Preface

Engineering design and optimization have always been very important for mechanical and manufacturing engineering, and there are wide varieties of research topics to be explored and technical problems to be solved within this broad engineering field and research area. Following the great success of last year’s International Conference on Engineering Design and Optimization (ICEDO 2010), held in Ningbo, China, 28-30 October 2010, a lot of new theories have been proposed, new algorithms formulated, new techniques developed, so on and so forth. As such, the conference committees felt it necessary to organize a new conference with similar but extended spectrum of topics, so as to provide a forum for international researchers and engineers to continue exchange ideas and showcase their research findings. As a result, the 2nd International Conference on Engineering Design and Optimization (ICEDO 2011) will be held during 19-21 August 2011, again in Ningbo, China.

The conference topics of ICEDO 2011 include Engineering Design Theory and Methodology, Product Design and Development, Simulation and Engineering Optimization, Manufacturing Systems Modeling and Optimization, Advanced Machining and Materials Processing Technology, as well as Engineering Mechanics and Application. The topics cover roughly two aspects of engineering problems, including those that are directly related to the design and optimization of the engineered products, and those that are related to the design and optimization of the engineering processes; where the latter are essentially relevant to the formation or implementation of the products, namely, the manufacturing processes.

From a great number of submissions to ICEDO 2011, a collection of 267 papers are selected and compiled into this two-volume book titled “Advances in Engineering Design and Optimization II”. All the selected papers have undergone a rigorous peer-review and revision process. The book is a joint effort from all the contributors, including the authors, the reviewers, the conference organizers, etc. The editors would like to thank all the authors for their valuable contributions and the reviewers for the constructive comments. Thanks are also due to the members of the Organizing Committee, in particular to those who are in the Program Committee, as well as to the members of the International Advisory Committee. Special thanks are given to the conference secretariat, including A/Prof. Huidi Zhang, Dr. Jiqiang Li, Mr. Jian Zheng, A/Prof. Jianfei Tu, Mr. Bin Zhang and Mr. Chao Fu, as well as a lot of other colleagues and students, for their hard work and great efforts in making the whole event a success.

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