

Editorial

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With its foundations in analytical mechanics, dynamics has, since early years, been used for selected applications in gyroscopes and mechanisms. In order to address the needs of emerging technologies, such as those required for space applications, system dynamics approaches grew and matured into computationally oriented methods. Multibody System Dynamics was established as a branch of theoretical and applied mechanics in 1977 on the occasion of the first IUTAM Symposium proposed by Kurt Magnus in 1974. In the following years, a grand development of this field happened starting from Europe and the United States, and expanding to the Americas, Asia and Australia. After two decades, in 1997, the journal Multibody System Dynamics was founded, with Springer as publisher, to serve as a common platform for the multibody dynamics community. With an increasing number of researchers in the field, the expansion of the areas of application and the growth of the general interest in multibody dynamics, a single volume of the journal published every year became too small. Therefore, in 2001 Springer started to publish two volumes of the journal each year to meet the demand of our productive community. With a still increasing activity of this scientific area, starting in 2015 there will be three volumes published yearly. Consequently, Multibody System Dynamics has grown from a quarterly to a monthly journal, thus allowing papers to be printed in a timelier manner.

The multibody dynamics community is very lively, as documented by the many meeting series, technical committees and journals operating worldwide supported by scientific or professional organizations, including IUTAM, IACM, IFToMM, EUROMECH, ECCOMAS, ASME, JSME or KSME. On the one hand, it looks like our scientific community has been well served, but, on the other hand, the risk of the fragmentation of our community increased not only due to its growth but also since not all active researchers can attend

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all the events. In the past, the multibody dynamics community was small and most of its members knew each other by personal contacts, but today the community is large and such personal contacts cannot be taken for granted, eventually leading to a more difficult interaction between scientists and to a weakening of the field. Thus, a central event that could be accepted by all organizations and that could gather the whole community was considered to be missing.

It was proposed and readily agreed to establish an International Steering Committee with the task to organize a Joint International Conference on Multibody System Dynamics in the Spring of even years, simply called IMSD. This joint conference was sponsored by the ASME, IFToMM, IUTAM, JMSE, and KMSE. Already the 1st IMSD organized by Aki Mikkola in Lappeenranta, Finland was very successful, with 200 presentations selected by the Steering Committee and 250 participants from 31 countries. The 2nd IMSD was chaired by Peter Eberhard and held 2012 in Stuttgart, Germany, while the 3rd IMSD took place 2014 in Busan, Korea with Sung-Soo Kim as chairman. The 4th IMSD is an invitation to Canada by John McPhee for 2016, and there are plans by Jorge Ambrosio, Portugal to bring the 5th IMSD back to Europe. So, establishing this bi-annual joint conference was successful in providing the multibody community with its Joint Conference, while the different scientific and professional organizations continue to run successfully their meetings and conferences.

For a continuous development of the joint conference (IMSD), the International Steering Committee of IMSD felt that not only individual scientists but also an organization should be responsible for serving the whole community too, as it is usual in other scientific communities. Therefore, the International Steering Committee of IMSD agreed on July 1, 2014 in Busan, Korea to form an International Association for Multibody System Dynamics, abbreviated as IMSD, too, to show the close relationship with the joint conference.

Scientific associations have two privileges. They can be admitted as affiliated organizations by Scientific Unions, closely related to their field, and they can cooperate with a scientific journal in their field, becoming their official organ. In August 2014, the General Assembly of IUTAM in Copenhagen, Denmark admitted the International Association on Multibody System Dynamics (IMSD), as affiliated organization, and in October 2014 a letter of agreement for the cooperation with Springer was signed. Thus, IMSD is recognized by its related Scientific Union, IUTAM, and starting on January 1, 2015 IMSD will be cooperating with Springer, an international leading publisher for multibody dynamics.

The Editors-in-Chief would like to use this opportunity to thank many colleagues and friends, the Contributing Editors and the Advisory Board, the reviewers, and, last but not least, our authors as well as the representatives of Springer, in particular Nathalie Jacobs, for their continuous commitment of proven and new activities in our challenging scientific work on multibody dynamics.

Lisbon, October 2014
Stuttgart, October 2014

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