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PREFACE

History is full of exciting and entertaining stories. Historical investigations place our own present-day activities in a wider perspective. They help us define who we are. Moreover, history remains a source of ideas and of inspiration for future developments.

The organization of an international symposium on the History of Machines and Mechanisms (HMM) every four years is the main activity of the Permanent Commission (PC) for the History of Mechanism and Machine Science of IFToMM, the International Federation for the Promotion of Mechanism and Machine Science.

The first two symposia, HMM2000 and HMM2004, were held at the University of Cassino in Cassino, Italy. The third symposium, HMM2008, was held at the National Cheng Kung University in Tainan, Taiwan. The fourth symposium took place at the Vrije Universiteit in Amsterdam, The Netherlands in 2012. The fifth symposium was at Queretaro University in Queretaro, Mexico, in 2016.

The mission of IFToMM is to promote research and development in the field of machines and mechanisms by theoretical and experimental methods, along with their practical applications. The aim of the international symposia on HMM is to maintain an international forum for the exploration of the history of machines and mechanism through study and presentation of historical achievements in MMS. The scope of the symposia is wide because they emphasize the history of technical systems and their applications. Relevant topics deal with the history of theories and design methods, biographies, the history of the institutions involved, the relations with other disciplines, the history of engineering education and the social and cultural aspects of machines.

The present journal special issue contains a selection of papers from the proceedings of HMM2018, the 6th International Symposium on the History of Machines and Mechanisms that was held at Chinese Academy of Sciences' Institute for the History of Natural Sciences (HINS) in Beijing, P.R. China, from September 26 to 28, 2018 with authors representing 10 different countries. As from the table of contents we succeeded in bringing together an interesting group of scholars with a stimulating variety of subjects.

After the review process three papers were accepted for this special issue. We are very satisfied with this result and we thank the authors for their valuable contributions and for the efforts in submitting in time the final versions of the journal papers. Moreover, we would also like to thank the colleagues who helped us in the review process with timely feedbacks and careful evaluations.

The proceedings and this journal special issue show the long-term development of machines and mechanisms in various contexts and reflects both the uniformity and diversity of knowledge evolution. It is meant for the inspiration and motivation of researchers, graduate students, engineers and all others with an interest in the history of machines and mechanisms.

We would like to express our sincere gratitude to the members of the scientific committee for HMM symposium:

M. Ceccarelli, University of Rome Torvergata (Italy) Chair,

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We also thank the sponsors of the symposium: The Institute for the History of Natural Sciences, of Chinese Academy of Sciences in Beijing, and IFToMM through the IFToMM Permanent Commission for History of MMS. Moreover, we are very grateful for the support we received from many friends and colleagues at IHNS and Springer, particularly Huang Xing and Yibing Fang. Without their support we would not have been able to organize HMM2018.

We thank the editorial staff of the journal, who supported the initiative since the early days of its proposal in 2017.

We wish the readers to get interesting reading as per the approach and contents in the papers motivating further interest and investigation on the history of machines and mechanisms, mainly from technical viewpoints.

March 2019

Marco Ceccarelli and Baichun Zhang.

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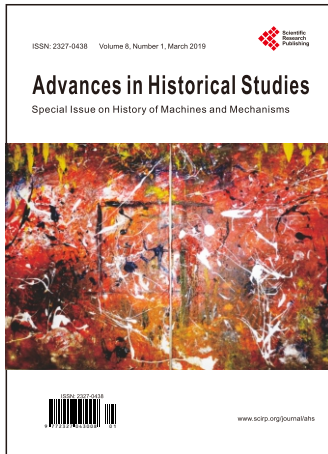
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