

Editorial

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From the Retiring Editor-in-Chief, Werner Schiehlen

It is with great pleasure and pride that I write this Personal Editorial on my retirement after getting eighty earlier this year. Since founding the Journal, together with Jorge Ambrósio in 1997, I enjoyed editing the Journal for 22 years. There was a real need from the multibody system dynamics community to get a scientifically approved platform for the discussion and the publication of the latest research results.

During the first four years, we published one volume per year, then there followed 14 years with two volumes and since recently there is a demand for three yearly volumes. As you know, multibody system dynamics is a very lively research topic with challenging new problems. Since its foundation the Journal publishes also thematic issues on selected fields often related to scientific meetings on multibody system dynamics. For example, this issue is a thematic one, based on the Rolling Contact Mechanics for Multibody System Dynamics, with papers recommended by the session chairs of the EUROMECH Colloquium 578 held in Madeira, Portugal, and subject to peer-reviews.

Furthermore, during the First International Conference on Multibody System Dynamics, held 2010 in Lappeenranta, Finland, chaired by Aki Mikkola and Werner Schiehlen, the International Association of Multibody System Dynamics (IMSD) was founded. It is in essence the mission of the Association to establish biannual international conferences on multibody system dynamics that address computational mechanics, nonlinear dynamics and control design; to foster research on the dynamics of multibody systems and related fields; and to promote international cooperation between scientists and engineers in industry, where this Journal serves as official publication organ of IMSD.

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In view of the exceptional works presented at the First International Conference on Multi-body Dynamics, including many of the foremost international researchers in Multibody Dynamics, six authors were invited to submit manuscripts to the Journal, where they have undergone a strict peer-review process resulting in a thematic issue. In the meantime the Fourth IMSD conference took place 2016 in Montreal, Canada, chaired by József Kövecses, John Mc Phee and Jorge Ambrósio, and resulting in another thematic issue published earlier this year.

The Journal would not have been launched without the remarkable support of KLUWER ACADEMIC PUBLISHERS, later merged with Springer. Therefore, I thank our publisher, Springer, for the close and efficient cooperation, and in particular Mrs. Nathalie Jacobs for all the time she spends to keep the Journal running so well. This is also appreciated by all Editors and Board members. But I would like to express my sincere thanks also to Paula Jorge, the secretary of Jorge Ambrósio, who manages excellently the daily work related to the Journal.

Moreover, I am thankful for the scientific support of all my friends and colleagues devoting themselves to the fascinating field of multibody system dynamics during the last 22 years. My partner as Editor-in-Chief, as you all know, was Jorge Ambrósio and we had together a really challenging time, efficient and successful. And both of us could always get advice and help from the Contributing Editors and Advisory Board members who served all for some period with the Journal. Their names are mentioned here in alphabetical order.

J. Angeles, W. Blajer, J. Garcia de Jalon, M. Geradin, M. Hiller, J. McPhee, P. NIKRAVESH, M. Pereira, A. Shabana, N. Shimizu, Y. Wan-Suk, D. Van Campen, H.-B. Zhao, and S. Agrawal, K. Anderson, Y. Aoustin, A. Arabyan, M. Arnold, O. Bauchau, E. Bayo, V. Berbyuk, C. Bottasso, H. Brauchli, O. Bruls, A. Cardona, F.L. Chernousko, J. Cuadrado, P. Eberhard, P. Fisette, P. Flores, J. Gerstmayr, G. Gim, C. Glocker, Y. Gu, J.M. Hansen, G. Hulbert, J.B. Jonker, T.R. Kane, A. Kecskemethy, E. Kreuzer, H.M. Lankarani, S. Leyendecker, C. Liu, J.-Y. Liu, P. Maisser, R. Lot, A. Mikkola, D. Negrut, E. Pennestri, J.-C. Samin, A. Schwab, R. Seifried, R.S. Sharp, M. Tavares da Silva, Y. Terumichi, M. Uchiyama, Z. Terze, M. Valasek, J. Wittenburg.

These names fit perfectly to the Aims and Scope as described clearly in the Journal since 1997.

During the annual Journal Board Meeting of the Journal 2018 in Lisbon, Portugal, we discussed not only the replacement of the Editor-in-Chief but also of those Board Members approaching the end of their term of service. After preparatory discussions, Aki Mikkola agreed to serve as my successor in the position of Editor-in-Chief. Furthermore, Springer agreed to establish a new position called Honorary Editor, and I agreed to continue my service for the Journal as adviser. The other replacements you can easily see on the reverse page of the front cover.

Last but not least, I welcome Aki Mikkola as Editor-in-Chief. He is worldwide scientifically highly respected, he cooperated as visiting scholar with Ahmed Shabana in the United States and he was very instrumental with the foundation of IMSD. Congratulations Aki!

From the Joining Editor-in-Chief, Aki Mikkola

Retiring Editor-in-Chief, Professor Emeritus Werner Schiehlen, can be considered a father figure of the field of multibody system dynamics. His scientific accomplishments related to vehicle dynamics and his explanations concerning multibody formulations and trends makes him one of the leading contributing scientists in the field. In addition to Werner's scientific achievements, I can also speak highly of his personality. He is open-minded, pleasant, and sociable. These characteristics make him easy to get along with. He never forgets to credit

his co-workers. Because Professor Schiehlen always treats people fairly, he has promoted a spirit of friendliness within the multibody community. My involvement in organizing the First International Conference on Multibody Dynamics in Finland, 2010, was a pleasant and memorable experience largely due to the assistance from and support of Werner Schiehlen.

In a larger perspective, multibody system dynamics is more important than ever due to the so-called digital revolution, which significantly affects many production and product processes. This important trend has already resulted in a number of changes to the ways that multibody system dynamics is utilized in science, digital services, and product processes. Because of its inherent flexibility, multibody system dynamics will continue to play an even greater and more critical role in the materialization of promises related to the digital revolution. I am thrilled about the recent changes in research and the application environments for multibody system dynamics, and I look forward to seeing new opportunities opening up in our field.

The Journal of Multibody System Dynamics is recognized as a premier publication forum that offers high quality review processes. It is responsible for innumerable interesting and well-written articles that have continually advanced the field of multibody system dynamics. Although competition among scientific journals is fierce, the Journal of Multibody System Dynamics has always been able to maintain the highest standard. This is, in part, due to the close connection between the journal and multibody community and the International Association of Multibody System Dynamics. These connections have been fostered by the journal's Editorial Board, which includes the current Editor-in-Chief Jorge Ambrósio and the now retiring Editor-in-Chief, Professor Emeritus Werner Schiehlen.

Because of his retirement, I have been asked to step in and fill Werner's shoes and assume the responsibility of becoming a new Editor-in-Chief for the journal. I will do my best to follow the principles that Professor Schiehlen established and to make my best efforts to be approachable via emails and in major meeting events of multibody system dynamics.

I would especially like to thank Professors Werner Schiehlen and Jorge Ambrósio for their trust in me. Clearly, Werner leaves big shoes to fill. I am, however, extremely excited about this new opportunity and looking forward to co-operating with both Werner and Jorge, Mrs. Nathalie Jacobs, all the reviewers, and all the other editorial board members. It is a great honor for me to join the Journal of Multibody System Dynamics as Editor-in-Chief.

From the Continuing Editor-in-Chief, Jorge Ambrósio

It has been an honor, a privilege and a pleasure to collaborate and work with Professor Werner Schiehlen in founding the Multibody System Dynamics journal. I want to take this opportunity, when Werner Schiehlen is retiring as EiC of Multibody System Dynamics, to express him my gratitude for all that could be accomplished by working together and to emphasize the pleasure on accomplishing it due to the exceptional scientific and social environment, in which fairness and friendship never took the back seat.

Professor Werner Schiehlen has been associated to the coining of the name of our scientific area, as Multibody Dynamics, not only due to his leading scientific work starting with his former advisor, Professor Kurt Magnus, but also for organizing, or being associated to, many of the conferences, colloquia, symposia or simply meetings to the development of Multibody Dynamics as a timely topic. Even before the birth of the journal Multibody System Dynamics, Werner Schiehlen, with his vision, work and inspiration, was among the leading scientists advancing the field of Multibody Dynamics either with the development of new methods and their computational implementation or by the application of its methodologies to novel problems and scientific areas. Certainly, Multibody System Dynamics, the journal, and Multibody Dynamics, the community, could not have a better guidance than that of Werner Schiehlen.

Following two very successful meetings, the NATO-ASI on Computer-Aided Analysis of Rigid and Flexible Mechanical Systems organized in Tróia, Portugal, in 1993 and the IUTAM Symposium on Optimization of Mechanical Systems in Stuttgart, Germany, in 1995. Karel Nederveen, with Kluwer Academic Publishers at the time, approached our community inquiring about the need and opportunity for a scientific journal completely focused on Multibody Dynamics. An extensive discussion under the members of the community was organized and the results converged to some interesting conclusions. It was recognized that a scientific journal was missing providing a first choice of the Multibody community to publish or to read scientific works in this area. The papers on Multibody Dynamics were published at that time in numerous journals with a rather broad focus. The inquiry showed that the size of the community and the volume of publications were already large enough to justify a dedicated scientific journal and that the existence of such a journal was most welcome. Moreover, last but not least, in a short list of colleagues that could provide the guidance for such a new journal Werner Schiehlen was almost unanimously referred, by the colleagues, who replied to the enquiry, as the best choice for Editor-in-Chief of the new journal, which was nicknamed MUBO (short for **M**ulti**B**ody) before a more suitable name could be chosen. In 1995/96 the structure of MUBO was defined, colleagues were invited for the journal boards, and the first call for papers was issued in 1996, during the XIX International Congress of Theoretical and Applied Mechanics that took place in Kyoto, Japan. The first issue of Multibody System Dynamics (MSD) was published already in June 1997. Starting with that first call for papers the flow of submissions has been increasing every year and the journal has been very healthy due to the unconditional support of the Multibody Dynamics community. Certainly in the process of development of MSD and the establishment of its reputation we always counted with the unconditional support of Springer through Mrs. Nathalie Jacobs (thanks Nathalie) and background work and dedication of Mrs. Paula Jorge (thanks Paula). The leadership of Werner Schiehlen with his knowledge, his intellectual honesty, his social balance, his enthusiasm, and his dedication were the key for this achievement.

During the past 25 years that I have been working closely with Werner I learned that besides a solid scientific work it required personal characteristics to gather researchers around a project and to maintain them involved. Werner Schiehlen has always been thoughtful on his actions and strategies, very enthusiastic and dedicated in pursuing them. Through his vision he has been providing direction to the community, visible not only in the journal MSD but also in the many events organized, in the international societies which he has been associated with, IUTAM and IAVSD in particular, and in the creation and direction of IMSD, the International Association of Multibody System Dynamics. During all these years I always appreciated Werner Schiehlen's organizational skills, exceptional and driven by excellence. It is common to hear colleagues referring to his organizations and initiatives as brilliant and motivational for all those involved, and they are correct. I also came to learn and appreciate Werner's team working skills, in which support and encouragement were never forgotten. Werner, you used in MSD all these qualities which, to the best of my ability, I tried to learn from you. Certainly during these past 25 years of working together in the journal, and not only that, organizing more than a few conferences and special sessions in general conferences together, while promoting other initiatives in the community, we came closer, our families came closer, and a friendship developed. This is something that I really value, thanks Werner. Now in your role as Honorary Editor-in-Chief you will continue to support MSD and inspire us with your enthusiasm, vision and friendship. So, welcome aboard in your new position.

The natural change in the leadership of a scientific journal is one of the signs of its maturity and longevity and we are fortunate to have in our Multibody Dynamics community

the ability to renew itself and the colleagues who can provide such leadership. Professor Aki Mikkola, welcome to Multibody System Dynamics as the new Editor-in-Chief. Your scientific work is respected and well established in our community, your contribution to Multibody Dynamics with the genesis of ISMD and its Conferences, your enthusiasm is well known and your dedication is recognized by all of us. I am looking forward to working with you and contributing to the increasing quality and visibility of Multibody System Dynamics and to the strengthening of the scientific area of Multibody Dynamics in science.

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