

Marco CECCARELLI

Introduction to the special issue on the 2015 Workshop on History of Mechanism and Machine Science

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The works on History of Mechanical Engineering, particularly on Mechanism and Machine Science (MMS), not only record and recognize past achievements and personalities but also inspires innovations for the development of mechanical engineering.

This special issue of the journal shows a collection of papers that have been selected from those that have been presented after review at the 2015 Workshop on History of MMS of the Permanent Commission (PC) for History of MMS of IFToMM: International Federation for the Promotion of Mechanism and Machine Science. The workshop was held in Saint Petersburg, Russia, on 26–28 May 2015.

The workshop series started in 2002 at Admont Abbey in Admont, Austria, and since then, it has been held every year when the Symposium History of Machines and Mechanisms (HMM) and IFToMM World Congress are not organized. The workshop is planned as an informal environment event for presenting unpublished materials and for discussing and promoting interest on historical subjects with technical contents. Therefore, a workshop is usually organized with an informal program, and presentation of papers can be considered in preparation for the HMM Symposium or journal articles. The HMM Symposium on History of Machines and Mechanism is the conference event of the IFToMM Permanent Commission for History of MMS PC as a forum for international participation with publication of proceedings. The Workshop series is a companion activity of the HMM Symposium that is held every four years. Both the events are devoted to technical aspects of historical developments of MMS. The last HMM Symposium was held in 2012 in Amsterdam, Netherlands, and the proceedings were published and made available by Springer.

The past HMMS Workshops were organized and led by the following chairpersons:

- HMM 2000 in Cassino by Prof. M. Ceccarelli
- Admont 2002 by Profs. M. Husty and M. Ceccarelli
- Dresden 2004 by Profs. B. Corves and Dr. H. Kerle
- HMM 2004 in Cassino by Prof. M. Ceccarelli
- Moscow 2005 by Prof. A. Golovin
- Queretaro 2005 by Prof. C. Lopez-Cajùn
- Ithaca 2006 by Prof. F. Moon
- Bangalore 2007 by Profs. A. Ghosal and J. S. Rao
- Besancon 2007 (as sections of IFToMM World Congress)
- HMM 2008 in Tainan by Prof. H. S. Yan
- Porto Alegre 2009 by Prof. A. Oliveira
- Beijing 2010 by Prof. B. Zhang
- Queretaro 2011 (as sections of IFToMM World Congress)
- HMM 2012 in Amsterdam by Prof. T. Koetsier

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Marco CECCARELLI (✉)

University of Cassino and South Latium, Cassino 03043, Italy
E-mail: ceccarelli@unicas.it

- Athens Meeting & Exhibition 2013 by Prof. T. Chondros
- Palermo 2013 by Profs. F. Sorge and M. Ceccarelli
- Tianjin 2014 by Profs. J. Dai and T. Huang
- Lima 2014 by Profs. J. Rodriguez and J. C. Crespo
- Saint Petersburg 2015 by Profs. A. Evgrafov and O. Egorova
- Taipei 2015 (as sections of IFToMM World Congress)
- HMM 2016 in Queretaro by Prof. C. Lopez-Cajun

The Saint Petersburg Workshop in 2015 was successful, with more than 50 submissions from around the world and with significant participation of Russian colleagues. Ten papers from various countries were published in this special issue after a second peer review. These papers cover a broad area of the history of mechanical engineering and show the significance of mechanical engineering worldwide. These ten papers focus on works and personalities from the antiquity to recent accomplishments in different areas of MMS, such as mechanism design, gearing systems, lubrication, bearings, hydraulic mechanics, agricultural machines, and 3D machine reconstructions, to illustrate contribution of MMS disciplines in the technological development of our society.

The organizers of the Saint Petersburg Workshop, Profs. Aleksandar Evgrafov and Olga Egorova, along with their teams, are acknowledged for providing a warm atmosphere during the workshop program and for facilitating fruitful technical discussions and cordial interactions among the participants. We also thank Saint Petersburg State Polytechnic University for hosting the event with an efficient team.

We thank the authors for contributing exceptionally interesting papers in several subjects covering many fields of mechanical engineering and for their cooperation in revising their papers on time and in compliance with the comments reviewers. We are grateful to the reviewers for the time and effort that they spent in evaluating the papers despite the tight schedule, permitting the publication of this special issue.

We would like to thank the publisher and editorial staff of this journal, particularly Ms. Tingting Guo, Editorial manager, for accepting and helping the publication of this special issue since the early phases in 2014.

Guest Editor:

Marco Ceccarelli
University of Cassino and South Latium

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