Welcome to The 3rd Workshop on Parallel and Distributed Scientific and Engineering Computing with Applications (PDSECA-02) held in conjunction with the 16th International Parallel and Distributed Processing Symposium (IPDPS-2002) in Fort Lauderdale, Florida on April 19, 2002.

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 is to bring together computer scientists, applied mathematicians and researchers to present, discuss and exchange idea, results, work in progress and experience of research in the area of parallel and distributed computing for problems in science and engineering applications.

There were a large amount paper submissions from not only the Asian Pacific, but also Europe and North American. All submissions were distributed to at least three reviewers from program committee members and reviewers. It was extremely difficult to select the presentation for 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 19 papers for presentation at the workshop. We believe all of these papers and topics will not only provide novel ideas, new results, work in progress and advance state-of-the-art techniques in this field but also stimulate the future research activities in the area of parallel and distributed computing for science and engineering applications.

The program for this workshop is the result of 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. Chip Weems, IPDPS 2002 Workshops Chair for helping and encouraging the inclusion of PDSECA-02 in IPDPS-02.

Laurence Tianruo Yang, Thomas Rauber and Gudula Runger
PDSECA-02 Workshop Chairs

Program Committee Members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamid R. Arabnia</td>
<td>University of Georgia, USA</td>
</tr>
<tr>
<td>Eric Aubanel</td>
<td>University of New Brunswick, Canada</td>
</tr>
<tr>
<td>David A. Bader</td>
<td>University of New Mexico, USA</td>
</tr>
<tr>
<td>Prith Banerjee</td>
<td>Northwestern University, USA</td>
</tr>
<tr>
<td>Subhash Bhalla</td>
<td>University of Aizu, Japan</td>
</tr>
<tr>
<td>Virendra C. Bhavsar</td>
<td>University of New Brunswick, Canada</td>
</tr>
<tr>
<td>Petter Bjorstad</td>
<td>University of Bergen, Norway</td>
</tr>
</tbody>
</table>
Martin Buecker                       Aachen University of Technology, Germany
Rajkumar Buyya                     Monash University, Australia
Ramon Doallo                        Universidade da Coruna, Spain
Andrei Doncescu                    University of West French Indies, France
Jack Dongarra                      Oak Ridge National Laboratory, USA
Len Freeman                        University of Manchester, UK
Xiangzhen Qiao                     Institute of Computing Technology,
                                    Academy of China, P.R. China
Minyi Guo                          University of Aizu, Japan
John Gustafson                     Ames National Laboratory, USA
Constantinos Ierotheou             University of Greenwich, UK
Weijia Jia                         City University of Hong Kong, P. R. China
Lei Li                             Yamaguchi University, Japan
Sanli Li                           Tsinghua University, P. R. China
Hai-xiang Lin                      Delft University of Technology, The Netherlands
Xiaola Lin                         University of Hong Kong, P. R. China
Svetozar Margenov                  Centeral Laboratory for Parallel Progressing,
                                    Bulgarian Academy of Science, Bulgaria
Graham Megson                      University of Reading, UK
Kalman Z. Meth                     IBM Haifa Research Laboratory, Israel
Russ Miller                        State University of New York, Buffalo, USA
Michael K. Ng                      University of Hong Kong, P. R. China
Marcin Paprzycki                   Oklahoma State University, USA
Bernard Philippe                   IRISA, France
Janusz Pipin                       National Research Council of Canada, Canada
Constantine Polychronopoulos      University of Illinois at Urbana-Champaign, USA
Enrique Quintana-Orti              University of Jaime I, Spain
Jose D. P. Rolim                   University of Geneva, Switzerland
Sartaj Sahni                       University of Florida, USA
Ahmed Sameh                        Purdue University, USA
Olaf Schenks                       University of Basel, Switzerland
Ruth E. Shaw                       University of New Brunswick, Canada
Peter Strazdins                    Australian National University, Australia
Eric de Sturler                    University of Illinois at Urbana-Champaign, USA
Luciano Tarricone                  University of Perrugia, Italy
Xiaohui Shen                       Motorola, USA
Xian-He Sun                        Illinois Institute of Technology, USA
David Taniar                       Monash University, Australia
Karen Tomko                        University of Cincinnati, USA
Kevin Kuang-Hui Tseng              Vanderbilt University, USA
Roman Wyzykowski                   Technical University of Chestochowa, Poland
Mateo Valero                       Universidad Politecnica de Catalunya, Spain
Robert van de Geijn                University of Texas at Austin, USA
Jie Wu                             Florida Atlantic University, USA
Zhiwei Xu                          National Center for Intelligent Computing Systems,
                                    Chinese Academy of Science, P. R. China
Zahari Zlatev                      National Environmental Research Institute, Denmark
Jun Zhang                          University of Kentucky, USA
Xiaodong Zhang                     College of William and Mary, USA
Weimin Zheng                       Tsinghua University, P. R. China
Bingbing Zhou                      Deakin University, Australia
Albert Y. Zomaya                   University of West Australia, Australia