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# Advances in Historical Studies

Special Issue on “Findings on History of Italian Mechanical Engineering”  
from IFIT 2020, the Third International Conference of IFToMM ITALY



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## Preface

This special issue aims to promote recent advances in the field of Italian History on Mechanism and Machine Science (MMS) with contributions ranging from theoretical achievements to experimental and practical applications of historical contents and interpretations. Italy is full of history and the technological evolutions are often underestimated in Italy against the cultural artistic heritage although Italian inventors, designers and scientists have contributed significantly to mankind progress thanks those achievements that have enhanced well fare and society frames. This is an attempt to give lights to Italian contributions that very often are restricted to the technical community in MMS and it is also a stimulus for more investigations by technicians and scientists in MMS to discover the historical backgrounds and to be proud of them.

This special issue contains a selection of papers that have been accepted for presentation at the Third International Conference of IFToMM Italy, IFIT 2020. Due to the COVID 19 international pandemic restrictions, IFIT 2020 - the Third International Conference of the IFToMM Italy association has been held online on September 9th-10th, 2020.

The IFIT conference series has been established in 2016 by IFToMM Italy with a very successful event in Vicenza. A second event has been held in Cassino in 2018 and a third event has been scheduled in Naples. MMS Italian community has been one of the founding member organizations of IFToMM, International Federation for the Promotion of Mechanism and Machine Science, as early as 1969. Since then, the Italian Member Organization has been very active with many contributions at national and international level. IFIT has been established to bring together researchers, industry professionals, and students, from the Italian as well as from the international community, in an intimate, collegial, and stimulating environment. The IFToMM Italy association board is currently formed by Alessandro Gasparetto (president), Giuseppe Quaglia (vice president), Vincenzo Niola (secretary) and Giuseppe Carbone (treasurer).

The IFIT 2020 content includes topics belonging to a broad range of disciplines in the field of MMS, such as robotics, mechanism design, vehicle dynamics and control, biomechanical engineering, mechatronics, gearing and transmission, vibrations and tribology. Moreover, three special sessions were organized, namely one on the History of Mechanism Science (with a best paper award in memory of Prof. Cesare Rossi of the University of Napoli), a special session IFToMM Italy - IFToMM Japan, aimed to increase scientific collaboration between the two countries and finally, a special session on the Design of Sustainable Systems.

This special issue contains contributions in extended revised versions of the conference papers that have been accepted for publication in this journal after an additional blind peer review process.

We wish to express our sincere gratitude to the authors and reviewers for their valuable scientific contributions and useful feedbacks to ensure a high scientific quality of the selected papers.

The editors are also grateful to the IFToMM Italy association to coordinate the conference organization and supporting this special issue as well as the IFToMM federation for patronage of the IFIT 2020 conference. Finally, we thank all the staff members of the journal for their valuable editorial support.

Marco Ceccarelli, University of Rome Tor Vergata

Vincenzo Niola, University Federico II of Naples

# Table of Contents

**Volume 9    Number 5**

**December 2020**

## **Design and Reconstruction of an Ancient Roman Crane**

M. Ceccarelli.....261

## **Silk Mills in the Early Modern Italy**

S. Comino, A. Gasparetto.....284

## **Mechanism and Machine Science Educational Workshop Based on Schröder-Reuleaux Ancient Models of Politecnico di Torino**

W. Franco, A. Trivella, G. Quaglia.....295

## **A Brief History of Piano Action Mechanisms**

M. Russo, J. A. Robles-Linares.....312

## **Archimedes, Vitruvius and Leonardo: The Odometer Connection**

M. Callegari, S. Brillarelli, C. Scoccia.....330

## **Antonio Lo Re: Mechanical Engineering in Agriculture**

C. Romano, L. Traetta.....344

## **The Teaching of Applied Mechanics through Textbooks in Italy**

M. Cocconcelli.....358

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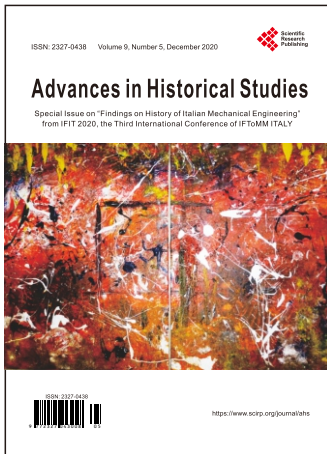
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