Technology Developments: the Role of Mechanism and Machine Science and IFToMM
Technology Developments: the Role of Mechanism and Machine Science and IFToMM
This is the first book of a series that will be focused on MMS (Mechanism and Machine Science). What is better to start a new book series on MMS by describing activity on MMS by the international community referring to it? This is one of main motivations for this book that presents also IFToMM, the international Federation on the Promotion of MMS and its activity.

IFToMM is the unique worldwide institution in the area if Mechanical Engineering addressing specifically to MMS. With its 44 member organizations it is present in all the continents and its activity that is ran usually in international frames but not only, is visible worldwide.

Indeed this book has been scheduled also within a IFToMM Presidency program ‘Visibility + Activity’ for reinvigorating the significance of IFToMM because of its mission in collaboration and development for MMS promotion. Visibility is aimed at showing clearly the activity of IFToMM and therefore its significance in promoting MMS in all its aspects for formation, research, innovation, and professional application. Activity is linked to the Visibility aim but it is clearly focused in advancing all the fields of MMS and in facilitating international collaborations among institutions, professional entities, and individuals within the above mentioned aspects. IFToMM activity consists mainly of forums and meetings both in scientific and professionals frames, at international but also national and local levels, in editorial works reporting last advances but also disseminating fundamentals and achievements in MMS.

Thus, this book can be considered in the aims both of Visibility and Activity, since its goals have been planned for presenting MMS and IFToMM to a wider public in Engineering Science. As a reader can appreciate, the content of the book gives also a view of how technical works in MMS have been and still are influential in Technology developments for Society benefits.

The book is organized with contribution by IFToMM officers being Chairs of member organizations (MOs), permanent commissions (PCs), and technical committees (TCs), who have reported their experiences and views toward the future of IFToMM and MMS.

In fact, the book is composed of three chapters, namely the first one with general considerations by high-standing IFToMM persons, the second chapter with views by the chairs of PCs and TCs as dealing with specific subject areas, and the third
one with reports by the chairs of MOs as presenting experiences and challenges in national and territory communities.

Therefore the book can be of interest to a wide public in order to know the status and trends in MMS both at international level through IFToMM and in national/local frames through the leading actors of activities. In addition, the book can be considered also a fruitful source for who-is-who in MMS, historical backgrounds and trends in MMS developments, as well as for challenges and problems in future activity by IFToMM community and in MMS at large.

This volume has been possible thanks to the invited authors, who have enthusiastically shared this initiative and who have spent time and efforts in preparing the papers with care and transmitting their passion for engineering science and international collaboration.

I believe that readers will take advantage of the papers in this book and future ones by supplying further satisfaction and motivation for her or his work with interdisciplinary activity for engineering developments.

I am grateful to the authors of the articles for their valuable contributions and for preparing their manuscripts on time. Also acknowledged is the professional assistance by the staff of Springer Science + Business Media and especially by Miss Anneke Pot and Dr Nathalie Jacobs, who have enthusiastically supported this book project with their help and advices.

I am grateful to my family: my wife Brunella, daughters Elisa and Sofia, and son Raffaele for their encouragement and support with their patience and understanding, without which the organization of such a task with so many people from different fields might be impossible.

Cassino, Italy

Marco Ceccarelli
Editor
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