

Preface

The International Conference on Manufacturing Science and Engineering is the premier forum for the presentation of new advances and research results in the fields of Manufacturing Science and Engineering. The conference brings together leading researchers, engineers and scientists in the domain of interest from around the world. The 1st International Conference on Manufacturing Science and Engineering was held in Zhuhai, 2009, under the organization of the University of Wollongong and Guangzhou University, the 2nd Congress was held in Guilin, 2011, co-hosted by the Guangxi University, Guilin University of Electronic Technology, University of Wollongong, Korea Maritime University, and Baosteel Research Institute. The 3rd Congress was held in Xiamen, 2012, co-hosted by Fujian University of Technology, Xiamen University, Fuzhou University, Huaqiao University, University of Wollongong, and Fujian Mechanical Engineering Society, China.

Following the style of the previous three successful congresses, the 4th International Conference on Manufacturing Science and Engineering was held in Dalian, China, 30-31 March 2013, Organized by Northeastern University, Harbin Institute of Technology, and Jilin University. The program was designed to advance manufacturing technologies to the next generation through discussion of the most recent advances and future perspectives, and to engage the worldwide community in a collective effort to solve problems in manufacturing. Delegates from more than 30 countries or districts attended those conferences.

The present volumes provide up-to-date, comprehensive and worldwide state-of-the-art knowledge of the manufacturing science and engineering, including: Non-ferrous Metal Materials and Its Alloys, Iron, Steel and Its Alloys, Composites, Micro/Nano Materials, Ceramic, Functional Materials, Surface Engineering/Coatings, Materials Forming and Manufacturing Processes, Materials Machining, Welding & Joining, CAD/CAE/CAM, Modeling, Analysis and Simulation of Manufacturing Processes, Products Design, Manufacture and Industry etc. All papers included in those volumes have already passed the strict peer-reviewing by 2-5 expert referees and been accepted for publication. We hope that those volumes will not only provide the readers a broad overview of the latest advances but also provide the researchers a valuable summary and reference in this field.

The organization of ICMSE2013 and the publication of those volumes were made possible thanks to the tireless dedication of many people. We would like to express our sincere thanks to the session organizers, session chairs, reviewers, presenters, exhibitors and congress attendees for their efforts and enthusiastic participation in this congress.

The Organizing Committee of ICMSE 2013

The 4th International Conference on
Manufacturing Science and Engineering
(ICMSE 2013)

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