## **Preface**

Dear Distinguished Authors and Guests,

A wide variety of mechanical approaches can be brought to bear on characteristics of new advanced materials. The development of new materials is the important factor of new industrial technologies as well as a key element in traditional fields. The first International Conference on Advanced Materials Design and Mechanics (ICAMDM 2012) was held on June 5th - 7th in Xiamen, China. The periodical international conference for multiple approaches in material design in Asia was established by the committee.

This volume is based on the second International Conference on Advanced Materials Design and Mechanics (ICAMDM 2013) in Kuala Lumpur, Malaysia, May 17th-18th, 2013. The conference included 135 peer-reviewed papers that covered various aspects of materials design and mechanics, and it was organized into 6 major topics: "Tribology, Automotive Engineering, Energy Reduction Technology," "Nomomaterial, Sensors, Surface coating, Ceramic materials," "Manufacturing Technology and Processing," "Material science," "Fatigue, Damage Analysis, Product Design, Quality Control" and "Civil Engineering and Materials, Welding, Computer Aided Design." In these conferences, several approaches including all levels from material science to machine design were discussed.

The conference ICAMDM 2013 has successfully carried out. We are grateful to all the authors for their papers and presentations in this conference. They were also the ones who helped make this conference possible through their hard work in the preparation of the manuscripts. We would also like to thank all members of the Technical Program Committee, International Program Committee as well as session chairpersons, and especially with the preparation of the Proceedings. Thanks are also given to Dr. Anne, Tanja, Dorthe and all the editors from Trans Tech Publications for their great support to ICAMDM2013.

May 2013 Katsuyuki Kida

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