



# **Advanced Materials, Mechanics and Industrial Engineering**

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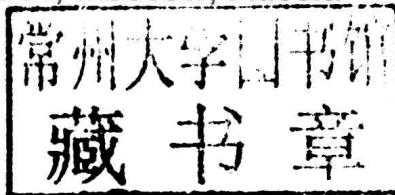
**Edited by**  
**Vinod Kumar and Polyakova Marina**



**TRANS TECH PUBLICATIONS**

# **Advanced Materials, Mechanics and Industrial Engineering**

Selected, peer reviewed papers from the  
2014 4<sup>th</sup> International Conference on  
Mechanics, Simulation and Control  
(ICMSC 2014),  
June 21-22, 2014, Moscow, Russia



*Edited by*

**Vinod Kumar and Polyakova Marina**



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# **Advanced Materials, Mechanics and Industrial Engineering**

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Vinod Kumar  
Polyakova Marina



## Preface

Dear Distinguished Authors and Guests,

The Organizing Committee warmly welcomes you to 2014 4th International Conference on Mechanics, Simulation and Control (ICMSC 2014), held on 21-22, June, 2014, Moscow, Russia.

The aim of ICMSC 2014 is to present the latest research and results of scientists (professors, students, PhD Students, engineers, and post-doc scientist) related to Mechanics, Simulation and Control topics. This conference provides opportunities for the different areas delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

After the peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference. The selected papers and additional late-breaking contributions to be presented as lectures will make an exciting technical program. The conference program is extremely rich, featuring high-impact presentation. We hope that the conference results constituted significant contribution to the knowledge in these up to date scientific field.

The proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Mechanics, Simulation and Control etc. Hopefully, all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in the process.

On behalf of the organizing committee, I would like to especially thank Anne, Tanja, Dorthe and all the editors from Trans Tech Publications for their great support to ICMSC 2014. Without their excellent editorial work, ICMSC 2014 will not be published so timely and successfully.

Finally we wish all the authors and attendees, from Russia, India, China, UK, UAE, United States, Germany, France, Czech Republic, Japan, Iran, Turkey, Poland, Algeria, Malaysia, Saudi Arabia, Egypt, etc more than 20 countries, a unique, rewarding and enjoyable memory at ICMSC 2014 in dynamic Moscow.

We, Science and Engineering Institute (SciEI), as Professional Organizer for Academic Conferences, will be committed ourselves to make ICMSC more and more professional with fully and enjoyable academic research and discussion platform for authors and attendees. Sincerely as always, we look forward to your consistent attention and support to 5th ICMSC in 2015.

With our warmest regards,

Prof. Vinod Kumar, Carleton University, Canada

Prof. Polyakova Marina, Magnitogorsk State Technical University, Russia

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