

Invited Lecture



Dr. D. C. Pande

Title: Signal Integrity in High Speed Circuits

Abstract: With the ever-increasing speed of digital signals, the Signal Integrity (SI) challenges in high speed systems are becoming very formidable to handle. As the signal speeds go beyond 25 Gbps, the parasitic effects in designing the high-speed circuits become significant. The subject of SI involves electromagnetics, RF engineering, microwave theory, digital design and VLSI, analog circuit design and signal processing. In this presentation, current SI challenges and some potential solutions to get around them would be discussed.

Biography: **Dr. D. C. Pande** was Outstanding Scientist & Associate Director at Electronics & Radar Development Establishment (LRDE) and presently he is Dr. Raja Ramanna DRDO Distinguished Fellow. He received his Bachelor and Master Degrees in Electronics from Garhwal University, India in 1974 and 1976 respectively. He completed his Ph.D in Applied Physics in 1982 from University of Allahabad, India. Dr. Pande began his Scientific Career in 1981 with Electronics & Radar Development Establishment, Defence R& D Organisation, Bangalore, where he was involved in the Design & Development of Electromagnetic Interference Control Techniques for Ground Based, Airborne and Ship-borne equipments and systems. He had designed developed the passive and active Antennas and Test Facilities for various radar programs of DRDO. He has published more: than 150 Research Papers and 50 Technical Reports. He is a founder life member of Society of EMC Engineers presently the Chairman of the Society. He was the Chairman of the IEEE EMC Chapter in Bangalore. He was awarded “Certificate of Achievements” by SUMMA Foundation of USA in 1989, “Commendable Certificate” by Integrated Guided Missile Development Program (IGMDP) in 1990, “Megha Nath Saha Memorial Award” of The Institution of Electronics & Telecommunication Engineers (IETE) in 1994, “EMC Engineer of the Year 1998” of Society of EMC Engineers (India), “Lab Scientist of the Year 2003” by DRDO, “National Science Day Award of 2004”, “DRDO Scientist of the Year Award 2005” by Prime Minister in 2006, “DRDO Technology Group Award (2011)”, “Certificate of Achievements” by The Chief of Naval Staff in 2014 and Prof SN Ghosh Award of IETE Allahabad Centre in 2015, Certificate of Acknowledgement in 2016 by IEEE EMC Society. He has become HPEM Fellow since July 2016.