

# Preface

It is our pleasure to welcome you to 2012 International Applied Mechanics, Mechatronics Automation & System Simulation Meeting (AMMASS 2012) in Hangzhou, China. AMMASS 2012 is the first conference dedicated to issues related to applied mechanics, mechatronics automation and system simulation. A major goal and feature of AMMASS 2012 is to bring academic scientists, engineers, industry researchers together to exchange and share their experiences and research results about most aspects of applied mechanics, mechatronics automation and system simulation, and discuss the practical challenges encountered and the solutions adopted.

We hope you will have a technically rewarding experience, and use this occasion to meet old friends and make many new ones. Don't miss the opportunity to explore in Hangzhou, China. And don't forget to take a sample of the many and diverse attractions in the rest of the China.

The conference promises to be both stimulating and informative with a wonderful array of keynote and invited speakers from all over the world. Delegates will have a wide range of sessions to choose from and will have a difficult decision in deciding which sessions to attend.

The program consists of invited sessions, and technical workshops and discussions with eminent speakers covering a wide range of topics in applied mechanics, mechatronics automation and system simulation. This rich program provides all attendees with the opportunities to meet and interact with one another. We hope your experience with AMMASS 2012 is a fruitful and long lasting one. With your support and participation, AMMASS will continue its success for a long time.

We would like to thank the organization staff, the members of the program committees and reviewers. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to express our gratitude to the external reviewers, for providing extra helps in the review process, and the authors for contributing their research result to the conference. Special thanks go to TTP Publisher.

We wish all attendees of AMMASS 2012 an enjoyable scientific gathering in Hangzhou, China. We look forward to seeing all of you next year at the AMMASS 2013.

Dr. Donghai LV  
Conference General Chair

# Organizing Committee

## Organizing Chairs

Prof.N.Jaisankar, School of Computing Sciences, VIT University, India  
Razvan Raducanu, "Al. I. Cuza" University, Romania

## Publication Chairs

Xiaomei Lu, Comptuer Science and Electronic Technology International Society,China  
Jinshan Xu, Comptuer Science and Electronic Technology International Society,China

## Organizing Committee

Prof. Rafi-U-Zaman, Muffakham Jah College of Engineering and Technology, India  
Prof. Jinlong Wang, Qingdao Technological University, China  
Prof. S J Wagh, Maharashtra Academy of Engineering, India  
Dean, Prof. Taher Omran Ahmed Aljabal Algharby University, Libya  
Prof. Qiang Li, Zhejiang University of Science and Technology, China  
Dr. Bruce Moulton, University of Sydney Technology, Australia  
Prof. Farhat Anwar, International Islamic University Malaysi, Malaysia  
Prof. Shinde Subhash Keshavrao, Bharati Vidyapeeth College of Engineering, India  
HOD, Prof. Khaleel Ur Rahman Khan, Muffakham Jah College of Engineering & Tech., India  
Prof. Haiyan Wu, Zhejiang Gongshang University, China  
Prof. Seung-Soo Han, Myongji University, Korea  
Prof. Adrian OLARU, University Polytechnic of Bucharest, Romania  
Prof. Zheng Quan, University of Science and Technology of China, China  
Prof. Nansheng Pang, North China Electric Power University, China  
Prof. Hossein Hassanabadi, Azad University of Quchan, Iran  
Prof. Neeraj Kumar Nehra, SMVD University, India  
Dr. Qian Chen, Columbia University, USA  
HOD, Prof. Bhavesh Patel, Shah & Anchor Kutchhi Polytechnic, India  
Prof. Sang Ho Lee, Soongsil University, Korea  
Prof. Guoai Xu, Beijing University of Posts and Telecommunications, China