Preface

2012 3rd International Conference on Information Technology for Manufacturing Systems (ITMS 2012) is held during September 8-9, 2012 at Qingdao in China. Qingdao also known in the West by its postal map spelling Tsingtao, is a major city with a population of over 8.715 million (2010 census) in eastern Shandong province, Eastern China. Its built up area, made of 7 urban districts plus Jimo city, is home to about 4,896,000 inhabitants in 2010. It borders Yantai to the northeast, Weifang to the west and Rizhao to the southwest. The character "Qing" in Chinese means "green" or "lush", while the character "dao" means "island". Qingdao is administered at the sub-provincial level. Lying across the Shandong Peninsula while looking out to the Yellow Sea, Qingdao is a major seaport, naval base, and industrial centre. It is also the site of the Tsingtao Brewery. The world's longest sea bridge, the Qingdao Haiwan Bridge, links the main urban area of Qingdao with Huangdao district, straddling the Jiaozhou Bay sea areas. In 2009, Qingdao was named China's most livable city.

The conference is intended to bring together the researchers and engineers/technologists working in different aspects of materials, mechanical, electronic, computer, information and other topics. In addition to the contributed papers, the conference committee has invited papers by active researchers from various countries in relevant topic areas covered at ITMS 2012. And experts from several countries are invited to deliver plenary/Keynote lectures at ITMS 2012.

ITMS 2012 will be the most comprehensive Conference focused on the various aspects of advances in Materials and Mechanical. Being crucial for the development of materials and mechanical engineering, our conference encompasses a large number of research topics and applications: from material characters to material application; from mechanical theory to many kinds of mechanical products. In order to ensure high-quality of our international conference, we have high-quality reviewing course, our reviewing experts are from home and abroad and low-quality papers have been refused.

The reviewers of the manuscripts, those by tradition would remain anonymous, have been very helpful in efficiently reviewing the manuscripts, providing valuable comments well within the time allotted to them. The Editors express their sincere and grateful thanks to all reviewers.

Noting can be done without the help of the program chairs, organization staff, and the members of the program committees. Thank you. Also thanks to other staffs assisting in the various stage of the editorial work, especially the international committees of our conference.

Wei Deng and Qi Luo

ITMS 2012 Organizing Committee

Honorary Conference Chair

Donald Lee, USA Yiyi Zhouzhou, Azerbaijan

General Chairs

Biswanath Vokkarane, Maldives Minli Dai, China

Program Chairs

Srinivas Aluru, Singapore Tatsuya Akutsu, Singapore Dehuai Yang, China

Local Chairs

Zhenghong Wu, China Ying Zhang, China

Progam Committee

Aijun An, Singapore Garry Zhu, Canada Jun Wang, Hong Kong Chin-Chen Chang, Taiwan Mingmin Zhang, China Zhigang Yang, China Wei Deng, USA Yong Hu, China