Centre for Development of Advanced Computing

Parallel Computing Workshop on PARAM 10000
May 15 2003 (Thursday) – May 16 (Friday) 2003, at IIT-Delhi

Class Room lectures: 09:30 Hrs – 12:30 Hrs   Hands-on Session: 14:00 Hrs – 18:00 Hrs

Day 1: May 15, 2003 (Thursday)

Time (Hrs)	Activity
09:00~09:15	Welcome to Parallel Computing Workshop
09:15~10:00	An Overview of Parallel Computing – Part I
10:15~11:00	An Overview of Parallel Computing –Part II PARAM 10000 & PARAM Padma
11:00~11:15	**Tea break**
11:30~12:30	Programming Paradigms: Message Passing Library (MPI)
12:30~14:00	**Lunch**
14:00~18:00	**Hands-on Session** (Day1): Basic MPI programs in FORTRAN and C, Examples on Point-to-Point and Collective communications and computations, Numerical Integration of ? function, Vector-Vector multiplication, Infinity Norm of a matrix, and Matrix-Vector multiplication algorithms

Day 2: May 16 (Friday)

Time (Hrs)	Activity
09:00~10:00	An overview of Programming Paradigms and Explicit/Implicit Parallelism
10:15~11:00	An overview of Performance Metrics: Scalability and Speed Up Analysis
11:00~11:15	**Tea break**
11:15~12:00	An overview of Application and System Benchmarks on PARAM 10000
12:00~12:30	HPCC Software: Performance Visualization Tools
12:30~14:00	**Lunch**
14:00~18:00	**Hands-on Session** (Day 2): Matrix-Matrix multiplication algorithms, Sample sort algorithm, Conjugate Gradient method, Gaussian Elimination and Jacobi method to solve matrix system of linear equations, and Demonstration of HPCC software