

Graphene, Carbon Nanotubes and novel 1D/2D materials

With the motto of delivering faster, sleeker, cheaper and energy efficient devices to the fraternity, the *Nano group* performs theoretical and experimental investigations on the plethora of 1-D and 2-D materials-based devices. We focus on two broad areas of these emerging devices: electro-thermal transport and process optimization for low-power and high-frequency applications.

Our recent endeavours include:

- Graphene FET for high frequency applications
- Contact resistance minimization
- Electro-thermal transport through multiwall carbon nanotubes and graphene FETs
- Investigation of reliability of multiwall carbon nanotube based interconnects and MoS₂ FETs.
- Tunnel Fin-FET