

## Workshop on

# High Performance Computing and its Multidisciplinary Applications

August 22 - 27, 2022

Organized by NIT Meghalaya and IIT Kharagpur  
Under the aegis of National Supercomputing Mission

Website

<https://nitm.ac.in/hpcma>

### About the Workshop:

The demand for High Performance Computing Systems is increasing tremendously in different application domains owing to different characteristics of problems at hand such as high dimensionality and large number of data samples, and exponential search space for possible solutions. This workshop aims to provide a one-place package for covering from basics of High Performance Computing to its applications in diverging areas such as smart cities, molecular simulation, medical image processing, computational fluid dynamics etc. including hands-on sessions.

### Topics:

- Introduction to HPC
- OpenMP, MPI, CUDA
- HPC for ML/ DL
- HPC and its applications: disease prediction, video analysis, Blockchain, molecular simulation, smart cities, computational fluid dynamics, biological data analysis.

### Speakers:

Prof. Prasan Kumar, Chang Gung University  
Prof. Pabitra Mitra, IIT Kharagpur  
Dr. Pralay Mitra, IIT Kharagpur



Dr. Santosh Kumar Vipparthi, IIT Guahati  
Dr. Lavika Goel, MNIT Jaipur  
Dr. Chhavi Dhiman, Technological University, Delhi  
Mr. Megh Makhwana, NVIDIA  
Mr. Ashish Kuvelkar, CDAC  
Dr. Akhilendra Pratap, NIT Meghalaya  
Dr. Amit Kumar, NIT Meghalaya  
Dr. Diptendu Sinha Roy, NIT Meghalaya  
Dr. Yogita, NIT Meghalaya

### Workshop Links:

Online Registration Form:

<https://forms.gle/Rn636dHKUJp5x8A6>

Website : <https://nitm.ac.in/hpcma>

Contact email: [yogitathakran@nitm.ac.in](mailto:yogitathakran@nitm.ac.in)



### Important Dates:

Last date for registration: **August 18<sup>th</sup>, 2022 5:00 PM**

(Registration may close earlier, if capacity is reached. Early registration is recommended. There is a cap of 30 participants in offline participation but there is no cap for online participation.)

Notification and sharing of link: **August 20<sup>th</sup>, 2022**

### Who should attend:

Scientists, Faculty Members, Postdoctoral Fellows,  
Doctoral Students, Postgraduate Students

### Coordinator:

Dr. Yogita, NIT Meghalaya

### Organizing Committee:

Prof. Pabitra Mitra, IIT Kharagpur  
Prof. Somnath Roy, IIT Kharagpur  
Dr. Diptendu Sinha Roy, NIT Meghalaya  
Dr. Alok Chakrabarty, NIT Meghalaya  
Dr. Akhilendra Pratap Singh, NIT Meghalaya  
Dr. Bunil Kumar Balabantaray, NIT Meghalaya  
Dr. Deepak Kumar, NIT Meghalaya  
Dr. Surmila Thokchom, NIT Meghalaya  
Dr. Soumen Moulik, NIT Meghalaya  
Dr. Vipin Pal, NIT Meghalaya