



University School of Basic & Applied Sciences Guru Gobind Singh Indraprastha University



Organizes Workshop

on

Atomistic modelling using Synopsys QuantumATK for Nanomaterials/ Nano Devices

PATRON

Hon'ble Vice Chancellor Padma Shri Prof. (Dr.) Mahesh Verma

TOPICS TO BE COVERED

- INTRODUCTION TO QUANTUMATK SOFTWARE
- TYPES OF SIMULATORS IN QUANTUMATK
- GENERAL WORK-FLOW IN QUANTUM ATK
- (DFT) DENISTY FUNCTIONAL THEORY
- (NEGF) NON-EQUILIBRIUM GREEN FUNCTION
- ADVANCED CALCULATION AND ANALYSIS
- MATERIAL BUILDING LIBRARY
- OPTIMIZATION OF GEOMETRY
- SCIPRTING IN QUANTUMATK
- LIVE DEMONSTRATION OF QUANTUM ATK
- VIRTUAL NANO LAB (VNL)
- NANO-STRUCTURED MATERIALS AND DEVICES
- ATOMISTIC MODELLING
- BULK/ MOLECULE CONFUGURATION
- DOPING AND SPATIAL REGION FOR DEVICES

27th October, 2023 (11:00 am - 4:00 pm)

Please Register at URL:

<https://forms.gle/fRX7AVqP6QdYb9Ze9>

Convener: Dr. Anjana Bagga

Contact:

Dean

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The slide displays a grid of six topics: Machine-Learned FF Training, Process Simulations, Interface Modeling, Device Channel Material Design, Nanodevice Modeling, and STT-RAM Memory Design. Below the grid is a large image of a tunnel junction structure with the text 'Interface Design for Multiferroic Tunnel Junctions'. At the bottom, contact information for Karan Kumar Soni, Senior Application Engineer, is provided, including a phone number and an email address.



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Gurgaon, Haryana, India.

SYNOPTYS
QUANTUMATK