

# Preface

The 3rd International Conference on Advanced Engineering Materials and Technology (AEMT 2013) was successfully taken place in Zhangjiajie, China, on May 11–12, 2013, after the very successful previous issues AEMT'2011 (Sanya, China) and AEMT'2012 (Zhuhai, China). All submitted papers are reviewed by the researchers with expertise that covered the range of topics presented at the conference. Only novel contributions to the field of engineering materials or manufacturing technology were considered for publication. After the standard review process by at least two reviewers, all accepted papers are included into the present volumes.

This book covers the subject areas of thin films, surface engineering/coatings, modeling, analysis and simulation, materials forming, materials machining, welding & joining, mechanical behavior & fracture, material design of computer aided, laser processing technology, theory and application of friction and wear, dynamic mechanical analysis, optimization and control, thermal engineering theory and applications, precision manufacturing technology and measurements, material physics & chemistry, CAD/CAE/CAM, Industrial Robotics and Automation, dynamic analysis of processing, and advanced design technology.

We are sincerely grateful to the authors for the high scientific quality of papers and to the reviewers and editors for diligent and timely processing of the manuscripts. I wish to express my gratitude to all invited speakers who came to share their knowledge with us and provided the necessary volunteer time and expertise. We look forward to the next AEMT conference.

*The Committee of AEMT 2013*

The 3nd International Conference on  
Advanced Engineering Materials and Technology  
(AEMT 2013)

**Organized by:**

Hebei Province Key Laboratory of Inorganic Nonmetallic Materials  
Korea Maritime University

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