Welcome to the Workshop on High Performance Scientific and Engineering Computing with Applications (HPSECA-01) held in conjunction with the International Conference on Parallel Processing (ICPP-01) to be held in Valencia, Spain, September 03-07, 2001.

Parallel and distributed processing is one of the most exciting technologies to achieve prominence, whose development has been facilitated by the rapid advances in electronic and integrated circuit technologies, since the invention of computers in the 1940s. It is expected that the years to come will witness a proliferation of the use of parallel and distributed systems, or supercomputers. This kind of computing method has become a key technology which will play an important part in determining, or at least shaping, future research and development activities in many academic and industrial branches, especially when the solution of large and complex problems must cope with harder and harder timing scheduling. This special workshop brings together computer scientists, applied mathematicians and researchers to present, discuss and exchange ideas, results, work in progress and experience of research in the area of parallel and distributed computing for problems in science and engineering applications.

There was a large number of paper submissions from not only the Asian Pacific, but also Europe and North America. All submissions were reviewed by at least three committee members or external reviewers. It is extremely difficult to select the presentation on the workshop because there were many excellent and interesting submissions. In order to allocate as many papers as possible and keep the high quality of the workshop, we finally decided to accept 30 papers for oral technical presentation in the workshop. We believe all of these papers and topics will not only provide novel ideas, new results, work in progress and state-of-the-art techniques in this field, but also stimulate future research activities in the area of parallel and distributed computing for science and engineering applications.

The program for this workshop is a result of the hard and excellent work of many others, reviewers and program committee members. We would like to express our sincere appreciation to all authors for their valuable contributions and to all program committee members for their cooperation in completing the workshop program under a very tight schedule. Last but not the least, we thank Prof. Timothy Pinkston, the workshops chair of ICPP-01, for helping and encouraging the inclusion of HPSECA-01 in ICPP-01.
Message from the Chairs

Workshop on Optical Networks

Welcome to WON’01! This is the first time a one-day workshop on optical networks is being held in conjunction with ICPP. Advances in optical technologies, together with the rapidly rising demand for network bandwidth, are fueling an increasing amount of research in the field of optical networks. Optical communication has become a promising networking choice to meet ever-increasing demands on bandwidth from the emerging bandwidth-intensive computing/communication applications. This workshop focuses on fundamental challenges and issues on using optics in two converging areas: parallel/distributed computing and communications. The main objective of this workshop is to bring together leading researchers in this field of research with the aim of encouraging the exchange of ideas and experience between these two communities.

We would like to thank many people for helping put together the technical program. First, we would like to thank the authors for submitting a diverse group of papers for consideration. There were 15 submissions from 8 countries. The papers submitted to the workshop were reviewed by at least two program committee members of the workshop and experts of the technical areas. We are very grateful to the program committee members and reviewers for providing timely and in-depth reviews. The final program consists of 11 papers. These have been divided into three sessions: WDM Networks (4 papers), Switching and Routing (4 papers), and Optical Interconnects (3 papers). The program reflects some of the topics of current interests in the optical networking community.

Our thanks also go to the ICPP Workshop Organizing Committee for giving us this opportunity to organize WON’01, especially to the ICPP Workshops Chair, Prof. Timothy Pinkston, for his advice and encouragement. Last but not the least, our sincere thanks are also due to the attendees of this workshop.

Yuanyuan Yang, SUNY Stony Brook, USA
Qianping Gu, University of Aizu, Japan
Workshop Co-Chairs
Welcome to the ICPP Workshop on Wireless Networks on Mobile Computing. This workshop focuses on fundamental challenges and issues in the fields of wireless networks and mobile computing. Our goal is to bring together leading researchers in this hot field of research in order to identify the fundamental challenges and future prospects of these important areas.

In response to the Call for Papers, we received 18 submissions from all over the world. On average, each paper was reviewed by three program committee members. Based on the referee reports, we have selected 11 papers for presentation and for inclusion in the conference proceedings.

We would like to thank the program committee members for their assistance in organizing this workshop and reviewing the submitted papers. The program of this workshop is the result of their hard work. Last but not the least, we thank the ICPP organization team for their assistance and cooperation.

Jie Wu, Florida Atlantic University, USA
Koji Nakano, Japan Advanced Institute of Science and Technology, Japan
Workshop Co-Chairs
Message from the Chair

Workshop on Scheduling and Resource Management for Cluster Computing

The decreasing cost and increasing performance of commodity components for networking has made clusters of networked computers attractive platforms for high-performance computing. With the deployment of numerous large clusters to support compute-intensive applications, there is considerable interest in scheduling and resource management issues for cluster computing.

This workshop features one invited presentation and eleven contributed papers on a range of topics pertaining to scheduling and resource management. I am indebted to the members of the program committee for their assistance in reviewing papers submitted to the workshop. They had to work under severe time constraints but provided detailed and timely reviews that enabled the selection of papers for the workshop and the improvement of content and presentation of the papers.

P. Sadayappan  
Workshop Chair