



What is this course about?

- **Device Physics**

- ▶ Crystal Structure
- ▶ Quantum Mechanics and Band Structure
- ▶ Statistical Mechanics to compute Charge Density
- ▶ Charge Transport Phenomena
- ▶ The pn junction and MOS Capacitor

- **Device Applications**

- ▶ The MOSFET, Advanced MOSFETs
- ▶ Optical Devices
- ▶ MEMS devices



Prof. Suman Datta

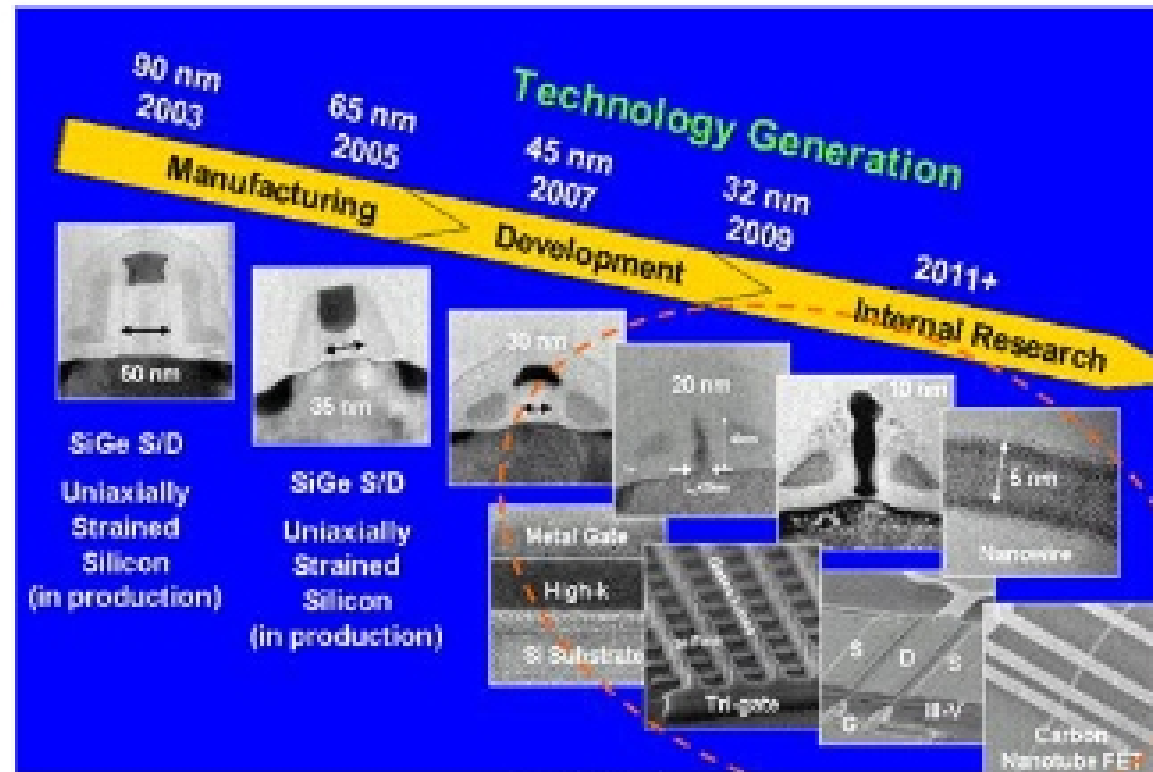
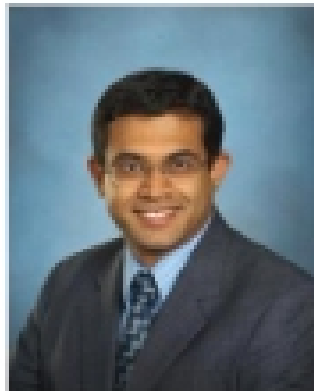
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BSEE - 1995 - Indian Institute of Technology, Kanpur, India

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