## **Preface from the Program Chairs**

Welcome to the 19th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP 2011). PDP is a well-established conference at which, each year interesting and significant research papers are presented. This year the Program Committee has received 136 papers by more than 560 authors from 34 countries in Africa, Asia, Australia, Europe, North America, and South America. Program Committee members and those involved in the Committees of the Special Sessions have affiliations with institutions in 29 countries and have provided 459 reports on the submitted papers. After reviewing, 63 regular papers and 26 short papers have been selected for publication in the Conference Proceedings, including papers to be presented in the Special Sessions. Authors of the accepted papers come from 29 different countries. For the main conference we received 74 papers and accepted 29 as regular and 17 as short papers.

We wish to thank all of those who have contributed to the success of this event, the authors, the reviewers, the Program Committee, the Special Session Chairs, the Keynote Speakers and the Euromicro Office Staff.

We would like to thank in particular the eight Special Session Chairs: Konrad Kloeckner, chair of Next Generation of Web Computing; Julien Bourgeois and Etienne Riviere, chairs of Modeling, Simulation, and Optimization of Peer-to peer Environments; Ivan Merelli and Daniele D'Agostino, chairs of Grid, Parallel and Distributed Bioinformatics Applications; Rainer Stotzka and Jan Westerholm, chairs of Grid and High Performance Computing for Nuclear Fusion Applications; Hamid Sarbazi-Azad and Nader Bagherzadeh, chairs of On-chip Parallel and Network-based Systems; Didier El Baz, chair of New Topics in Parallel Computing in Optimization; Thierry Delaitre, chair of Virtualization in Distributed Systems; and Igor Kotenko chair of Security in Networked and Distributed Systems.

We also thank, those who have been working behind the scenes, the Euromicro Office Staff and in particular the Office Manager Brigitte Kloeckner for her excellent administration, the Euromicro General Secretary Amund Skavhaug for acting as liaison with the publishers, the SEIT laboratory of the University of Cyprus for maintaining the conference web page, Lisa O'Conner and all the staff at the CPS publishers for the production of this volume, and last, but by no means least, the Chairman of Euromicro Karl-Erwin Grosspietsch for his discrete support.

We finally thank all the participants of PDP 2011. Looking forward meeting all of you in Cyprus!

Yiannis Cotronis, Marco Danelutto, and George Angelos Papadopoulos **Program Chairs**