

## Preface

We are pleased to welcome you to the proceedings of **The 3rd International Conference on Power, Energy and Mechanical Engineering (ICPEME 2019)** and **The 8th International Conference on Manufacturing Engineering and Processes (ICMEP 2019)** that took place in **Prague, Czech Republic** from the **16th to the 19th of February of 2019**.

The **Conferences on Power, Energy and Mechanical Engineering and on Manufacturing Engineering and Processes** are annual international event for the presentation, interaction and dissemination of researches related to several topics. Together they aim to foster awareness and discussion on the importance of this subject and its benefits for the community at large.

It is my pleasure to announce the participation of expert speakers from twenty one countries (China, France, Germany, Japan, India, Islamic Republic of Pakistan, New Zealand, Portugal, Republic of Albania, Republic of Croatia, Republic of Iran, Republic of Korea, Republic of Peru, Republic of Tunisia, Romania, Russia, Serbia, Syrian Arab Republic, Poland, Thailand, United States of America) in this three days event. We have received research papers from distinguished participating academics and researchers from countries spreading over three continents. Thus, this event revealed itself as being a platform for researchers in a vast variety of fields to discuss, share, and exchange experiences. The comprehensive content of the congress has attracted immense attention and the wealth of information spread out over all the papers is, in our point of view, extremely useful for professionals working in the related fields.

These proceedings, organized in 4 chapters- Manufacturing Engineering, Energy and power system, Control system, Materials Science and Engineering, contain a collection of the research papers, presented at **ICPEME 2019 and ICMEP 2019** in Prague, Czech Republic. This publication is the result of the creative work of their authors and of a highly selective peer-review process.

We would like to express our sincere thanks to all those who have contributed to the success of **ICPEME 2019 and ICMEP 2019**. The conference would not have been possible without the support from Lisbon School of Architecture of the University of Lisbon the Washington University in St. Louis, Macquarie University which selflessly and enthusiastically supported and helped to overcome the many obstacles that arose during the preparation and organization of this event.

We want to thank all authors of submitted papers for their participation. All contributed with a great deal of effort and creativity to produce this work, and I, in my quality of organizing chair, am especially happy that they chose **ICPEME 2019 and ICMEP 2019**, as the place to present it. Credit also goes to all collaborators, in particular, the Scientific Committee members and reviewers, who donated substantial time from their busy schedules to carefully read and conscientiously evaluate the submissions.

In addition, in the name of the Organizing Committee, I would like to take this opportunity to extend our sincere gratitude to all supporting Organizations, for their support and encouragement and for making the event a success.

Special thanks to all our speakers, authors, and delegates for making **ICPEME 2019 and ICMEP 2019**, a fruitful platform for sharing, learning, networking, and inspiration.

We sincerely hope you find this publication enriching and thought provoking.

Prof. Mário S. Ming KONG  
University of Lisbon, Portugal