



Centre for Development of Advanced Computing

Parallel Computing Workshop on PARAM 10000

October 10 (Thursday) – October 11 (Friday) 2002, at IIT-Delhi

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

Day 1: October 10 (Thursday)

Time (Hrs)	Activity
09:00~09:15	Welcome to Parallel Computing Workshop
09:15~10:00	An Overview of Parallel Computing
10:15~11:00	An Overview of PARAM 10000
11:00~11:15	Tea break
11:30~12:30	Programming Paradigm - Introduction to 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 π function, Vector-Vector multiplication, Infinity Norm of a matrix, and Matrix-Vector multiplication algorithms

Day 2: October 11 (Friday)

Time (Hrs)	Activity
09:00~10:00	HPCC Software: KSHIPRA, Active Messages and C-MPI
10:15~11:00	An overview of Performance Metrics
11:00~11:15	Tea break
11:15~12:00	An overview of Application and System Benchmarks
12:00~12:30	HPCC Software: Debuggers and System Management 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