



हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर - 208002, उ.प्र., भारत

HARCOURT BUTLER TECHNICAL UNIVERSITY

NAWABGANJ, KANPUR - 208002, U.P., INDIA

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100 YEARS  
1921 - 2021

## Report on “One-day Webinar on Atomistic Next Generation Materials & Device Simulation using NanoDCAL & RESCU Software”

Department of Physics  
School of Basic & Applied Sciences  
Harcourt Butler Technical University, Kanpur

Organizes  
One Day Webinar  
On  
**Atomistic Next Generation Materials & Device Simulation using NanoDCAL & RESCU Software**  
Speaker  
**Er. Anil Kumar Sharma**  
(Managing Director)  
IMPULSE TECHNOLOGY  
November 19<sup>th</sup>, 2022

Registration link: <https://forms.gle/qHJVyXSVEi8x5vAV8> No Registration Fee

<b>Patron</b> Prof. Samsher Hon'ble Vice Chancellor HBTU, Kanpur	<b>Convener</b> Dr. Divya Somvanshi (Assistant Professor) Department of Physics HBTU, Kanpur	<b>Co-Convener</b> Dr. Braj Bhusan Singh (Assistant Professor) Department of Physics HBTU, Kanpur
<b>Chairperson</b> Prof. C.L. Gahlot Dean, School of Basic and Applied Sciences HBTU Kanpur Prof. S. K. Sharma Head, Department of Physics HBTU, Kanpur	<b>Coordinator</b> Dr. Suresh Kumar Sharma Dr. Alok Singh (Assistant Professor (Guest)) Department of Physics HBTU, Kanpur	

**Organizing Committee**  
Members & Research Scholars  
Department of Physics  
Harcourt Butler Technical University, Kanpur

**Contact**  
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The Department of Physics, School of Basic & Applied Sciences, Harcourt Butler Technical University (HBTU), Kanpur has organized a one-day Webinar on **Atomistic Next Generation Materials & Device Simulation using NanoDCAL & RESCU Software** on 19 Nov 2022. by Dr. Divya Somvanshi, Assistant Professor, Department of Physics, HBTU, Kanpur. The main speaker in this Webinar was **Mr. Anil Kumar Sharma, Managing Director, Impulse Technology**. To reach out more no of participants, there was no registration fees for the event. Total 71 people have joined the webinar from various Central university, NITs, IITs, and people from outside India also participated in this Webinar. The webinar focussed on atomistic simulations of new advanced materials such as 2D materials, their fundamental about



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simulation, electronic transport etc. It is to be mentioned here that Ab initio methods (first principles) have been used to study a variety of systems that can be represented with a few dozens to a few hundred atoms, including semiconductors, metals, and topological insulators. **This webinar presented Nanoacademic's atomistic software suite, to construct molecules, surfaces, crystals, interfaces, and devices at the nanoscale range & predict the electronic-like band structure, the density of state & electrical properties transmission coefficient, current, IV characteristics of nanoscale devices.** Many questions are asked by attendees and their queries are resolved by speakers.

Overall, this webinar was a successful events and all the attendees gained valuable simulation skills and knowledge that they could apply in their research works. The organizers also received positive feedback from the attendees and based on that organizers are also planning to conduct an On-line Short-term course (STC) in the near future to cater the growing demand for simulation of advanced materials.

Registration Form (snap shot):

## Atomistics Next Generation Materials & Device Simulation using NanoDCAL& RESCU Software

Speaker Er. Anil Kumar Sharma, Managing Director, IMPULSE TECHNOLOGY

Name of the Candidate (To be Printed on Certificate) \*

Short answer text

Designation (Kindly mention whether You are Professor/ Associate Professor / Assistant Professor / Research Scholar or Others) \*

Short answer text

Affiliation (University / Institute) \*

Short answer text

*Dinjee Somvanshi*