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Preface

I wish to welcome all of you to the International Symposium on High Performance Computing (ISHPC) and to the historic city of Fukuoka, Japan. I am pleased to serve as Conference Chair at a time when high performance computing has a significant influence in computer science and engineering. In particular, high performance computing has had a significant impact on advanced technologies that are giving rise to a new era in information processing. The many conferences and symposiums that are held on the subject around the world are an indication of the importance of this area and the interest of the research community.

ISHPC was planned as a focused meeting of top researchers in the field to give them the opportunity to exchange ideas and interact with all the participants in the symposium. One of the goals of this symposium is to provide a forum for the discussion of all aspects of high performance computing (from system architecture to applications) in a more informal and personal fashion. We started planning for the symposium one and half years ago, and today we are delighted to have the symposium, which comprises excellent invited talks, tutorials and workshops, as well as high quality technical papers.

This symposium would not have been possible without the significant help of several people who devoted resources and time. In particular I would like to thank the Organizing Chair, K. Araki from Kyushu University, and all members of the organizing committee, who contributed very significantly to the planning and organization of the ISHPC. I must also thank the Program Chair, C. Polychronopoulos of the University of Illinois at Urbana-Champaign, and the program committee members who assembled an excellent program comprising a very interesting collection of contributed papers from many countries. Finally, I thank all those who have worked diligently to make the ISHPC a success.

I hope you will enjoy the symposium, and that you will find the information and interaction useful.

November 4, 1997

Makoto Amamiya
General Chair

Foreword

The International Symposium on High Performance Computing (ISHPC'97) held in Fukuoka, Japan, November 4-6, 1997, was thoughtfully planned, organized, and supported by the ISHPC Organizing Committee and Kyushu University.

The ISHPC'97 Program consists of a keynote speech, several invited talks, a workshop on HPC and distributed environments, tutorials on parallelizing compilers and MPI, and several technical sessions covering theoretical and applied research topics on high performance computing which are representative of the current research activities in industry and academia. Participants and contributors to this symposium represent a cross section of our research community and major laboratories in this area, including the Center for Supercomputing Research and Development of UIUC, the Swiss Center for Scientific Computing of ETH, the Maui High Performance Computing Center, and the Institute of Systems & Information Technologies Kyushu.

All of us on the Program Committee wish to thank the authors who submitted papers to ISHPC. We received more than 40 technical contributions from various countries. Each paper received at least three peer reviews and, based on the evaluation process, the program committee selected four papers as distinguished papers to appear as 16-page contributions in the proceedings, and sixteen regular (12-page) papers. Given that several additional papers received favorable reviews, the program committee recommended a poster session comprising shorter papers. Ten contributions were selected as short (8-page) papers for presentation in the poster session and inclusion in the proceedings.

We hope that final program will be of significant interest to the participants and will serve as the launching pad for interaction and debate on technical issues among the attendees.

November 1997

Constantine D. Polychronopoulos
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