations (biomed-startup); Adviser and Lead Contributor: Semiconductor Devices and Process Technologies, EDGE196, Entrepreneur Development Global Ecosystem; Adviser, EntrepreneursFace, Global Venture Capital and Entrepreneurs Network, Singapore; Scientific Adviser to Digivalley Innovations; Scientific Adviser to ULVAC Technologies Inc. Japan/USA; Scientific Adviser to West Bengal Electronics Industry Development Corporation Limited (WEBEL), Scientific Adviser to ISF Analytica & Informatica, Consultant with Asentrex Global. Alongside the pursuit of high research and administrative ambitions, consulting futuristic technologies for business firms, Amit is keenly engaged in consulting educational ventures and universities: Academic Adviser to NSHM Group of Institutions, Brainware University, Swami Vivekananda University; Netaji Subhash Engineering College; Arohan Educan Ltd. London, UK; Ambassador, Bentham Science Publishers, SG.

Amit received Ph.D. degree in Semiconductor Technology from Energy Research Unit, Indian Association for the Cultivation of Science (D.S.T., Govt. of India) and has extensively worked on design and development of high vacuum plasma CVD reactors, which are used in industrial manufacturing of solar cells, coatings and TFTs. He also developed low cost high vacuum MW-PECVD units, and conceived the process for cost effective commercial grade antireflection coatings (ARC) synthesis for solar cells by nano-crystalline diamonds. His current work is on Terahertz Technology, including THz sensors and sources, design, fabrication, aiming at biomedical imaging applications. His recent work on antenna-coupled microbolometer arrays, are compatible with the state-of-the-art medium-scale semiconductor device fabrication processes, and technologically competitive with commercial viability as on-chip integrable detector arrays for terahertz imaging.

Amit has co-authored several scientific papers, presented in several international conferences as plenary and keynote speakers, received several awards including Young Physicist Award and honorary life-membership from Indian Physical Society, Award by the Metrology Society of India (MSI), Award Indian Institute of Chemical Engineers (IChE), Award by Dept. of Atomic Energy (D.A.E.), Award by

Quality in Research (QiR), Indonesia. Amit has edited seven books: "Terahertz Biomedical and Healthcare Technologies", Elsevier; "Emerging Trends in Terahertz Solid-State Physics and Devices", Springer Nature; "Artificial Intelligence and the Fourth Industrial Revolution", Pan Stanford Publishing, Singapore; "Advances in Computer, Communication and Control" Springer Nature; "Internet of Things for Healthcare Technologies", Springer Nature, "Internet of Medical Things for Smart Healthcare", Springer Nature, "Emerging Trends in Terahertz Engineering and System Technologies", Springer Nature.