

Preface

The 2nd International Conference on Mechatronics and Robotics Engineering, ICMRE 2016, was held in Nice, France, during February 18–22, 2016. The aim of ICMRE 2016 is to provide a platform for researchers, engineers, academics as well as industry professionals from all over the world to present their research results and development activities in the area of mechatronics and robotics engineering. This book introduces recent advances and state-of-the-art technologies in the field of robotics engineering and mechatronics for the advanced and intelligent manufacturing. This systematic and carefully detailed collection provides a valuable reference source for mechanical engineering researchers who want to learn about the latest developments in advanced manufacturing and automation, readers from industry seeking potential solutions for their own applications, and those involved in the robotics and mechatronics industry.

This proceedings volume contains 36 papers that have been selected after review for oral presentation. These papers cover several aspects of the wide field of advanced mechatronics and robotics concerning theory and practice for advanced and intelligent manufacturing. The book contains three parts, the first part focuses on the *Design and Manufacturing of the Robot*, the second part deals with the *Mechanical Engineering and Power System*, and the third part investigates the *Automation and Control Engineering*.

We would like to express grateful thanks to our Program Committee members and Organization Committee members of the 2nd International Conference on Mechatronics and Robotics Engineering, special thanks to the keynote speakers: Prof. Alexander Balinsky, Cardiff University, UK, Prof. Farouk Yalaoui, Université de Technologie de Troyes, France, Prof. Dan Zhang, York University, Canada, and Prof. Elmar Bollin, Offenburg University of Applied Sciences, Germany. We would like to express our deep appreciation to all the authors for their significant contributions to the book. Their commitment, enthusiasm, and technical expertise are what made this book possible. We are also grateful to the publisher for supporting this project and would especially like to thank Arumugam Deivasigamani, Anthony Doyle, and Janet Sterritt for their constructive assistance and cooperation,

both with the publishing venture in general and the editorial details. We hope that the readers find this book informative and useful.

Finally, the editors would like to sincerely acknowledge all the friends and colleagues who have contributed to this book.

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