

A Five Day Workshop on High Performance Computing for ALL

Date: 10 TO 14 DECEMBER 2018

Venue: IIITDM Kancheepuram, Melakottaiyur, Vandalur-Kelambakkam Road,
Chennai - 600 127

1 Objective

This workshop aims to provide the basics of modern processor architecture and serial optimization techniques that can effectively exploit the architectural features for scientific computing. Critical issues in data movement and issues in high performance computing are discussed. The use of parallel processing in shared, nonuniform access, and distributed memories is discussed. In addition the popular programming styles of OpenMP, MPI and mixed programming are highlighted. Hands on sessions will be conducted on the IIITDM Cluster Computer.

Registration Link: <http://www.iiitdm.ac.in> or <http://web.iiitdm.ac.in/noor> or

<https://docs.google.com/forms/d/e/1FAIpQLSf11oPs03iM25k3qDmi7hUcGOrek7StErEOfVksz28CFLFcKg/viewform>

2 Organized By

Center for High Performance Reconfigurable Computing, Department of Computer Science and Engineering, Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kancheepuram. IIITDM Kancheepuram is an Institute of National Importance under Ministry of Human Resources Development, Govt. of India. IIITDM Kancheepuram is established in the year 2007 with a vision to excel as a center for excellence in IT enabled Design and Manufacturing. This workshop is aligned to the vision statement of the Institute to develop the human resources in programming High Performance Computing.

3 Topics to be Covered

- Introduction to HPC
- Modern Processor Architecture
- Optimization of Serial Code
- Parallel Computer
- Parallelization Fundamentals
- Shared memory models and programming languages and OpenMP
- Distributed Memory Architectures and MPI Programming
- Vector Processors, GPUs and CUDA

4 Target Audience

Faculty/Scientists/Researchers/PG and UG Students working in the area of Computational domain.

5 Prerequisite

Participant should have the working knowledge of basic computer programming in C.

6 Registration Details

- Online Registration – Open from October 01, 2018.
- Register your seat at the earliest as the seats are limited.
- Registration Closes by December 07, 2018.

7 Registration Fees

R&D Labs/ Faculty/ PSUs	Rs. 7000*
Full Time or Part Time Research Scholars, PG & UG Students	Rs. 6000*

* Inclusive of 18% GST as per GoI norms.

8 Important Details

- NEFT or IMPS Account Details: IIITDM Educational Events; Acc. No: 35594334673; State Bank of India; Kandigai Branch; IFSC code: SBIN0018365.
- Registration Fee covers FOOD and HOSTEL ACCOMMODATION for all the 5 days. No TA/DA will be provided.
- DD in favor of IIITDM Educational Events payable at Chennai. DD should reach us on or before November 25, 2018 to the following address.

Dr Noor Mahammad Sk,
Organizing Chair, HPC Workshop
Indian Institute of Information Technology,
Design and Manufacturing (IIITDM) Kancheepuram
Melakottaiyur, Vandalur – Kelambakkam Road,
Chennai – 600 127, Tamil Nadu, India.

For enquiry and clarification, please contact:

Email: noor@iiitdm.ac.in, noorse@gmail.com;

Ph.No: 044-2747 6349(O)/ 91760 10587(M)

How to Reach Venue (www.iiitdm.ac.in):

IIITDM Kancheepuram Campus in Chennai on Vandalur – Kelambakkam Road. It is 9KMs from Vandalur Zoo toward East Direction, Landmark: KANDIGAI.