



Workshop on High Performance Computing

Organized by

**High Performance Computing Technologies,
Centre for Development of Advanced Computing, Pune (India)**

Venue: Tezpur University

Duration: 3 days. August 9-11, 2016

August 9, 2016

Time (Hrs)	Lecture/Hands-on Session
10:00 – 11:00	Inaugural Function
11:00– 12:00	Overview of High Performance Computing (HPC)
12:00 – 13:00	Insight into HPC
Lunch Break - 1 hr.	
14:00 – 15:30	Shared Memory Computing with OpenMP
15:30 – 17:00	Hands on session with OpenMP

August 10, 2016

Time (Hrs)	Lecture/Hands-on Session
09:30 – 10:00	Introduction to PARAM TEZ HPC facility: System overview
10:00 – 10:30	Design of Parallel Algorithms
10:30 – 11:30	Distributed Memory Computing with MPI
11:30 – 13:00	Hands on Session with MPI
Lunch Break - 1 hr.	
14:00- 14:30	Demonstration: Porting & Execution of Scientific HPC Application
14:30 – 15:00	Cluster Resource Manager and Job Scheduler (TORQUE)
15:00 – 17: 00	HPC System Administration (PARAM TEZ HPC facility)



August 11, 2016

Time (Hrs)	Lecture/Hands-on Session
09:30 – 11:30	Overview of GPGPU Computing and CUDA
11:30 – 12:15	Cluster Building Tools
12:15 – 13:00	Introduction to PARAM Shavak
Lunch Break - 1 hr.	
14:00- 14:30	Profiling of Codes
14:30 – 16:30	Overview of architecture and computing with Xeon Phi (MIC)