

Dr. Deepnarayan Gupta, Professional Biography



Dr. Deepnarayan (Deep) Gupta is Executive Vice President, RF Circuits and Systems at Hypres, Inc, Elmsford, NY, USA. In his current position, Dr. Gupta is responsible for the RF Circuits and Systems Business Segment that includes the whole digital-RF technology program. Dr. Gupta was instrumental in changing HYPRES' business direction in 2000-2001 to focus on RF applications and small-scale digital-RF systems, and creating a multi-faceted program consisting of synergistic research and development (R&D) projects funded by different Government agencies and other sources. This branch of HYPRES business encompasses analog-to-digital and digital-to-analog converters (ADCs and DACs), digital signal processors (DSP), multi-chip modules (MCMs), cryogenic analog RF modules (CARM), and complete cryocooled digital systems. Dr. Gupta has led the development of three generations of digital-RF receiver systems, the latest of which are modular, multi-function systems operating in customer facilities. Dr. Gupta served in various capacities, including VP R&D (2003-2012), since joining HYPRES in 1997. Prior to joining HYPRES, Dr. Gupta was a post-doctoral research affiliate at Stanford University (1995-1997), working on hybrid superconductor-semiconductor electronics, a theme that he has continued to develop into the hybrid-temperature heterogeneous-technology (HTHT) systems concept that combines the strengths of various warm and cold electronic and photonic technologies to solve difficult technical problems. His doctoral research (1990-1995) at University of Rochester involved the invention of an inductive opening switch built with high-temperature superconductor (HTS) thin films and triggered by short laser pulses. He earned B. Tech. in Electronics and Electrical Communications Engineering (1990) from the prestigious Indian Institute of Technology (IIT), Kharagpur, India. Dr. Gupta, a senior member of the IEEE, is a coauthor of over 60 articles and holds 32 U.S. patents. He serves on the boards of the Applied Superconductivity Conference (ASC) and the United States Committee for Superconductor Electronics. Dr. Gupta has been serving as the IEEE Electron Device Society (EDS) representative on the IEEE Council on Superconductivity (CSC) since 2009.