

Preface

2015 3rd International Conference on Recent Trends in Materials and Mechanical Engineering (ICRTMME 2015) will be held on January 15-16, 2015, Auckland, New Zealand. 2013 2nd International Conference on Recent Trends in Materials and Mechanical Engineering (ICRTMME 2013) has been held on September 21-23, 2013, Singapore very successfully.

ICRTMME 2015 will be the most comprehensive conference focused on the various aspects of Materials, Mechanical Engineering and Information Engineering. Our conference provides a chance for academic and industry professionals to discuss recent progress in the area of Materials, Mechanical Engineering and Information Engineering.

The goal of this conference is to bring together the researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of Materials, Mechanical Engineering and Information Engineering.

Materials and Mechanical Engineering discussed the topical information on innovative, structural and functional materials and composites with applications in optical, electronical, mechanical, civil, aeronautical, medical, bio and nano engineering. Industrial engineering is a branch of engineering which deals with the optimization of complex processes or systems. It is concerned with the development, improvement, implementation of integrated systems of people, money, knowledge, information, equipment, energy, materials, analysis and synthesis, as well as the mathematical, physical and social sciences together with the principles and methods of engineering design to specify, predict, and evaluate the results to be obtained from such systems or processes.

We are thankful to colleagues for their contributions to ICRTMME 2015. We also would like to thank the members of the Organizing Committee and the corporate sponsors for their efforts and contributions towards making the conference successful. Special thanks go to TTP Publisher. Our sincerely acknowledgements are also expressed to the people who contribute to the proceedings and conference. Moreover, our thanks are also due to the sponsors for providing much help for the conference.

Finally, we hope the attendees benefit from the conference, and have a happy and meaningful journey in Auckland, New Zealand.

Thanks.

Wongseedakaew and Qi Luo

ICRTMME 2015 Organization Committee

Keynote Speaker

Gerald Schaefer, Loughborough University, U.K.

General Chairs

Jian Yang, Huazhong University of Science and Technology, China

Yuanzhi Wong, Wuhan University, China

Publication Chairs

Khanittha Wongseedakaew, King Mongkut's Institute of Technology, Thailand

Qi Luo, Wuhan Institute of Technology, China

International Committee

Ming-Tsung Tsai, Southern Taiwan University of Science and Technology, Taiwan

CHICHERNEA G. FLORIN, Transilvania University of Brasov, Romania

Jung-Guk Kim, Hankuk University of Foreign Studies, Korea

Eui in Choi, Hannam University, Korea

Ayyoub Akbari-Moghanjoughi, Universiti Putra Malaysia, Malaysia

Hernan Gonzalez Acuña, Universidad Autonoma de Bucaramanga, Colombia

Fabiane Bordin, University of Vale do Rio dos Sinos, Brazil

Uipil Chong, University of Ulsan, Korea

Grzegorz Sierpiński, Silesian University of Technology, Faculty of Transport

Serap Akdemir, Namık Kemal University, Turkey

J. Manoranjini, Tagore Engg College, Anna University, India

Ana Breda, University of Aveiro, Portugal

Nurdiana binti Samsulrizal, Universiti Teknologi MARA, Malaysia

Radin Yury, All Russia Thermal Engineering Institute, Russia

Yuriy V. Kostyuchenko, Earth of National Academy of Sciences of Ukraine, Ukraine

Dwi Agustina, Nanyang Technological University (NTU), Singapore

Carlo Pozzi, Department of Architecture, Pescara, Italy

Nuraini Abdul Aziz, Universiti Putra, Malaysia

Mou'ad A. Tarawneh, National University of Malaysia, Malaysia

Ha Nguyen Thi Thu, Vietnam Electric Power University, Vietnam

Irwansyah. E, Bina Nusantara University, Indonesia

Maha TeBAA, University Mohammed V-Agdal, Morocco

Tomáš Bublík, Czech Technical University in Prague, Czech Republic

Prerna Saxena, Department of Electronics Engineering, VNIT, India

Artem M. Chirkin, ITMO University, Russian Federation

Nikolay E. Galich, Saint-Petersburg State Polytechnic University, Russian Federation

Yasuaki Ibayashi, Tokyo Institute of Technology, Japan

Paweł Kędzia, Wrocław University of Technology, Poland