

Preface

2014 3rd International Conference on Manufacturing Engineering and Process (ICMEP 2014) was held in Seoul, Korea, April 10-11, 2014. The conference provides a platform to discuss Manufacturing Engineering and Process etc. with participants from all over the world, both from academia and from industry. Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The present volumes collect accepted papers and represent an interesting output of this conference. This book covers these topics: Materials Engineering and Technology, Mechanical Engineering, Design Technology and Engineering, Applied Thermodynamics, Heat Transfer, Energy Conversion, Electrical Engineering and Electric Machines, Power System and Energy Engineering, Its Applications, Instrumentation, Measurement Technologies, Analysis and Methodology, Electronics and Integrated Circuits, Embedded Technology and Applications, Mechatronics and Robotics, Modern Control, Automation and Reverse Engineering, Civil Engineering, Manufacturing and Industrial Engineering, Management Applications, Mathematics, Signal Processing and Data Mining, Information Technologies and Networks.

This conference can only succeed as a team effort, so the editors want to thank the international scientific committee and the reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

Amanda F, Wu
Science and Engineering Institute, USA

Committees

Conference Chairs

Prof. Bale V. Reddy, University of Ontario Institute of Technology (UOIT), Canada

Prof. You-Jin Park, Chung-Ang University, Korea

Prof. Vinod Kumar, Carleton University, Canada

Program Committee Chairs

Dr. Ho-Sung Lee, Korea Aerospace Research Institute

Dr. Alexey Vereschaka, Moscow State Technological University STANKIN, Russia

Dr. Nico Hanenkamp, Freudenberg NOK Sealing Technologies Plymouth/MI/USA

Prof. Kwang Sik Chung, Korea National Open University, Korea

Prof. Lingda WU, The Key Lab, the Academy of Equipment, Beijing, China

Prof. Ting-Chuen Pong, Hong Kong University of Science and Technology, Hong Kong

Prof. Tae Geun Kim, Korea University, South Korea

Technical Committee

Dr. Balan D. George, German-Romanian University of Sibiu, Romania

Prof Dr. Yusri Yusof, Universiti Tun Hussein Onn Malaysia, Malaysia

Dr. Manish A. Kewalramani, Abu Dhabi University, UAE.

Dr. YIP Mum Wai, Tunku Abdul Rahman University College, Malaysia

Principal. Mohammad Israr, Balaji Engineering College, India

Prof. Ankit Khurana, Aautosync – Automotive Centre of Excellence, India

Prof. Mehmet Savsar, Kuwait University, Kuwait

Prof. S. E. Oraby, PAAET, Kuwait

Prof. Nukman Bin Yusoff, University of Malaya, Malaysia

Prof. Gopal Krishna Upadhyay, J. P. Nagar(UP), India

Prof. Zheng Xuan Zhang, Shanghai Institute of Microsystem And Information Technology,

Chinese Academy of Science, China

Prof. Renjun PEI, Columbia University, USA

Prof. Chia-Mei Chen, National Sun Yat-Sen University, Taiwan

Prof. Kevin Ho, Dep. of Computer Science & Communication Engineering, Providence University,

Taiwan

Prof. K. Al-Shalfan, Computer Science Department, Imam Med Bin Saud University, Riyadh.

Kingdom of Saudi Arabia

Dr. Mark Anderso, Edge Hill University, UK

DR. Chi-Yi Tsai, Department of Electrical Engineering, Tamkang University, Taiwan

Prof. Der-Feng Guo, Department of Electronic Engineering, Air Force Academy, TAIWAN

Dr. Mohammad Alshayeb, King Fahd University of Petroleum and Minerals, Saudi Arabia

Prof. Chanchai Thongsopa, Suranaree University of Technology Nakhon Ratchasima, Thailand

Prof Mehmet Hakan Karaata, Computer Engineering Department, Kuwait University, Kuwait

Prof. Saad M. Darwish, computer science, Alexandria university, Egypt

Prof. Xiaodong Wang, Quanzhou Normal University, China

Dr. Bin Song, University of Florida, USA

Dr. Abdul Rehman Abbasi, Karachi Institute of Power Engineering, Pakistan

Dr. Shadi Banitaan, North Dakota State University Fargo, ND, USA

Sponsors

Science and Engineering Institute

Carleton University, Canada

University of Ontario Institute of Technology (UOIT), Canada