

Mechanisms and Machine Science

Volume 30

Series editor

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More information about this series at <http://www.springer.com/series/8779>

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Microactuators and Micromechanisms

Proceedings of MAMM 2014, Timisoara,
Romania, October 2-4, 2014

 Springer

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ISSN 2211-0984

Mechanisms and Machine Science

ISBN 978-3-319-15861-7

DOI 10.1007/978-3-319-15862-4

ISSN 2211-0992 (electronic)

ISBN 978-3-319-15862-4 (eBook)

Library of Congress Control Number: 2015937012

Springer Cham Heidelberg New York Dordrecht London

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Preface

The third Conference on Microactuators and Micromechanisms, MAMM-2014, was organized by the Department of Mechatronics at the Faculty of Mechanical Engineering, Politehnica University of Timisoara, under the patronage of the International Federation for the Promotion of Mechanism and Machine Science (IFTToMM) Technical Committees for Linkages and Mechanical Controls and for Micromachines.

The Conference aims to bring together researchers and students who develop their work in disciplines associated with micromechanisms and microactuators in a friendly, colleague-like, and collaborative environment. MAMM-2014 offers a great opportunity for scientists all over the world to present their achievements, exchange innovative ideas, and create solid international links. The scientific event was meant to gather the novelty and originality in machine science and to depict the trend of this important and creative field.

The topics proposed for the Conference are Microactuators and micro-assembly, Micro sensors involving movable solids, Micro-opto-mechanical device, Mechanical tools for cell and tissue studies, Micromanipulation and micro-stages, Micro-scale flight and swimming, Micro-robotics and surgical tools, Micron-scale power generation, Miniature manufacturing machines, Micromechatronics and micro-mechanisms, Biomechanics micro and nano scales and Control issues in microsystems.

We would like to express our grateful thanks to IFTToMM, to the Romania IFTToMM National Committee (ARoTMM), and to the members of the International Scientific Committee of MAMM-2014.

We appreciate the effort of the reviewers gathered in the International Scientific Committee of MAMM-2014. They spent time on a serious work of evaluation and improvement guidance, meant to assure high quality in all papers.

We thank the authors, who contributed with valuable papers on different subjects covering the wide scientific fields of Mechanisms and Machine Science.

We thank the Department of Mechatronics at the Faculty of Mechanical Engineering, Politehnica University of Timisoara, for hosting the scientific event and

supporting all associated activities. The third Conference on Microactuators and Micromechanisms became a reality due to a hardworking local organizing team: Gruescu Corina Mihaela, Inocențiu Maniu, Valentin Ciupe, Iosif Cărăbaș, Nicolae Mircea Dehelean, Valer Dolga, Florina Pop, Cristian Pop, Dan Teodor Mărgineanu, Cristian Emil Moldovan, and Eugen Sever Zăbavă.

Last but not least, we are grateful to the staff at Springer Publishing for their excellent technical and editorial support.

Timisoara, Romania
September 2014

Erwin-Christian Lovasz
Gondi Kondaiiah Ananthasuresh
Burkhard Corves
Victor Petuya

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