

Title of Talk: Past, Present and Future Prospective of Semiconductor Devices in India

Abstract

In recent year, Indian government is trying to expand semiconductor domain to become self-dependent in IC manufacturing. Presently we are dependent on other countries for importing all the components for various applications. Once the dream of our honourable Prime Minister of AatmaNirbhar Bharat Abhiyaanis achieved and this will give employment opportunities to many of our young engineers. Recently AICTE launched BTech ECE (VLSI Design) and diploma in IC manufacturing. In this talk, I will try to explore the past, present, and future of semiconductor devices. I will also discuss the journey of single to multi-gate devices. I will also highlight the Moore's law, short channel effects and benefits of using multi-gate MOSFET. At the end, I will focus on latest trends, opportunities, and challenges in the semiconductor devices.