

# Preface

This volume is a collection of papers presented at the 2012 2nd International Conference on Machinery, Materials Science and Engineering Applications (MMSE 2012) held from June 16-17, 2012 in Wuhan at the Wuhan University of Science and Technology, China.

The International conference on Machinery, Materials Science and Engineering Applications (MMSE 2012) is organized by Wuhan University of Science and Technology, co-sponsored by the China Institute of Mechanical Engineering, Hubei Institute of Mechanical Engineering, United States Iowa University. From the planning to the organizing of this conference, we got supports from many other universities, such as Tsinghua University, Huazhong University of Science and Technology, Central China Normal University, China University of Geosciences (Wuhan) and U.S. WPI, and so on. Here, we'd like to show our thanks to them.

Machinery, materials science is a scientific knowledge, that study the organization structure, nature, production and use of performance of mechanical engineering, material science. It is a application science which inextricably linked with the engineering technology.

The idea of the conference is for the scientists, scholars, engineers and students from the Universities all around the world and the industry to present ongoing research activities, and hence to foster research relations between the Universities and the industry.

This year, MMSE 2012 has received an overwhelming response of 300 papers submitted to Program Committee, from 4 countries and regions. All the submitted papers in this proceedings have been peer reviewed by at least two reviewers drawn from the chairs of committees on the subject matter of the paper. A joint committee meeting was held to resolve the final paper selection and a draft programme for the conference. After the rigorous reviewing process, about 180 papers were accepted for presentation and included in the proceedings.

Online information concerning the conference is available under the following Uniform Resource Locator (URL):

<http://www.mmseconf.org>

Here, I would like to express our gratitude to the Wuhan University of Science and Technology, Tsinghua University, Huazhong University of Science and Technology, Central China Normal University, China University of Geosciences (Wuhan) and U.S. WPI kindly, giving their support to the conference. We hope that all participants and other interested readers benefit scientifically from this proceeding and also find it stimulating in the process.

Conference Chair of MMSE 2012  
June 16-17, 2012

# Organization

## **MMSE 2012 is organized by**

Wuhan University of Science and Technology, China  
The University of Iowa, USA  
Hubei Mechanical Engineering Society, China

## **Co-Sponsored by**

Chinese Mechanical Engineering Society, China

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