

Machinery Electronics and Control Engineering III

Edited by
Jianfeng Li



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Machinery Electronics and Control Engineering III

Selected, peer reviewed papers from the
2013 3rd International Conference on
Machinery Electronics and Control Engineering
(ICMECE 2013),
November 29-30, 2013, Jinan, Shandong, China

Edited by

Jianfeng Li



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Trans Tech Publications Ltd
Kreuzstrasse 10
CH-8635 Dürnten-Zürich
Switzerland
<http://www.ttp.net>

Volume 441 of
Applied Mechanics and Materials
ISSN print 1660-9336
ISSN cd 1660-9336
ISSN web 1662-7482

Full text available online at <http://www.scientific.net>

Distributed worldwide by

Trans Tech Publications Ltd
Kreuzstrasse 10
CH-8635 Dürnten-Zürich
Switzerland

Fax: +41 (44) 922 10 33
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and in the Americas by

Trans Tech Publications Inc.
PO Box 699, May Street
Enfield, NH 03748
USA

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Fax: +1 (603) 632-5611
e-mail: sales-usa@ttp.net

printed in Germany

Preface

Dear Distinguished Delegates and Guests,

The Organizing Committee of ICMECE 2013 warmly welcomes you to the 2013 3rd International Conference on Machinery Electronics and Control Engineering (ICMECE 2013), held on November 29-30, 2013 in Jinan, China. ICMECE 2013 is sponsored by Shandong University.

The conference is aimed at providing a platform for all of you to present leading-edge work in the fields of Machinery Electronics and Control Engineering. More than 500 papers were submitted to ICMECE 2013 and finally 241 papers are accepted for the conference after peer reviewed by reviewers drawn from the scientific committee, external reviewers and editorial board depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. 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 presentations.

The proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Machinery Electronics, Electrical Engineering, Materials Research, Control Engineering, Manufacturing Technology, Power System, Robotics and System Modeling. The main goal of ICMECE 2013 is also to provide international scientific forums for exchange of new ideas focus on Machinery Electronics and Control Engineering.

We would like to thank the program chairs, organization staff, and the members of the program committees for their work. Thanks also go to all those who have contributed to the success of ICMECE 2013.

Hopefully, all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in the process. We hope all of you have a unique, rewarding and enjoyable week at ICMECE 2013 in Jinan, China.

With our warmest regards,

Prof. Jianfeng Li, Shandong University, China

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