

Preface

The International Manufacturing Conference in China (IMCC) is a biennial conference series inaugurated in 1983. The past twelve IMCC conferences were successfully held in Guangzhou (twice), Wuhan, Nanjing, Beijing, Harbin, Hong Kong, Singapore, Xiamen, Jinan and Xi'an, and have provided an excellent platform for participants to exchange new ideas and bring forth new research opportunities and collaborations. With the continual development in the modern industry, the coverage of IMCC has expanded from metal cutting to more advanced topics such as manufacturing engineering, modern management as well as information technology. The 13th International Manufacturing Conference in China (IMCC2009) held in Dalian, China, during 21-23 September 2009 provides another forum to promote the exchange of the development in materials manufacturing science and technology.

There are two separate volumes in the proceedings of IMCC2009. This volume II is a collection of 125 papers selected from 510 submissions from universities and industries all over the world, based on their quality and relevancy to the conference. All of the papers have been peer-reviewed by selected experts. These papers represent the latest development in the field of materials manufacturing technology, spanning from the fundamentals to new technologies and applications. Specifically, these papers cover the topics of modern design theory and methodology, MEMS and nanotechnology, and material science and technology in manufacturing.

I believe that this book provides a valuable reference for researchers in the field of materials manufacturing science and technology who wish to further understand the underlying mechanisms and create new and practical technologies, systems and processes. It should also be particularly useful for practicing engineers in manufacturing who are responsible for the efficient and effective operations.

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