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Preface

Engineering design and optimization are important tasks and activities that are essential for the success of product development and application. In general, they cover two aspects of research topics, 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. A more detailed list of the relevant topics may be summarized as Engineering Design Theory and Methodology, Product Design and Development, Simulation and Engineering Optimization, Manufacturing Systems Modeling and Optimization, as well as Machining and Materials Processing Technology, and so forth.

The two-volume book is a collection of 349 papers selected from more than 500 submissions to the International Conference on Engineering Design and Optimization 2010 (ICEDO 2010), held in Ningbo City, Zhejiang Province, P. R. China, 28 – 30 October, 2010. All the selected papers have undergone a rigorous peer-review and revision process. They present a state-of-art research results in the aforementioned areas of engineering design and optimization. As such, the book is titled as “Advances in Engineering Design and Optimization”.

This 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 as well as a lot of other colleagues and students, for their hard work and great efforts in making the whole event a success.

The Editors
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