

Preface

Dear Distinguished Delegates and Guests,

The Organizing Committee warmly welcomes our distinguished delegates and guests to The 3rd International Conference on Materials Science and Engineering (ICMSE2014) held on Jan. 24-26, 2014 in Jiujiang, China.

ICMSE2013 has achieved great success in the last year; ICMSE2014 has followed the purpose of it and would also be a success one. ICMSE2014 is organized to gather members of our international community scientists so that researchers around the world can present their leading-edge work, expanding our community's knowledge and insight into the significant challenges currently being addressed in that research.

This proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Materials Science and Engineering. The aim of ICMSE2014 is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Materials Science and Engineering. It provides opportunities for the delegates to exchange new ideas and application experiences, to establish business or research relations and to find global partners for future collaboration. Its scope includes but not limited to: Materials Processing Technology, Applied Mechanics, Nanotechnology, Engineering Materials, Modeling and simulation of materials, Biomedical manufacturing, Nanotechnology, Polymer Materials, Modeling , Analysis and Simulation of Manufacturing. All manuscripts published in the proceeding have been peer reviewed by the reviewers drawn from the scientific committee, external reviewers and editorial board depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. After the rigorous peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference.

ICMSE2014 is in line with the principle of "hand in hand with research and development", gathering domestic and foreign experts to discuss and exchange opinions on the newest development of Materials Science and Engineering. Since this meeting extensively called for papers, it has been favored by the majority of experts and scholars.

We would like to thank the program chairs, reviewers and the members of the program committee for their work. We are grateful to all those who have contributed to the success of ICMSE2014. We hope that all participants and other interested readers benefit scientifically from the proceedings.

We hope you have a unique, rewarding and enjoyable week at ICMSE2014 in China.

With our best regards,

ICMSE Organizing Committees
Jiujiang, China

Organizing Committees

General Chair

Debnath Bhattacharyya, University of Calcutta, Kolkata, India

Proceeding Editor

David M. Batisdas, Spanish Council for Scientific Research (CSIC), Spanish
Prof. Alexander Bagatur'yants Russian Academy of Sciences, Russian

Program Committees

Zhihong Yang, School of Mechanical Engineering, Shandong University, China

Yehu Shen, Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), Chinese Academy of
Sciences, China

Thomas Ahlswede Central Michigan University, China

Hongchao zhang, Texas Tech University, USA

Zheng You, Tsinghua University, China

Prof. Chengshan Wang, Tianjin University, China

Ruizhen Zhang, School of Materials Science and Engineering, Taiyuan University of Technology, China

Linagcai Zhong, Dongbei University, China

Hongting Pu, Institute of Functional Polymers, School of Materials Sci. & Eng. Tongji University, China

Jun Cai, School of Mechanical Engineering & Automation, Beihang University, China

Xiaofeng Yu, Nanjing University, Nanjing, China

Chun Mao Lee, South China University of Technology

Guohe Wang, Textile and Clothing Engineering, Soochow University College, China

Xiaogang Chen, University of Manchester Manchester, UK

Chengyan Zhu, Zhejiang University of Technology Institute of Textile and Materials, China

Guangli Song, Tianjin Polytechnic University, China

Erlan Wu, North National University, China

Bo Zhao, Henan Polytechnic University School of Mechanical Engineering, China

Xu Wei, College of Information Engineering, China

Dai Jingguo, Shaoguan University, China

Xiaozhou Li, Qilu Industrial University, China

Weidong Huang, Nanjing University of Posts and Telecommunications, China

Yaojun Yu, Jiujiang University, China

Zhengfang Wang, School of Mechanical Engineering, Shandong University of Technology, China

Kun Sun, Chuxiong Normal University, China

Linf WU, Institute of Photo catalysis, Fuzhou University, China

Haoliang Tian, Beijing University of Aeronautics and Astronautics, China

David M. Batisdas, Spanish Council for Scientific Research (CSIC), Spanish

Raja Suzana Raja Kasim, Universiti Teknologi MARA, Malaysia

Thomas Ahlswede, Central Michigan University, USA

Chima Adiele, Trinity Western University, Canada

Sponsors

Advanced Science and Engineering Technology Institute

Ttp trans tech publications inc.

Huazhong University of Science and Technology