

2011 IFToMM NEWSLETTER



International Federation for the Promotion of
Mechanism and Machine Science

www.iftomm.org

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SCOPE OF THE NEWSLETTER

This Newsletter reports the most important facts and events of IFToMM activity during the past year but with an eye to future plans. Information are collected mainly from IFToMM bodies and its leadership. A special attention list is devoted to forthcoming conference as forum for meetings among the community and promotion of MMS.

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EDITORIAL BOARD FOR 2011 ISSUE

Marco Ceccarelli, Chair of editor board, IFToMM president
Joe Rooney, member of current EC
Jean Pierre Merlet, member of new EC
Shuo Hung Chang, member of new EC
Veniamin I. Goldfarb, Chair of PC Communications & Publications & Archiving

MESSAGE OF THE IFTOMM PRESIDENT (2008-2011)

Dear IFToMM officers and IFToMMists:

The end of the term is near and this is my last message to say farewell as IFToMM President for a term that has been exciting since a dense activity and fruitful interaction with the community has brought to relevant results for the growth of IFToMM.

The main results of this terms can be summarized within the planned program for Visibility-Activity in

- we have increased the number of MOs (Member Organizations)
- we have helped MOs and TCs (Technical Committees) in difficult conditions to achieve proper functioning
- we have outlined procedures in EC regulations and Constitution has been properly updated
- we have increased the number of IFToMM sponsored conferences
- we have increased publications under the umbrella of IFToMM
- we have increased the number of IFToMM affiliated journals and started book series linked to IFToMM for better dissemination of MMS
- we have reinvigorate the activities of TCs with more participation of individuals
- we have started or restarted TCs in hot topics in MMS
- we have determined clear benefits for MOs and individuals in being involved in IFToMM activity
- we have celebrated the 40-th year anniversary of IFToMM also with a ceremony at the foundation city Zakopane, Poland
- we have started new initiatives such as student Olympiad, summer schools, and tutorials
- we have enhanced the finance of IFToMM with increased income sources and budget returns

During the term 2008-2011 the presidency activity has been focused on guiding IFToMM activity with the help of members of the IFToMM Executive Council (EC) by also improving the functioning of the IFToMM bodies.

The Visibility-Activity plan has been intended to increase the

visibility of IFToMM and its activity by promoting new and existing activities with an explicit mention of IFToMM and to facilitate new and existing initiatives under the umbrella of IFToMM. During the term 2008-2011, results have been achieved in increasing meetings, exchanges, publications, teaching, and international collaborations, as prescribed for the mission of IFToMM in the IFToMM constitution. Efforts have also spent to have clear increased benefits for IFToMM Member Organizations and their affiliated individuals in being involved in IFToMM.

In particular, a book series on MMS has been started in 2010 by the international publisher Springer and with more IFToMM affiliations, 6 journals are now available and linked for paper publications. The journals are Mechanism and Machine Theory (<http://www.elsevier.com>), Problems of Mechanics (<http://pam.edu.ge>), Open-access Mechanical Sciences (<http://www.mech-sci.net>), Chinese Journal of Mechanical Engineering (<http://www.cjmenet.com>), Advances in Vibration Engineering (<http://www.tvi-in.com/index.asp>), and Mechanics Based Design of Structures and Machines (<http://www.tandf.co.uk/journals/titles/15397734.asp>). The book series are Book series on MMS (<http://www.springer.com/series/8779>) and Book series on History of MMS (<http://www.springer.com/series/7481>).

Sources for IFToMM finance have been increased through returns from IFToMM supported initiatives, donations, and royalties from publications mainly within the above mentioned book series.

Functioning of the IFToMM bodies has been supervised with an efficient help of the IFToMM Executive Council also through specific activity of EC Working Groups in attaching specific matters. Chairs of MOs in GA have been continuously informed on IFToMM activity that has been coordinated by EC with supervision of the President. In general they have been successfully reactive in providing more representatives in TCs and PCs. Some critical situations related to due arrears and lack/insufficient participation to IFToMM activity have been solved, but others have required unpleasant strong actions as decided at the last GA (General Assembly). In this term new MOs have been accepted from Turkey, Portugal, Egypt, Denmark, after preliminary negotiations for proper candidature submissions. Now, IFToMM Federation has 48 MOs with presences of active IFToMM communities in all continents.

Permanent Commissions (PCs) have shown different situations reflecting different interests from IFToMM community. PC for Standard and Terminology have worked out relevant activity with a new multilingual publication of MMS terminology, that is now available also on line. This PC has also started a link with ISO for collaboration on standards. The PC for History of MMS has carried out impressive achievements both in scientific works and organization of the field, with the largest commission in IFToMM. The PC has also improved the storage of documents in a rich and rich IFToMM archive. The PC for

Communications has served with difficulties in the task of improving IFToMM webpage and IFToMM newsletter mainly because of a very weak response from the IFToMM community, also with a very limited number of active PC members. Similarly, PC publications has encountered difficulties in fulfilling the By-Laws duties because of a poor participation from IFToMM community, although the frames of IFToMM publications have been increased considerably both in journals and books (textbooks and conference proceedings). Thus, at the 2010 EC meeting the EC has proposed to merge the two PCs into a new PC for Communications, Publications and Archiving with a reshaped plan of duties under the direct responsibility of the IFToMM Presidency desk; at the 2011 GA the new PC was approved and it has just started the activity.

Success of Technical Committees (TCs) strongly depends of individuals, who are representatives of MOs in their respective fields with the aim to fulfil the By-Laws prescriptions in order to develop activities in the main aspects of meetings, collaborations, conference events, transfer of expertise, and publications. During the past two terms, also thanks of repeated requests, TCs have been enriched with more representatives from MOs, but not yet all MOs have TC members in all TCs. Most of the TCs have worked very successfully in the above mentioned aspects and in general with trends towards good results in a near future. In particular, several new conferences have been started within TC frames and existing conferences have received a clear sponsorship by IFToMM through the TCs. The new book series on MMS is also available for publication of books and proceedings IFToMM sponsored conferences with royalty to IFToMM. Two TCs have been started, namely on Sustainable Energy Systems and on Biomedical Engineering. A TC on Gearing and Transmissions has been re-established with a reinvigorated group of colleagues. Unfortunately, there are still few TCs with a weak activity that has required help and strong actions by the EC with the hope of a quick revitalization referring to the hot topics which they are related to. Now IFToMM have 14 TCs in the most hot topics in MMS.

The Executive Council (EC) has been very efficient in dealing with IFToMM activity during the term by attaching problems and situations with a well thought attention towards suitable solutions, and in general by achieving considerable improvements of the functioning of IFToMM both in visibility and activity. Most of EC members have been more active and reactive than expected as in the constitution prescriptions. Particular mention for a continuous dedication to IFToMM is deserved to the Secretary General prof. Carlos Lopez-Cajùn and the Treasurer Joseph Rooney. EC has worked out not only at the time of EC meeting, but EC members have been active both for telemeetings that have been started in 2010 and for email postal ballots, and for a continuous monitoring and discussion of the IFToMM activity mainly by email. Those continuous activities have permitted a continuous feedback with the community and its operations. EC regulations have been outlined to clarify and

simplify procedures for IFToMM functioning and EC leadership. Another important new means of EC work has been successfully experienced with Working Groups (WGs) that have been established to solve specific problems with short time targets. The President has continuously stimulated EC members in a friendly collaborative ways and great satisfaction seem to be achieved from both sides.

As Chair of IFToMM Committee for Honours and Awards, the President has stimulated successfully the community for annual awards of significant personalities, who can be also ambassadors of the IFToMM mission.

Finally, I will like to outline few visionary thoughts as from experience gained in serving as Secretary General in 2004-2007 and President in 2008-2011.

IFToMM has a relevant significant role in the development both of Technology and Society. We need to be well aware of this and increase the visibility of it. In today aggressive world, nobody advertises or even recognizes merits of others and therefore we IFToMMists are forced to stress continuously the role of IFToMM by ourselves. We are a worldwide community, who develops mechanical engineering in terms of formation and innovation. We can form properly new generations of engineers with modern vision for the future when we are well aware (i.e. visibility) and well skilled (i.e. activity) in the developments of mechanical/mechatronic systems for the benefit of society. We can work and transfer innovation when we are well aware (i.e. collaboration) and well expert (i.e. research) in attaching challenging novel problems for technological developments.

As President I have experienced that IFToMM is a unique worldwide body in the fields of Mechanical Engineering with specific focus on MMS, and it has a worldwide significance because of the community worldwide presence and its activity. But this is not an abstract entity, and each of us can contribute and contributes to IFToMM success with large or small participation depending of her/his own possibilities. Without individuals with common views and activities a community cannot exist and cannot be a reference also to help for other individuals. Thus, the future of IFToMM with a great success like in the past, and even with more influence in the Society for the benefit of Society, much depends on us, on how we participate, disseminate, and transfer the feeling and activity of a community. This is fundamental and instrumental for innovation and enhancement. The IFToMM community works successfully when its members helps each other and all together contribute to the intellectual and scientific growth of the individuals within specific technical fields. The vitality of a community as the IFToMM community is also appreciated by giving turn of MOs representatives in the leadership of the community. Thus, beside being careful to properly distribute TC Chairmanships among MOs depending of the recognized reputation of candidates with high levels of expertise, it is also very important to have turn in EC members as from MOs, even with the aim to recognize the most active MOs or to stimulate more MO activities. This turn plan is also fundamental not only to recognize IFToMM membership without any

preference or prominence of one MO with respect to other MOs but mainly to show an open-mind community in agreement with the mission of IFToMM.

Today IFToMM has a great potentiality more than in the past and it is shown as a reality.

Let us look at the past, let us work with the enthusiasm in the present to shape the future, our future, our IFToMM.

The considerable activity and significant achieved results in this term have been possible thanks to the support, participation, and help of all IFToMM officers (Chairs of MOs, PCs, and EC members) and also many individual IFToMMists. I will like to thank all the IFToMM officers since we had indeed direct contacts and I received from each of them valuable feedbacks, suggestions, and inputs. But I cannot forget individual IFToMMists, whom I have met at conferences and meetings, and whom I have exchanged emails with: thanks to all of them! I have had always the feeling of doing well for the interest and benefit of IFToMM, because of the smiles and nice words I received when meeting persons of our IFToMM community. Those appreciations together with claims and argues have been for me a continuous stimulus to spend more and more efforts and time for the wonderful experience as IFToMM President. The expressed gratitude that I have received also with few simple words has been and is for me of great value and memory. I owe deep gratitude to my family, my daughters Elisa and Sofia, my son Raffaele and my granddaughter Greta and mainly to my wife Brunella. Their patience has been immense in permitting me to dedicate lot of time in replying emails and preparing material even when home, but mainly for the many travels I spent in name and in occasion of IFToMM and also in receiving warmly the many IFToMM hosts home. They are the great base of my success, if you will consider successful my presidency activity.

I also take the opportunity to wish prof Y. Nakamura, President-elect, and new Executive Council a fruitful activity in the term to come.

I wish you all happy end-year holydays and all the best in 2012.

Thanks to all and let us be proud to be IFToMMist for ever!
Cassino: November 2011

Prof Marco Ceccarelli
(IFToMM President 2008-2011)

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2011 GENERAL ASSEMBLY

The 12th IFToMM General Assembly was held in Guanajuato, Mexico on 22 June 2011 at the conference site of the 2011 IFToMM World Congress. As usual, the status and problems of IFToMM activity led to a very rich agenda that was discussed with a well thought participation.

Professor Ceccarelli, the President reported in details his activity by stressing main achievements and pending problems. The Visibility-Activity plan of the Presidency 2008-2011 was intended to increase the visibility of IFToMM and its activity by promoting new and existing activities with an explicit mention of IFToMM and to facilitate new and existing initiatives under the umbrella of IFToMM. During the term 2008-2011, results were achieved in increasing main aspects of meetings, exchanges, publications, teaching, and international collaborations, as prescribed for the mission of IFToMM in the IFToMM constitution. In particular, efforts were aimed at making clear and increasing benefits for IFToMM Member Organizations (MOs) and their affiliated individuals in being involved in IFToMM. Main benefits can be summarized in: access to IFToMM activities with reduced fees, fee for individual subscription to MMT (Mechanism and Machine Theory) journal and reduced subscription fees for the other IFToMM affiliated journals, special attention to MMS topics for paper submission in IFToMM affiliated/linked Journals, reduced page charge for paper publication in IFToMM affiliated Journals, international contacts among individuals and institutions, participation and contribution to IFToMM activities, IFToMM support and sponsorship of conferences and other events for promotion of MMS and IFToMM. Within IFToMM community, meetings were organized within PCs, TCs, and MOs with more discussion on IFToMM activity even by teleconferences; exchanges have been carried out with visits of scholars, and students, also within conferences and the new initiative of IFToMM Olympiad of MMS; publications have been increased as explicitly referring to IFToMM community also with the help of specific agreements with publishers, and a book series on MMS has been started in 2010 by the international publisher Springer; with two more affiliations, 5 journals are now available and linked for paper publications; teaching on MMS has been better referred to IFToMM even at local frames of MOs, and summer schools and tutorials have been started on specific subjects; international collaborations have been increased and are better shown under the umbrella of IFToMM mainly through the PCs, TCs, and MOs; sources for IFToMM finance have been increased through returns from IFToMM supported initiatives, donations, and royalties from publications, mainly within the above mentioned book series.

Functioning of the IFToMM bodies has been supervised with an efficient help of the IFToMM Executive Council also through specific activity of EC Working Groups in tackling specific matters. EC regulations have been outlined to clarify and simplify procedures for IFToMM functioning and EC leadership. Another important new means of EC work has been successfully experienced with Working Groups (WGs) that were established to solve specific problems with short

time targets. Most of WGs have completed successfully the tasks given to solve problems and situations that arose also between EC meetings. Chairs of MOs in GA were continuously informed on IFToMM activity, coordinated by EC with supervision of the President.

The President reminded also that 40-th year anniversary of IFToMM was celebrated within the 2009 EC meeting and then in January 2010 with a ceremony in foundation city Zakopane, Poland, where a bronze plaque was installed as a memory record.

Professor Lopez-Cajun, the Secretary General reported of the business of IFToMM that he has directed through personal contacts and email communications over the past four years.

Professor Chicurel, Chair of the 13th World Congress Organizing Committee, reported on the successful World Congress with 309 papers accepted from 44 countries, 37 of them with IFToMM Member Organizations. Sessions were well attended covering all the traditional topics of IFToMM activity with presentation even in new areas of current interest. The participation of about 350 individuals was less than expected as due to the world financial crisis and long traveling to Mexico from many MOs.

Professor Ceccarelli reported the status of IFToMM community. He illustrated the activity by summarizing the results of information collected by MOs, PCs, and TCs. IFToMM is a growing institution both in terms of individuals participation and activity initiatives that are aimed to the mission of IFToMM for promoting MMS and IFToMM community worldwide. In particular, considerable is the increase of visibility of activities in term of sponsored conferences and publications. New IFToMM Member Organizations from Denmark, Egypt, Portugal, and Turkey were accepted after successful email ballots of the Chairs of the IFToMM MOs in 2010 and early 2011 bringing the number of MOs to 48, its highest level.

Prof Kedzior, the Chair of the Constitution Committee presented the amendments for Constitution and By-Laws as elaborated by the Committee from considerations that came from the President, EC, IFToMM officers, and committee members yet. In particular, the number of categories for MOs was reduced to five. A new nominating procedure was approved; a new PC for Communications, Publications, and Archiving was established to replace the closed PCs for Communications and for Publications with more clear structure and tasks; the conditions for observer membership in PCs and TCs were indicated clearly. In addition, a decision on deciding to accept only English as official language of IFToMM was postponed. Nevertheless, an email ballot among MOs was held in August in which the MO Chairs expressed a positive result for it.

The Treasurer, Doctor Rooney, reported on the finances of IFToMM and the budgets over the term 2008-2011 giving a positive picture of the organization's financial status with a considerable net balance. However, the level of expenses is continuously rising, and we have a continuing problem with a small number of MOs that have continuing records of being in arrears with their annual dues. A small number of MOs have long standing arrears of their annual dues. The IFToMM Constitution specifies that a MO that is more than three years

in arrears shall have its voting privileges suspended, and the General Assembly may withdraw its membership by a two-thirds vote. The treasurer certified that he had issued the warnings specified by the constitution to three delinquent MO's and therefore, after previous consultation with the Executive Council, the Treasurer proposed the withdrawal of membership. After a discussion the general Assembly withdrew the memberships of the Kazakhstan MO, and Mongolia MO. We do hope that these communities will re-apply for membership when they have re-organized and made suitable arrangements to meet their financial obligations. A particular situation occurred with Perú MO for which was not reached the quorum for the membership loose but no reaction was received by the President in order to plan a solution of the arrears and lack of activities. In addition, a new group of institutions contacted the President since two years ago and, again, just after the General Assembly to be ready to take the IFToMM membership in Peru once the old MO would have been left the membership. Thus an email ballot among MOs was held successfully in September with the aim to have the new Perú Committee as IFToMM MO, under condition that they will start immediately a correct activity.

Prof Waldron, Chair of the Nominating Committee, presented the slate of nominees for the next Executive Council. The nominees were presented to the General Assembly and, after discussion, the following Executive Council for the term 2012-2015 was elected: Yoshihiko Nakamura (Japan), President; Veniamin Goldfarb (Russia), Vice President; Teresa Zielinska (Poland), Secretary General; Just Herder (Netherlands), Treasurer; Members: Shuo Hung Chang (China-Taipei), Burkhard Corves (Germany), Vijay Kumar (USA), Jean Pierre Merlet (France), Datong Qin (China-Beijing), Juan Antonio Carretero (Canada). Professor Marco Ceccarelli (Italy) remains a non-voting member of the Executive Council as Past President.

Professor Ceccarelli, as Chair of the Honors and Award Committee reported on an updated version of the manual for IFToMM honors, and then he presented the 2008-2011 recipients and 2011 nominees for IFToMM awards. After discussion the General Assembly approved the following recipients for new IFToMM Honorary members: Professor Manfred Hiller from Germany, Professor Jammi S. Rao, from India, prof Hong-Sen Yan from China-Taipei, and Professor Enrique Jaime Chicurel-Uziel from Mexico. The recipients for 2011 IFToMM Awards of Merit were Dr Jean Pierre Merlet (France) and Professor Javier Garcia de Jalon from Spain, while in 2009-2010 IFToMM Awards of Merit were given to professor Florea Dudita (Romania), professor Atsuo Takanishi (Japan), professor Zhen Huang (China-Beijing), and professor Rafael Aviles (Spain). The recipients for 2011 IFToMM Dedicated Service Award was Dr. Hanfried Kerle from Germany, while in 2009-2010 IFToMM Dedicated Service Awards were given to Professor Tian Huang (China-Beijing), Professor Alberto Rovetta (Italy), Professor Manfred Husty (Austria), and Professor Ying Chien Tsai (China-Taipei).

Prof Waldron, Chair of the Nominating Committee, presented the nominees for the Constitution Committee serving during the term 2012-2015. After discussion the General Assembly

elected the Constitution Committee, as composed by Kenneth J. Waldron (USA), Chair and members: Tian Huang (China-Beijing), Leila Notash (Canada), Bodo Heimann (Germany). Prof Waldron, Chair of the Nominating Committee also presented nominees for the Nominating Committee serving during the term 2012-2015. The General Assembly elected the following Constitution Committee: Chair (ex-officio) Professor Marco Ceccarelli (Italy), J. Rooney (UK), C. Lopez-Cajun (Mexico), T. Koetsier (Netherlands), B. Ravani (USA).

With regard to the location of the 14-th World Congress in 2015 proposals from Aachen in Germany, Taipei in China-Taipei, and Hiroshima in Japan were presented. After discussion the General Assembly voted, and after a second ballot with equal votes for first two candidates, according to the IFToMM Constitution, the President exercised his ballot through the tossing a coin, whose result gave the preference to the candidature of China-Taipei.

The next IFToMM General Assembly is scheduled for 2015 in Taipei, China-Taipei during the fourteenth IFToMM World Congress.

The minutes of the General Assembly, and corresponding appendices are available at the IFToMM webpage www.iftomm.org.

Marco Ceccarelli (President of IFToMM)
Carlos Lopez-Cajun (IFToMM Secretary General)

2011 MEETING OF EXECUTIVE COUNCIL

The 44th IFToMM Executive Council (EC) Meeting was held in Guanajuato, Mexico, on the 19th and 23rd of June 2011, at the University of Guanajuato on the occasion of the 2011 IFToMM World Congress on MMS. The second day on June 23 was scheduled also as a training session for the newly elected Executive Council for the term 2012-2015. The status and problems of IFToMM activity were discussed with a tight schedule for an intense agenda. Many of the main points of discussion were focused on the reports and proposals for improving IFToMM activity, with the intention to give more worldwide visibility and activity to the Federation. The activities of Permanent Commissions (PCs) and Technical Committees (TCs), the reports of the EC Working Groups (WGs), the Treasurer's report, the candidatures for the next 2011 IFToMM World Congress, and the report of the Organizing Committee for the 13th IFToMM World Congress, were also presented and discussed.

After voting, the reports of the PCs and TCs were approved with comments for improving the prescribed activity in terms of meetings, conferences, editorial works, formation events, and collaborations in the specific areas. The report of the TC for Vibrations was suspended until a later evaluation since it was submitted very late and no TC member presented the report as proxy of the absent TC Chair. In general the TC reports have shown good activities, although there is still not a full participation from all the IFToMM Member Organizations with individual representatives in them, and,

although many conferences are now under the umbrella of IFToMM, thematic conferences are not yet organized under direct TC responsibility in all the MMS subjects.

The TC for Rotordynamics was properly re-established with a strong link to IFToMM thanks to the pro tempore Chairmanship of Prof. J.S. Rao (India) that led to the new TC chairmanship of Prof. Paolo Pennacchi (Italy) and a new revitalized TC with also new members. Similarly, the TC for Reliability has been revitalized with good promising initiatives by the TC Chair, Prof. Kesy (Poland). Relevant activities have been addressed and congratulations from the EC members were conveyed to the PC for the History of MMS, to the TC for Computational Kinematics, to the TC for Multibody Dynamics, to the TC for Robotics and Mechatronics, and to the TC for Tribology. The recently created TC for Sustainable Energy Systems has also planned very good activities with strong IFToMM participations. The critical situation of the TC for Human-Machine Interfaces was discussed and the EC has decided to look for the possibility of revitalization by appointing ad tempore Prof. Federico Casolo (Italy) as TC Chair with the task of aggregating more TC members from MOs and starting or planning proper initiatives within a short time in order to avoid cancellation of the TC. A new PC for Communications, Publications, and Archiving has been established following a decision of the GA with the aim to merge the duties of the old PC for Communications and the PC for Publications. Amongst other things, the new PC should solve the problem of lack of support and participation from the IFToMM Community in those fields that are not directly associated with scientific contributions. The hope is that the new PC, with the direct leadership of the Presidency Desk, will work efficiently and will have professionals' help. The president and EC members have warmly thanked Prof. Leila Notash for the efforts and time spent on the PC for Communications in the last term. A new IFToMM Newsletter has been worked out and recently published with proper format and contents that will require more and more contributions directly from TCs, PCs, and MOs. A new TC for Biomechanical Engineering has been started under the Chairmanship of Prof. Juana Mayo (Spain) as the result of a great interest in those fields within the IFToMM community. In general, the EC congratulated the TC Chairs for their relevant activities and results in conferences, meetings, publications, and formation events in their specific fields as prescribed by the IFToMM By-Laws, but the EC also asked to enlarge the participation of MOs representatives in the TC/PC activities.

The President, Prof. Marco Ceccarelli, presented his report of activity by emphasizing positive results during the term on aspects of the Visibility-Activity plan relating to conference events, publications, meetings and collaborations, and formation events within all the fields of MMS. He reported that a significant result of the term activity can be considered the enlargement of the publications frames for the IFToMM community in now having five IFToMM affiliated journals and two book series dedicated to IFToMM topics. The journals are:

Mechanism and Machine Theory - <http://www.elsevier.com/locate/mechmt>;
Problems of Mechanics - <http://pam.edu.ge>;
Open-access Mechanical Sciences - <http://www.mech-sci.net>;
Chinese Journal of Mechanical Engineering - <http://www.cjmenet.com>;
Advances in Vibration Engineering - <http://www.tvi-in.com/index.asp>

The book series are published by Springer International Editor, with the possibility of publication royalties to go to IFToMM from:

Book series on MMS (<http://www.springer.com/series/8779>)

Book series on History of MMS

(<http://www.springer.com/series/7481>);

The editors of the journals were invited at the EC meeting to report their publication activity and trends that were of great interest to the EC members. Dr. Nathalie Jacobs of Springer was invited to present briefly the book series that she introduced by showing the just-published book 'Role of MMS and IFToMM in technology developments' that is the first of the MMS book series. All the Journal Editors and Springer publisher have expressed great satisfaction with the collaboration with the IFToMM community and they have great expectations for better and better results, and for more contributions and subscriptions to the journals. A specific benefit for the IFToMM community is indeed the possibility not only to publish in those journals and book series with specific attention to MMS topics, but also to have personal subscriptions at reduced journal subscription rates. In addition, agreements are in force with Curran Associates Inc. Publisher and Springer to publish conference proceedings of IFToMM sponsored conferences with reduced costs and worldwide distribution, but royalties to go to IFToMM.

The President also reported negotiations for establishing new IFToMM member organizations with the particular result of having Turkey join IFToMM, bringing to 48 the number of IFToMM MOs. He also reported initiatives for trying to find solutions for those MOs with many years due arrears that led to the loss of IFToMM membership by a vote of the IFToMM General Assembly, so that at the end of the IFToMM World Congress, IFToMM now has 46 MOs. He reported the strategy to have regional IFToMM conference series at continent level with EUCOMES in Europe, MUSME in America, and Asian MMS in Asia. He also reported the continual care in updating the IFToMM flyer and posters that may be considered to be the basic means for IFToMM publicity, and also, to attract interest to IFToMM from other communities. Similarly, the EC regulations have been enlarged and completed with procedures that can clarify the actions and that can provide the possibility for IFToMM activity to have common standards. He also reported the very good status of the IFToMM archive that recently has been completed with the full set of World Congress proceedings. Finally, in visionary thoughts formulated from his experiences as Secretary General and President, he expressed outlines for the future of IFToMM in terms of stressing the role of IFToMM, both in research and formation for the benefit of Society, advising IFToMM leadership to have a

better distribution among MOs in EC positions and TC/PC chairmanships, and reinforcing volunteer contributions from individuals in all aspects of IFToMM activity with acknowledgements and benefits. He concluded his report by thanking all the EC Members and particularly the Secretary General and Treasurer, as well as Prof. Goldfarb and Dr. Ionescu, but additionally all the IFToMMists who have interacted with him during the term. He apologized for the mistakes that he may have made, but in good faith, and concluded with a warm thanks to his family and particularly to his wife Brunella for letting him dedicate so much of his time to IFToMM.

The Secretary General, Prof. Carlos López-Cajún, reported on his activity for dealing successfully with the business and correspondence of IFToMM. He also reported as Chair of the WG for IFToMM FelBIM (Iberoamerican Federation on Mechanical Engineering) on the role of the Federations and MMS. He presented several requests for IFToMM conference sponsorships that were discussed one by one by summarizing that in the term the number of IFToMM sponsored conferences had increased considerably, but still many others should be brought under the IFToMM auspices since indeed they are organized by the IFToMM community.

An IFToMM Dedicated Service Award was approved in a previous EC telemeeting for Dr. Hanfried Kerle (Germany) and an IFToMM Award of Merit was approved for Prof. Javier Garcia de Jalon (Spain). IFToMM Honorary Memberships were presented and approved by the GA after EC favourable opinions for Manfred Hiller (Germany), Jammy S. Rao (India), Hong-Sen Yan (China-Taipei), and Enrique Chicurel (Mexico). The IFToMM Awards and Honorary Memberships were given to the recipients by the President during the IFToMM Award & Honor ceremony at the banquet of the 2011 World Congress. On the same occasion, Springer Awards were given for best Congress paper on the History of MMS ex equo to the team of Prof. Tarabarin (Russia) and Prof. Koetsier (Netherlands) and for most active PC member to Prof. Alexander Golovin (Russia). Also Congress Best Paper Awards were given by a committee of the local organizers.

Prof. Krzysztof Kedzior, Chair of the GA Constitution Committee presented the proposed constitution amendments that were submitted to the GA as related to technical updates and substantial changes.

Prof. Kenneth Waldron, Chair of the GA Nominating Commission presented the procedure and slate of nominees for the new Executive Council that were submitted to the GA, and he emphasized the pluralities of nominees that would thereby permit a choice among the candidates.

A report on the First Students International Olympiad on Mechanism and Machine Science (SIOMMS) was presented by the organizer, Prof. Veniamin Goldfarb, with significant results for a participation of 12 teams from several MOs and, after discussion, it was unanimously accepted by the EC with

a great appreciation. The second IFToMM Students Olympiad was proposed and the EC approved this to be hosted by Jiao Tong University in Shanghai in 2013 by the organization of China-Beijing.

The Treasurer, Dr Joe Rooney, in his report detailed the financial status of IFToMM by stressing still some problems that are related to arrears due to some member organizations, although several situations have been resolved after several exchanged messages and negotiations also with the help of the President. In particular, great appreciation was expressed in having IFToMM Bulgaria back in a correct position and also with plans to restore an active participation in all IFToMM activities. The Treasurer reported an improvement of the finance of IFToMM and more regular payment of annual fee from MOs. The IFToMM Young Delegate Program received successful attention by having so far given 15 grants for the year 2011 for the 2011 IFToMM World Congress. Some budget return was received from IFToMM sponsored conference and publication royalties. Summarizing the good health of IFToMM finances, the Treasurer has indicated a doubling of the positive balance with respect to the beginning of the 4-year term. All the EC members congratulated the Treasurer and the report was unanimously approved.

Prof. Ricardo Chicurel, Chair of the Mexican Organizing Committee presented a report on the 13th IFToMM World Congress with successful results, despite the financial crisis that severely limited participations mainly from far countries. A general satisfaction was expressed on the congress outputs, but there was a discussion on the problems that were reported on the review process with some flaws and failures, and a too-dense program with too many parallel sessions.

Candidatures for hosting the 2015 IFToMM World Congress were presented by Prof. Burkhard Corves (Germany), Prof. Shuo Hung Chang (China-Taipei), and Prof. I. Iwatsuki (Japan) with suitable characteristics that attracted favorable opinions of all EC members. The final decision was taken by the General Assembly and after several ballots the 2015 world Congress was assigned to China-Taipei.

An acknowledgment point was raised by Prof. Bahram Ravani and added to the Agenda. Prof. Ravani expressed warm thanks to the President for his activity and remarkable achievements during the term, and all EC members applauded. The President also expressed thanks to all the EC members for their collaboration, support, advice, criticism, and even silence that have permitted him to achieve satisfactory results for the Visibility-Activity plan.

The activities and results of EC Working Groups were reported specifically: for merging PC Communications with PC Publications into a new PC by Dr. Rooney; for guidelines for World Congresses by Prof. Ceccarelli; for the IFToMM Newsletter by Dr. Rooney as proxy of Dr. Ionescu; for networking by Prof. Goldfarb; and for the IFToMM-FelBIM WG for MMS role by Prof. López-Cajún. Each report was

discussed and then approved with satisfaction for the completed tasks. Unfortunately, Prof. Nakamura could not work on ruling PC/TC membership in voting rights for MOs, delegation and Deputy Chairs and he did not present a report. Consequently he proposed to extend the WG activity into the next EC term.

The newly elected Executive Council was presented at the second day of the EC meeting and the new President Prof. Yoshihiko Nakamura and new Secretary General, Prof. Teresa Zielinska addressed short speeches to the audience to outline their plans and to express thanks for their election. Similarly, Prof. Shuo Hung Chang and Prof. Burkhard Corves expressed their wishes for a fruitful volunteer service in the next EC as EC members.

The next meeting of the IFToMM Executive Council will be held in Tokyo, Japan, on the occasion of the 2011 IFToMM Asian Conference on MMS from 6 to 7 November 2012.

While closing the EC meeting, Prof. Ceccarelli thanked again all the EC members and IFToMM Officers for their collaboration and support in the leadership of IFToMM during the Presidency term 2008-2011, with special mention to Professor Carlos S. López-Cajún, IFToMM Secretary General and Doctor Joseph Rooney, IFToMM Treasurer.

The minutes of the 44th EC meeting and the corresponding appendices are available for public consultation on the IFToMM webpage www.iftomm.org.

Prof Marco Ceccarelli, President 2008-2011

Prof Carlos S. López-Cajún, Secretary General 2008-2011

Dr Joseph Rooney, Treasurer 2004-2011

ON 2011 IFTOMM WORLD CONGRESS

The Local Organizing Committee for the Congress, constituted in August, 2007, incorporates Scientific, Local, Administration, Communications, and Exhibition Chairs. The original deadlines for papers submission, provisional acceptance, final version submission and final decision on acceptance, had to be extended for the reasons explained below:

Papers in three new areas (sustainable energy systems, MEMS, prosthetic devices) not covered in the original call for papers and outside the scope of the existing TC's and PC's were solicited in a complementary call for papers announced near the end of the original submission period. Interestingly, the sustainable energy systems TC was created soon after. Also, a special session on rotordynamics was organized at a late time. The main reason for the very substantial delays in finalizing the provisional acceptance, final version submission and final decision on acceptance, was the unresponsiveness of a great number of reviewers. This situation became very critical and forced the organizing

committee members and other local IFToMM affiliated members to rescue the review process at the cost of a heavy work load.

The paper review process used was provided by the Mexican Society of Mechanical Engineers (SOMIM). The system selects automatically two reviewers for each paper from a data base corresponding to the area of the paper. These are proposed to the corresponding TC or PC chair. If he/she does not object in five days, the paper is sent to the proposed reviewers who are asked to reply within three days whether or not they are willing to do the review. If a reviewer gives a negative reply, a new reviewer is selected. Reviewers are asked to complete their reviews in two weeks time. Two positive reviews were required for acceptance of a paper. In the case of one positive review and one negative, the opinion of a third reviewer is obtained.

The total number of papers that were submitted is 349 from 44 countries, 37 of them being Member Organization countries. 309 papers were accepted, or 89%. There were 132 reviewers that did not respond at all, and 19 that accepted doing the review but in fact, did not. Even though the local organizing committee had been advised of the possibility of inadequate response from the reviewers and prepared for it, the magnitude of the problem was simply overwhelming. Also, it must be pointed out that PC and TC chairs were considered pivotal in the review process and, as explained before, were asked to authorize each reviewer for every paper, however, some did not even answer messages sent to them.

The number of submitted papers was considerably lower than expected. Three possible reasons are: (1) safety concerns, (2) economic crises in many countries (3) need to travel long distances from countries with large IFToMM communities.

The distribution of delegates attending the congress according to countries is shown in Figure 1. These numbers include student delegates.

An unexpected and very irritating problem that was experienced is that registration payments made through bank transfers, often showed surprise deductions that were not authorized by the buyer.

Identification numbers were assigned to congress participants at the moment of reception of their registration fee payments to have an easy reference when checking in at the congress. Registered participants were asked to fill out a travel plan form with the purpose of providing assistance upon their arrival in Mexico. In this manner, they were greeted at the Mexico City airport or the Bajío airport, as the case may be. Some required transportation from the Mexico City airport to a distant bus terminal to take a bus to Guanajuato. All of those arriving at the Bajío airport were given courtesy transportation to Guanajuato.

Two excellent sites for the congress venue were considered: The Guanajuato Convention Center and the Division of

Economic and Administrative Sciences (DCEA) of the University of Guanajuato. The latter, which was offered by the University at no cost, was finally selected with the approval of the Executive Council, whose members travelled to Guanajuato in September of 2009 to review in detail the preparations for the Congress providing valuable guidance which is hereby acknowledged with thanks.

The local organizing committee received support, financial or in kind, from a number of sources including the University of Guanajuato, The National Council for Science and Technology, the governments of the State and City of Guanajuato, the Council for Science and Technology of the State of Guanajuato, The Mexican Society of Mechanical Engineering, the National Autonomous University of Mexico, the Technological Institute of Celaya, the Technological Institute of Irapuato, the Polytechnic University of Guanajuato, the Technological University of Southwestern Guanajuato, the Technological Institute of Pachuca, and the Autonomous University of Queretaro.

The congress organizers are indebted to the organizers of the Twelfth World Congress in Besançon, who provided us at a very early time with a valuable guide to the complex task undertaken.

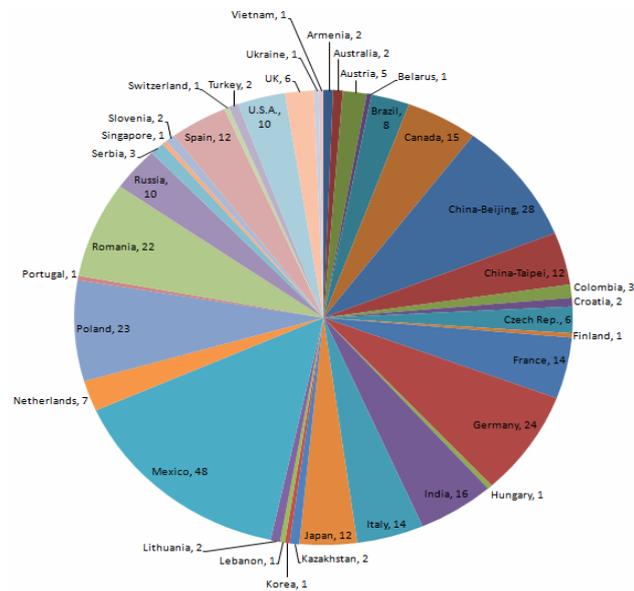


Figure 1. Delegates attending the congress according to countries as referring to 322 attendees from 38 countries

NEWS FROM MEMBER ORGANIZATIONS

MO AUSTRIA

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The main activity of the small IFToMM Austria group was the organization of the first Austrian Robotics workshop (<http://www.roboticsworkshop.at/>) held at UMIT-Hall. The workshop brought together for the first time researchers, professionals and practitioners working on diverse topics of robotics in Austria. 22 papers were presented in two days and Vijay Kumar (University of Pennsylvania, Philadelphia, USA) presented an overview talk on "Autonomous Flight and Cooperative Control of Multiple Micro Aerial Vehicles". During the workshop a half day workshop on "Temporal and Continuous Planning" was held by Andrew Coles of University of Strathclyde - Glasgow, Scotland.

In the year 2011 the organization of ARK 2012 (Advances in Robot Kinematics) a biannual conference of the TC Computational Kinematics that will be held in Innsbruck (Austria) started. The web page of the conference is <http://geometrie.uibk.ac.at/ark2012/>. Paper deadline is January 15th, 2012.

MO BELARUS

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The 5th Belarusian Congress of Theoretical and Applied Mechanics "Mechanics-2011" was held from the 26th-28th October 2011 in Minsk as the main event in a field of TMM in Belarus. The Joint Institute of Mechanical Engineering of National Academy of Science of Belarus (NASB) which patronizes the Belarusian Committee of IFToMM, was a host of the Congress.

The Congress has been organized under the support of the NASB, State Science and Technology Committee, Ministry of Industry, and Ministry of Education of Belarus.

More than 130 papers have been presented at the Congress plenary session and three technical sessions: 1. Mechanics of mobile machines, testing, certification, 2. Dynamics, strength, and durability of mobile machines and structures, and 3. General issues of mechanics, deformable body mechanics. Congress delegates represented Belarus, Russia, Ukraine, Georgia, Germany, France, Czech Republic, Singapore (<http://oim.by/ru/congress>).

Keynote speakers reflected the state-of-art, trends, and levels of research and development in countries-participants. Among the plenary keynotes there were the following:

The development of machine-building complex of the Republic of Belarus for 2011-2015 /Prof. A. Rusetsky, Chairman of the National Academy of Sciences of Belarus, D. Katerinich, Minister of Industry, Academician M. Vysotsky (Belarus);

Experimental methods in the technique of micro-mechanics and biology / Corresponding member S.Chizhik (Belarus);

Plasticity. thermo-and-visco-plasticity. Theory and experiment / Prof. V. Bondar (Moscow State Technical University "MAMI", Russia);

Biomechanical model of human dental system as part of the international project "Virtual physiological human" / Prof. Y. Nyashin, Dr. V. Tverie (National Research Perm Polytechnical University, Russia), Prof. M. Menard (University of Bordeaux, France);

Modern technology assessment of fail-safety and quality of aircraft manufacture based on SAE standards and PRI / Dr. G. Susova (National Institute of Aviation Technology, Russia);

Dynamical systems with elements of the Mind: Problems and Prospects of Research / Prof. L. Sosnowski (Belarusian State Transport University, Belarus).

Congress was successful and became a promising platform for the international exchange of experiences and results of academic research and realizations in the field of mechanics and engineering currently carried out by Belarusian experts and their foreign colleagues.

MO CANADA

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The 2011 Canadian Committee for the Theory of Machines and Mechanisms (CCToMM) Symposium on Mechanisms, Machines, and Mechatronics (M3) was held at McGill University in Montreal, QC, on June 2–3, 2011. It was co-chaired by Professors Jozsef Kovecses, Roger Boudreau, and Juan A. Carretero. Eighteen full papers and five extended abstracts were accepted for presentation. Keynote lectures were delivered by Dr. Marek Teichmann of CM-Labs, and by Dr. Christian Lange of the Canadian Space Agency. Currently, Professors Roger Boudreau and M. John D. Hayes are working as co-Guest Editors for a special issue of the Transactions of the Canadian Society for Mechanical Engineering to oversee the re-review process of papers selected from the proceedings of the 2011 CCToMM Symposium. The special issue is expected for December 2011. In addition to the technical meetings, the CCToMM Annual General Meeting (AGM) was held on June 2, 2011. It was regrettably announced that Professor Ron P. Podhorodeski was stepping down as CCToMM Chair for medical reasons. Ron served on the Executive Council for nearly two decades. A plaque was unveiled at the AGM by Professor Juan A. Carretero expressing CCToMM's recognition and appreciation of Ron's many years of outstanding service. Moreover, Professor Henning Struchtrup, the Acting Chair, and Professor Zuomin Dong, the Chair of the Department of Mechanical Engineering at the University of Victoria, the very department that Professor Podhorodeski helped to build throughout his academic career, will place the plaque in a prominent location in the department.

The next CCToMM Symposium and AGM will be held during 2012 CSME Congress, June 7-10, 2012, in Winnipeg, MB. While following the paper format and due dates of the 2012 CSME Congress, CCToMM will conduct their own peer-based review of CCToMM papers contributed to the 2012 CSME Congress. These papers will be scheduled for

presentation at CCToMM Mechanisms, Machines, and Mechatronics sessions.

MO CHINA-BEIJING

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(1) Three undergraduates with Shanghai Jiaotong University attended the First Students International Olympiad on Machine and Mechanisms Science (SIOMMS 2011). One won the first, the other two ranked the second and tenth, respectively. They also won the second in the team competition. The Second SIOMMS will be hosted by Shanghai Jiao Tong University in 2013 with the support of IFToMM MO-Beijing.

(2) The Second ASME/IFToMM International Conference on Reconfigurable Mechanisms and Robots (ReMAR 2012) will be held in July 2012 at Tianjin University, China as a result of the very successful ReMAR 2010 held in King's College, London University, UK. It is anticipated that more than 200 delegates will attend this event.

(3) The Second IFToMM International Symposium on Robotics and Mechatronics (ISRM 2011) is held in Shanghai Jiaotong University, Shanghai, China on Nov. 3-4, 2011. It is the second event of the series initiated in 2009.

(4) Prof. Datong Qin with Chong Qin University was elected as the member IFToMM executive council and Prof. Tian Huang with Tianjin University was elected as the member of IFToMM Permanent Commission of Constitutions at the General Assembly of the 13th IFToMM World Congress held in Guanajuato, Mexico on June 19 - 25, 2011.

(5) International Conference on Power Transmissions (ICPT 2011) was held on the 25-29, October 2011 in Xi'an. Representatives from 12 countries took part in this Conference. It was organized jointly by the TC of Gearing and Transmissions of IFToMM. The Conference and TC meeting were both held successfully within ICPT 2011.

MO CHINA-TAIPEI

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The Chinese Society of Mechanism and Machine Theory (CSMMT) in Taiwan had been established since 1990. CSMMT has been maintaining approximately 160 members from both the academy and industry. Every year, CSMMT organizes annual domestic academic conference and General Assembly in November. The number of papers presented in the annual conference is approximately 110 that are mostly from universities. Several domestic research institutes, especially the Industrial Technology Research Institute (ITRI) constantly has contributions. The 2011 annual conference and general assembly is held in the National Central University in ChunLi on Nov. 3-4, 2011.

The CSMMT members are often actively involved in the international professional societies. For examples, they actively participated the IFToMM events, such as the 2011 IFToMM World Congress with 15 papers presented in Guanajuato, Mexico and IFToMM ISRM 2011 in Shanghai, China.

The year 2011 has been a big year for CSMMT. In the IFToMM General Assembly held in Guanajuato, Mexico on June 23, 2011, CSMMT is honoured for several events. First is that its founder Prof. Hong Sen Yan has been honoured as an Honorary Member of IFToMM. Prof. Shuo Hung Chang was elected as the new IFToMM Executive Council Member. Most importantly, the 2011 IFToMM General Assembly voted that 2015 IFToMM World Congress will be hosted in Taipei, Taiwan. The CSMMT definitely has the great honor and solid confidence to host a successful congress.

MO CROATIA

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The main activity in 2011 of Member Organization Croatia is the monthly meeting held at Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb, Croatia. Throughout the year, 10 meetings were held. Each meeting was accompanied with lectures related to MMS activities, and speakers were scientists from universities or experts from the industry.

Furthermore, at the 13th IFToMM World Congress in Guanajuato, Mexico, we had three attendants, who presented three papers. Throughout the year, we have pursued our ongoing efforts to enhance industry and academia collaboration on MMS-related topics.

MO FRANCE

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France has a long standing tradition in the field of mechanism and machine theory. In the field of Mechanics the largest events this year was the National Mechanics Conference, that has been held in Besancon, with over 300 attendees and the National Robotics conference held in Nantes, with 160 attendees. The list of smaller workshops is too long to be listed here but we may single out the IFToMM October School on Singularity of Parallel Robots with 15 students coming from France, Spain, Italy, Sweden and Germany which was organized as a dissemination effort of the results of a project funded by ANR, the French National Research Agency. In the current organization in France this agency is becoming the main fund supplier for research projects and IFToMM members have been quite successful in securing funds from it (exact numbers are difficult to determine but at least 10 projects regarding mechanism and machine theory have been funded in the last 3 years). Apart of ANR, the European Union is also an important funding body for French laboratories and here again French laboratories working in our field have been quite successful in being involved in FP7 calls.

To conclude I will mention that after chairing IFToMM France since 2003 I will resign from this position on January 1, 2012 and join IFToMM Executive Council. The new chair of IFToMM France will be Said Zegloul, professor of Mechanics at Poitiers University. Said has been involved since a long time in IFToMM activities and I am completely confident that he will improve the position of IFToMM in France.

MO INDIA

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Association for Machines and Mechanisms (AMM) India was established in 1984 and has been growing with renewed interest since 2008 particularly due to its website <www.ammindia.org> and quarterly news bulletins being published regularly. AMM now has about 280 members which is almost a 100% increase over its membership of 2008. In order to cater to growing interest amongst students, a national level mechanism contest was introduced at AMM's flagship conference, NaCoMM (National Conference on Machines and Mechanisms) in 2009. NaCoMM which is held in every odd year attracts many foreign participants as well. Papers from 10 countries have been accepted for NaCoMM 2011 which is to be held in IIT Madras during Nov. 03-Dec. 02, 2011 and it is expected that around 12 foreign delegates will participate in the conference.

Besides NaCoMM, AMM organizes IPRoMM (Industrial Problems on Machines and Mechanisms) series of workshops and conferences in every even year. AMM supports several other activities in the country by providing seed money, resource persons, and access to the database of members. To manage the growing membership, AMM recently launched its on-line membership registration.

In the recent General Body Meeting of AMM held during the International Conference on Multi-Body Dynamics at Vijayawada in February 2011, AMM has taken the novel initiative of "Training the Teachers." In this initiative led by Prof. T.S. Mruthyunjaya former Professor at IISc Bangalore, young faculty from the ever-growing engineering institutes in the country, who are not so well-exposed to the topic of mechanisms, will be trained to teach MMS in an interesting and more meaningful way. Finally, AMM takes pride that its founder Prof. J. S. Rao has been honored as one of the Honorary members of IFToMM during the General Assembly held in Guanajuato, Mexico on June 23, 2011.

MO ISRAEL

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The 14th ISRACAS conference on Computer Assisted Surgery, Medical Robotics and Medical Imaging was held in September 2011 in Israel in conjunction with the SMIT (Society of Medical Innovation Technology) under the endorsement of IFToMM.

MO JAPAN

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The IFToMM Japan Chapter, a member organization on Japan, is abbreviated "Jc-IFToMM" and basically holding about 100 members in the field of mechanisms, robotics, mechanical design, machine elements, automatic control, and so on. We have the annual Jc-IFToMM symposium to

disclose and discuss the new results by rather young researchers and engineers, and senior members as well.

Since one of our major roll in Japan is to encourage those young investigators, we regularly award the Best Young Investigator Award from three “finalists” whose papers is qualified as excellent by blind review among those submitted to the symposium. The last meeting was held on Saturday, July 16, and totally 12 papers were presented. The winner this year is Mr. Moritaka TANIGUCHI, a graduate student of the Institute of Technologists. The title of his paper is “Mock-up Designs of a Toy with Transformable Mechanism”, from which one can imagine the Henshin Toys like the GUNDAM robot, a famous character of Japanese SF Manga.

The hottest news from Jc-IFTToMM is hosting the second IFTToMM Asian Conference on Mechanism and Machine Science (Asian-MMS2012), which will be held November 7 through 10, 2012, in Tokyo. The conference follows the first conference (Asian-MMS) in Taipei, Taiwan, in 2010, and it aims to enhance cross communication among researchers, industry engineers and students in Asian IFTToMM member organization from the broad ranges of disciplines referring to mechanism and machine science. We welcome many participants not only from Asia but also from the worldwide IFTToMM member organizations. For the detail of our Jc-IFTToMM and Asian-MMS2012, please visit <http://www.jc-iftomm.org/english/> and <http://www.jc-iftomm.org/Asian-MMS2012/>.

Japan is on the way of recovery from the disaster hit by the 3.11 earthquake and Tsunami, and resultant incidents of the nuclear power plant. We believe the success of Asian-IFTToMM2012 will be an encouragement to all the Japanese.

MO MEXICO

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The most significant event to report for the year 2011 is the 13th IFTToMM World Congress which took place at the University of Guanajuato, from June 19 to 23, in the spacious and modern campus of the Division of Economic and Administrative Sciences, a venue selected with the approval of the Executive Council, whose members travelled to Guanajuato in September of 2009 to review in detail the preparations for the Congress.

The total number of submitted papers was 349, from 44 countries, 37 of them Member Organization countries. 309 papers were accepted at 89%. 322 delegates attended, including fifteen recipients of IFTToMM’s Young Delegates Program grants. Papers in three new areas - sustainable energy systems, MEMS, and prosthetic devices - were solicited in a complementary call for papers announced near the end of the original submission period. Interestingly, the sustainable energy systems TC was created soon after. Also, a special session on rotor-dynamics was organized at a late time.

Three keynote lectures were included in the program: “Impact of Strategies for Cooperative Project of R&D” by Arturo Lara-Lopez, Rector of the University of Guanajuato, “Micro-manufactories: A New Methodology for Sustainable Manufacturing” by Yuichi Okazaki, Researcher, Agency of

Industrial Science and Technology, Japan, and “The Task Selection Problem in the Kinematic Synthesis of Linkages” by Michael McCarthy, Professor and Director of the Center for Engineering Science in Design at the University of California, Irvine, United States.

During the General Assembly, the voting to select a winning proposal for the 14th World Congress turned out to be very suspenseful as it was necessary to break a tie between China-Taipei, and Germany. Finally, China-Taipei was selected.

MO NETHERLANDS

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IFTToMM is an important forum for the activities in the Netherlands. Below an overview is given.

Conferences:

In the 2011 IFTToMM World Congress there were 5 paper contributions from the Netherlands.

Prof. Teun Koetsier chaired a session on History of Mechanism and Machine Science.

Prof. Just L. Herder, Ir. Juan Andres Gallego Sanchez, and Ir. Nima Tolou organized the IFTToMM Second Symposium on Compliant Mechanisms (CoMe2011,

<http://compliantmechanisms.3me.tudelft.nl/mw/index.php/CoMe2011>) which attracted 80 participants, 30 interactive presentation and 2 commercial exhibits. 24 papers will be published in the IFTToMM open access journal Mechanical Sciences.

Journals:

The open access journal Mechanical Sciences (www.mech-sci.net) agreed a Memorandum of Understanding with IFTToMM to become an official medium for IFTToMM sponsored events.

Prof. Just L. Herder joined the Editorial Board of Mechanism and Machine Theory as an associate editor for the research fields of static balancing, dynamic balancing, and grasping.

IFTToMM Officers from the Netherlands:

At the General Assembly meeting of the 2011 IFTToMM World Congress, the following individuals were elected:

Prof. Teun Koetsier was elected a member of the Credential Committee.

Prof. Teun Koetsier was also elected a member of the Nominating Committee 2012-2015 at the same event.

Prof. Just L. Herder was the Treasurer of the IFTToMM Executive Committee.

Dr. A.L. Schwab took the position as Chair of the Netherlands MO. He succeeds Prof. Just L. Herder who was elected as Treasurer of the IFTToMM EC.

Dr. Antonius Klein Breteler continues to be the Chair of the Permanent Commission on Standardization of Terminology.

Ir. Volkert van der Wijk and Prof. Just L. Herder were elected into the Technical Committee of Computational Kinematics as member and observer, respectively.

Prof. Just L. Herder was also elected into the newly established Technical Committee of Biomechanical Engineering.

MO POLAND

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Formal term of duties was 2007-2010. The establishing of new structure of Polish Academy of Science is in progress. PC TMM has two affiliations: domestic level – Polish Academy of science, and international level – IFToMM.

1. PRESENTATION OF RECENT ACTIVITIES

1.1. Participation in 2011 IFToMM World Congress, approximately 20 Polish scientists participated;

1.2. Preparations for domestic conference on TMM in 2012;

1.3. Preparation of plans for the next term of duties of the domestic Polish Committee on TMM.

2. MEETINGS AND VISITS

2.1. University of Technology in Radom – 22nd April 2010 (60th Anniversary of the Faculty of Mechanical Engineering); Prof. W. Blajer talked on dynamic simulation of reverse controlled mechanical systems;

2.2. University of Technology in Białystok (Augustów) - 28th June, 2010 (during the domestic conference on TMM);

2.3. AGH University of Technology in Kraków – 12th April 2011, the most important decisions are:

(a) IFToMM-Poland will submit an official proposal to organize IFToMM World Congress in 2019;

(b) Venue would be Kraków, optional excursions to Zakopane will be organized;

(c) Head of Organizing Committee is Prof. Tadeusz Uhl, AGH University of Technology in Kraków.

3. RESEARCH JOINT COLLABORATIONS AND EXCHANGES

Prof. Teresa Zielińska, Warsaw University of Technology, gave lecture “Fundamentals of mobile robots development” at Shanghai JiaoTong University, People’s Republic of China (2010).

Prof. Antoni Gronowicz served as session chair in SYROM (Brasov, Romania), Oct. 2009 and participated TC on Mechanical transmissions. Two papers were presented and published in SYROM 2009, Proceedings, 10th IFToMM Int. Symp. on Science of Mechanisms and Machines, Brasov, Romania, 2009, Ion Vişa (ed.). Dordrecht: Springer, 2010.

Prof. Jan Awrejcewicz on 29th June, 2010 in the Bashkortostan Pedagogical State University, Ufa, Russia, presented a lecture “Smooth and nonsmooth nonlinear dynamical systems”.

Prof. Wiesław Ostachowicz, from Institute of Fluid Machinery in Gdańsk was one of the tutors during the Advanced Course on Structural Health Monitoring, November 25 -26, 2010, Hamburg, Germany.

4. DOMESTIC CONFERENCE EVENTS

2010 in Augustów - Organized by Technical University of Białystok. Chair was Professor Franciszek Siemieniako. The keynote lecture by Professor Jozef Wojnarowski, President of PC TMM on history of achievements of Leonhard Euler. An approximate 80 papers were presented and published in two Polish Scientific journals (indexed by Polish Ministry of Science), selected papers in English were published in journal “Acta Mechanica et Automatica”.

2010 in Zakopane - celebration of 40th Anniversary of establishing IFToMM (1969-2009) (described underneath).

5. PUBLICATIONS

Professor Józef Wojnarowski: 40th Anniversary of IFToMM

(1969-2009), (in Polish);

Professor Józef Wojnarowski: Polish Committee on TMM – term of duty 2007-2011, (in Polish);

Professor Józef Wojnarowski: PC TMM on 40th Anniversary of IFToMM, (in Polish and in English).

Proceedings of the domestic conferences on TMM 2010 (Summaries, CD).

6. FUTURE PLANNED ACTIVITIES

2012: domestic conference – University of Technology in Koszalin (Sarbinowo at Baltic Sea); September 2012.

2013: 3rd International Conference GRAPHS & MECHANICS – continuation of former events in 1993 and 1999;

2019: IFToMM Congress in Cracov-Zakopane, Organizer AGH University of Technology in Kraków.

7. OTHER RELEVANT INFORMATION

7.1. Celebrations of 40th Anniversary of IFToMM (1969–2009). On 26th January 2010, it was unveiling of the commemorating plaque (plate) to honor town Zakopane where IFToMM had been established. The plate was placed on the wall of hotel HYRNY. Greeted by Professor Jan Szlagowski and Prof. Józef Wojnarowski, special talk was by President of IFToMM Professor Marco Ceccarelli, entitled “Role of Mechanism and Machine Science in Technology”. Other guests included Dr. Joe Rooney, Treasury of IFToMM, Prof. Valentyn Kovalenko, Charkowskij Politechniczny Institute, Prof. Peter Solec, Chair of of IFToMM-Slovakia, Prof. Ion Vişa, Chair of IFToMM-Romania and many others.

7.2. IFToMM Congress 2019 in Poland. We kindly propose to organize the IFToMM Congress in Poland to celebrate the 50th Anniversary of establishing IFToMM with venue in Kraków, Poland.

7.3. Proposal for intensification of IFToMM activities within coordination of research programs:

(a) Call for proposals of common research programs;

(b) Common applications for versatile European grants;

(c) Establishing regional IFToMM conference between congresses as satellite events.

MO ROMANIA

Prof. Ion Vişa, Transilvania University of Brasov,

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The Technical Committee on Sustainable Energy Systems (approved by IFToMM EC in 2010 and chaired by professor Vişa) had its first meeting during the World Congress in Guanajuato. The TC is aiming to develop a collaborative framework for research and education on machines and mechanisms, considering the sustainable energy concepts for Energy Efficiency, Energy Saving and Renewable Energy Systems.

The International Conference on Sustainable Energy, CSE 2011, at its 3rd edition is organized every 3 years, since 2005, by Transilvania University of Braşov. The scientific event aimed from the very beginning to gather international researchers, academics, professionals and students, working in the field of sustainable energy and to support dissemination and experience exchange. CSE 2011 represents a scientific event that is dedicated to the promotion and dissemination of R&D results obtained at national and international level in the

field of sustainable energy, environmental protection, innovative products, materials and processes.

During CSE 2011, the TC on Sustainable Energy Systems organized a workshop, gathering participants from 7 countries (Taiwan, Mexico, Austria, Hungary, Poland, Moldavia and Romania). The meeting allowed defining the future actions for the next period, focusing on a broader dissemination of the TC activities, by promoting the sustainable energy systems in world conferences and high level scientific events and by launching a website that should also be a collaborative tool. The CSE 2011 Conference ran in parallel with the Regional RTD Fair, giving thus opportunity for a vivid academia-industry experience exchange.

The IFToMM Romania is an active presence at international level as to the latest Guanajuato World Congress, where a significant group of participants presented 35 papers.

Since 2006, the Romanian Association for the Science of Mechanisms and Machines (ARoTMM) started to organize a National Seminar on Mechanisms, gathering representatives of the 16 national branches. The 2011 Seminar was organized by the University "Stefan cel Mare" of Suceava, being held at Gura Humorului, on March 31–April 2. A special attention was paid to the implementation of modern methods and IT solutions in teaching activities in the field of Mechanisms. Reports were given by each national branch on their activity. A similar event is organized annually in Machine Design. The 31st edition was held in Bucharest, in June 2011. The National Seminar on Machine Elements gathers specialists in the field, from all over the country.

In October 2011, Timisoara Branch organized the 1st Workshop on Mechanisms, Transmissions and Applications (MeTrApp 2011). The co-organizers were the TC Mechanical Transmissions and the TC Micromachines. The papers were reviewed by two independent reviewers, the accepted papers being published by Springer Publishing House.

A training session in ADAMS software was organized in March 2011 by Transilvania University of Brasov for ARoTMM national branches. The participants received a diploma issued by the Romanian Ministry of Education and Research.

MO SERBIA

Prof. Aleksandar Veg, University of Belgrade,

Email: aveg@mas.bg.ac.rs

The activities can be briefed as follows:

1. One new book is published: "Technical diagnosis," by Milos Milovancevic, ME Faculty Nis, 2011, (written in Serbian)
2. One international symposia has been organized in Serbia. Conference official title: RESEARCH AND DEVELOPMENT OF MECHANICAL ELEMENTS AND SYSTEMS. IRMES2011. April 27th to 28th, 2011 in Zlatibor, Republic of Serbia (www.irmes.com/Cached)
3. International symposia attended by Serbian the members. No. of participants 6
4. Graduate works (numbers) 10
5. Master thesis (numbers) 3
6. Doctoral thesis (numbers) 0
7. Patents and innovations (numbers) 4

8. International and national projects (numbers) 6

9. Newly established journals 0

10. Papers published in the International journals (numbers) 8

11. Papers published in the National journals (numbers) 1

12. Scientific meetings (numbers) 2

MO SINGAPORE

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Singapore became a Member Organization in 1998. This was a result of initiation from a group of people from the local universities and research institute, as well as strong encouragement from President of IFToMM Prof. Jorge Angeles.

The founding Chair of the MO Singapore committee was Prof. Low Kin Huat. Residing within the Singapore Industrial Automaton Association (SIAA), the MO Singapore has gained strong supports from the industrial practitioners in the automation equipment and machinery industry. Under the second Chair Assoc. Prof. Chen I-Ming, presence of MO Singapore in IFToMM community continued continues to grow stronger with more people sitting on various Technical Committees.

To reach out to the academia communities and students in the fields of mechanism and machine theory, today, under the current Chair Dr. Lin Wei, MO Singapore has become part of the Robotics and Automation Chapter of IEEE. This will ensure the substantiality of the MO Singapore with larger base of membership. In the coming years, the MO Singapore will continue with membership drive. We will continue to work with the IEEE Robotics and Automation Chapter Singapore for more fruitful joint activities.

Each year, MO Singapore has been regularly organized or co-organized several technical talks and seminars. The following technical talked has been conducted in 2011:

Prof. Behrad Khamesee, University of Waterloo, "Regenerative Electromagnetic Dampers for Vehicle Suspension Systems" on 31st August 2011

Prof. Rolf Johansson, Lund University, "Modeling and Control of a Piezo-Actuated Compensation Mechanism for Industrial Macro-Mini Robot Configurations," on 4th November 2011

MO SLOVENIA

Prof. Karl Gotlih, University of Maribor,

Email: gotlih@uni-mb.si

In the year 2011 in NC SI IFToMM all efforts were directed into participation of Slovenia on the IFToMM World conference in Guanajuato, Mexico. Two papers were presented. Both papers addressed the TC Robotics and Mechatronics with the titles: A reverse engineering technique and its possibilities in robotics, and on the design of workspaces of serial mechanisms. The NC SI FEANI president attended the meeting of the TC Robotics and Mechatronics and the General assembly.

Next year NC SI IFToMM will focus its activities into the promotion of IFToMM to students at the University of Ljubljana and the University of Maribor, and to systematize

the scientific events in Slovenia (congresses, seminars, and workshops) which are compatible with IFToMM. We have to establish and straighten the bounds to Slovenian engineering and scientific associations as the association of Slovenia Engineers (SIZ), the Society of Mechanical Engineers Slovenia (ZSIS) and the Society of Mechanics.

The members of NC SI IFToMM are staff members of the Institute Jozef Stefan in Ljubljana the University of Ljubljana and the University of Maribor.

MO SPAIN

Prof. Fernando Viadero-Rueda, Universidad de Cantabria,

Email: viaderof@unican.es

From 11 to 13 May 2011, we celebrated the XIII Mechanical and Vehicle Engineering Meeting in Ferrol (La Coruña), in the Faculty of Industrial Engineering of the University of Coruña. During this meeting it took place the General Assembly of the Spanish Association of Mechanical Engineering (AEIM). Prof. Fernando Viadero (University of Cantabria), President of the Association and Iftomm Chair Member Organization of Spain, shown a summary of the activity during the four years period of his presidency, and was reelected President of the Association for a second period, until 2015.

The 4th International Symposium on Multibody Systems and Mechatronics (MUSME 2011) was held in Valencia from 25th to 28th October at the ETS de Ingeniería del Diseño of the Universitat Politècnica de València. The Chairman of the Conference was Prof. Vicente Mata.

Jointly with the Moto Engineering Foundation (MEF), the AEIM has promoted the participation of the university community in the second edition of competition MotoStudent. This competition is a challenge among University teams and consists in designing and developing a prototype of a competition motorcycle.

In the 13th IFTOMM World Congress in Guanajuato, Mexico, the Spaniard participation was so high, up to 10 papers, and with an important number of delegates.

MO TUNISIA

Prof. Lotfi Romdhane, Ecole Nationale d'Ingénieurs de Monastir,

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On January 14th, 2011 Tunisia had its revolution. Work did not stop, however 2011 was marked by the organization of the 4th International Congress: Design and Modeling of Mechanical Systems: CMSM'2011, which was rescheduled from March to May 2011 and it took place in Sousse, Tunisia. This event is sponsored by IFToMM and, as usual, one of the main guest speakers was a prominent member of the IFToMM community. This year, the guest speaker was Dr Jean-Pierre Merlet with a plenary session entitled "Mécanique et robotique d'assistance aux personnes âgées". IFToMM Tunisia was also present in Guanajuato World Congress and in the IFToMM sponsored event ISR2011 that took place in Shanghai on November 3-5, 2011.

A paper, under the title "Teaching and Research in Mechanism Theory and Robotics in Tunisia" by L. Romdhane and A. Mlika was published in the IFToMM

sponsored book TECHNOLOGY DEVELOPMENTS: THE ROLE OF MECHANISM AND MACHINE SCIENCE AND IFTOMM, Mechanisms And Machine Science Series, Volume 1, 2011, DOI: 10.1007/978-94-007-1300-0, Marco Ceccarelli Editor.

MO VIETNAM

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Organizing the national Olympia exam in Theory of Mechanism and Machine for students and the national Olympia exam engineering mechanics for students.

Organizing the national scientific conference on dynamics and progressive collapse of cable-stayed bridges in Hanoi, February 2011.

Organizing seminars in "Dynamics and Control" monthly. Participants are university teachers, graduate students and researchers.

Co-organizing the international symposium on Dynamics and Control in Hanoi, September 2011. More than 40 scientific reports were presented at the symposium.

NEWS FROM PERMANENT COMMISSIONS

Nothing received

NEWS FROM TECHNICAL COMMITTEES

TC Biomechanical Engineering

Last June, in Guanajuato, the constitution of a new technical committee: the TC Biomechanical Engineering was approved by the Executive Council.

The TC Biomechanical Engineering will promote study, research and development in musculoskeletal biomechanics, cardiovascular and respiratory biomechanics, dental biomechanics, injury biomechanics, medical devices, orthopaedic biomechanics, rehabilitation engineering and sports biomechanics, among others related topics. The proposed TC deals with the design (synthesis and analysis) of devices, machines, and mechanisms with medical or biomechanical application. The idea of the TC is looking into the parts of biomechanics related to Mechanism and Machine Science. This is not covered by other existing biomechanics societies.

The TC Biomechanical Engineering is chaired by Juana Mayo (University of Seville, Spain). Miguel Silva (IST-Lisbon, Portugal) is the vice-chairman and F. Javier Alonso (University of Extremadura, Spain) is the secretary. Other members of the committee are: Marcus G. Pandy (University of Melbourne, Australia), Luciano L. Menegaldo (Federal University of Rio de Janeiro, Brazil), Marko Ackermann (Centro Universitário da FEI, Brazil), Peter Eberhard (University of Stuttgart, Germany), Moshe Shoham (Technion - Israel Institute of Technology, Israel), Wojciech Blajer (Technical University of Radom, Poland), Paulo Flores (University do Minho, Portugal), Dejan B. Popovic

(University of Belgrade, Serbia), Ming Y. Lee (Chang Gung University, Taiwan), Venkatesh Dubey (Bournemouth University, UK). Andres Kecskemethy (University Duisburg-Essen, Germany) and Just L. Herder (Delft University of Technology, The Netherlands) will act as observers due to others commitments with the IFToMM community.

After the approval by the Executive Council, some other members have shown interest in belonging to the TC Biomechanical Engineering: Bahram Ravani (UCDavis, University of California, USA), Doina Pisla (Technical University of Cluj-Napoca, Romania), Lajos Borbás (Budapest University Technology and Economics, Hungary) and Vincenzo Parenti-Castelli (University of Bologna, Italy) as observer.

From here, all IFToMM members are welcome to participate actively in this new TC.

TC for Multibody Dynamics

The TC for Multibody Dynamics has got 36 members from 21 Member Organizations. The following activities took place in this year.

A special issue with eight contributions presented at the ECCOMAS Thematic Conference Multibody Dynamics 2009, was published in the journal *Multibody System Dynamics* (vol. 25, no. 2) in February 2011. Another special issue, based on eight contributions presented at the EUROMECH Colloquium 515 *Advances and Perspectives of Multibody System Dynamics*, was published in the journal *Mechanics Based Design of Structures and Machines* (vol. 39, no. 2) in April 2011.

The organizers of two conferences celebrated during 2011 accepted IFToMM patronage: IUTAM Symposium on Human Body Dynamics, and ECCOMAS Thematic Conference Multibody Dynamics 2011.

An external link to the TC web page (www.iftomm-multibody.org) was included in the entry “Multibody system” of the Wikipedia, so as to provide more visibility to the site. This entry is the first link that appears when the term “multibody dynamics” is written in Google.

The TC Chair offered a tutorial entitled “Introduction to multibody dynamics” on June 19 in Guanajuato, Mexico, with occasion of the IFToMM 2011 World Congress. Around 15 students attended the tutorial. In the same event, the IFToMM Award of Merit was delivered to Javier Garcia de Jalon, nominated by the TC to the award.

The TC Chair and Vice-Chair, along with two other members of the multibody dynamics community, wrote a contribution for the book “Role of MMS and IFToMM in Technology Development”, recently published by Springer.

Plans for the next future are to continue with the activity in the mentioned directions, making special emphasis on the celebration, in 2012, of the second International Joint Conference on Multibody System Dynamics, co-sponsored by IFToMM.

TC Transportation Machinery TC

Our TC’s Mission is to study research problems from the transportation industry with emphasis on hybridization and electrification of passenger vehicles. We share research

results via quarterly teleconferences and workshops. Additionally, we assist with reviewing papers for the World Congress and we organize an international workshop in a year that does not feature the World Congress. At the present time we have 15 active participants representing 13 countries (Taiwan, Finland, Germany, Poland, USA, Korea, India, Australia, Greece, Slovakia, Serbia, Japan, Czech Republic). In 2011 we have had 3 quarterly teleconferences as well as a face-to-face meeting at the World Congress in Guanajuato, Mexico. We have also had several bilateral visits by participating members (Australia to USA, Taiwan to USA, USA to India, etc.) Recent activities include (i) organization work for an upcoming conference MHCL 2012 in Serbia by Prof. Nenad Zrnic (Serbia), (ii) research into silent chains used on motorcycles by Prof. Chintien Huang (Taiwan), and (iii) modification of a Powertrain test facility to include electric drives by Prof. Nong Zhang (Australia). In 2012, we plan to have a Hybrids workshop in Russia (either Moscow or St. Petersburg) in the June-July time-frame. Further details of our TC and its activities may be found at our web-site: <http://www.gk-md.com/IFTOMM/IFToMM%20TC%20Main%20Page.html>

BOOK SURVEY

In May 2011 the volume *Technology Developments: The Role of Mechanism and Machine Science and IFToMM* became available. Editor is Marco Ceccarelli and Springer published it. In this Marco Ceccarelli, president of IFToMM, the *International Federation for the Promotion of Mechanism and Machine Science*, presents Mechanism and Machine Science (MMS) and IFToMM to the world. The book is the first volume of a series on MMS.

IFToMM is a unique organization. In 1969 in the middle of the Cold War, engineers from behind the Iron Curtain, the Western World and some crucial non-aligned countries, got together and founded IFToMM. I once met a CIA-agent who in the 1950s and 1960s used to brief and debrief American scientists who were in touch with colleagues from communist countries. There is no doubt that the foundation of IFToMM was surrounded by considerable briefing and debriefing from all sides. Fortunately the academic and political interests coincided. Machines were and are one of the pillars of modern scientific technology and they are, moreover, intellectually challenging.

Right from the start IFToMM was international. The USSR, Bulgaria, the German Democratic Republic, Hungary, Poland and Rumania represented Eastern Europe. The West was represented by the USA, Australia, the German Federal Republic, Italy and the United Kingdom. India and Yugoslavia were the non-aligned countries. On the other hand, big parts of the World were not represented.

At the moment IFToMM has 48 member organizations. The Iberoamerican community is represented and so is Asia. The organization has grown but, inevitably, it has also changed its focus. In the 1960s, for example, classical kinematics of mechanisms remained a core discipline. In the past 50 years fast computing, sophisticated software and new applications

have changed MMS. Engineering has always been a multidisciplinary activity, but the number of disciplines involved has only grown. Kinematics, dynamics and gearing are classical subjects but the computer has changed them completely. In the book there are papers on computational kinematics, multibody-dynamics and tribology. Robotics, mechatronics and micromachines are new subjects too. The book has papers on each of these subjects.

In the present volume we find a great variety. After some papers with general considerations chairs of IFToMM Technical Committees and Permanent Commissions express their points of view and finally chairs of member organizations describe the work in their community. Many of the papers are at least partly historical. Jammi S. Rao's paper on turbine blade dynamics nicely illustrates the recent developments in this area in India. Other papers deal with MMS in Armenia, Belarus, Brazil, Canada, PR China, Taiwan, Czech Republic, Georgia, Greece, Hungary, India, Italy, Lithuania, Mexico, Poland, Romania, Russia, Slovakia, Spain and Tunisia. Hanfried Kerle *et al* have written a paper on the role of mechanism models and Burhardt Corves *et al* wrote on the modern equivalent of the models: the digital mechanism and gear library ThinkMOTION. In spite of the great variety of sub-disciplines MMS remains a coherent science. This book illustrates it and so does the flourishing existence of IFToMM.

Teun Koetsier

Report of 1st IFToMM Students International Olympiad on MMS, SIOMMS 2011

On 19-21 April, 2011 Izhevsk State Technical University (ISTU), Izhevsk (Russia) hosted the First Student International Olympiad on Mechanism and Machine Science (SIOMMS). The decision on conducting such Olympiads aimed at attracting young people to deeper studying MMS, propaganda of knowledge and achievements in this science, revealing young talents, increasing IFToMM authority was made at the session of IFToMM Executive Council in Guanajuato, Mexico in June 2009.

In accordance with the EC Regulations, the Olympiads will be held every two years. Students' teams of higher educational institutions from countries with IFToMM Member Organizations can participate.

17 student teams from 8 countries participated in the 2011 competition (China, Czech Republic, Egypt, Hungary, Slovak Republic, Syria, Ukraine and Russia). The official opening ceremony of the Olympiad took place in the Students Palace "Integral" of ISTU. The welcome addresses were made by the Rector of ISTU Prof. Boris Yakimovich, world famous designer of small arms Mikhail Kalashnikov, IFToMM President Prof. Marco Ceccarelli, Minister of Education and Science of the Udmurt Republic Prof. Andrei Kuznetsov and Chairman of 2011 Olympiad Organizing Committee prof Veniamin Goldfarb.

The main event in solving of contest problems was arranged on the same day. Each participant of the Olympiad was

provided with a separate place in the library of ISTU, contest problems and everything necessary for solving them. In the evening all the team members were invited to jazz festival in the Students Palace "Integral".

The following day started with open keynote lectures of the leading scientists on MMS for the Olympiad participants and students of ISTU. The lectures were read by IFToMM President Prof. Marco Ceccarelli and members of IFToMM Executive Council Prof. Joseph Rooney and Prof. Veniamin Goldfarb. After that the Olympiad participants were involved in the exciting social program with visits to the museum of the famous composer Peter Tchaikovsky and Mikhail Kalashnikov museum of small arms. At the same time, the Olympiad jury consisting of the team representatives was evaluating the students' works. The social program continued on the final day of the Olympiad with the visit to the Udmurt ethnographic outdoor museum in the village Ludorvai, and the jury completed their work with summing up the final results of the Olympiad. The final ceremony of awarding the winners and official closing of the Olympiad was arranged on 21 April, 2011 in the afternoon. The team winners were:

- 1 place: Chuvash State University (Cheboksary, Russia),
- 2 place: Shanghai Jiao Tong University (Shanghai, China),
- 3 place: Volgograd State Technical University (Volgograd, Russia).

In the personal competition the winners were the students from Cheboksary (Russia) and Shanghai (China) since they got the same final score. The second place (silver medal) was for the student from Shanghai (China), and the third place (bronze medal) was for the student from Volgograd (Russia).

Each participant and the team were issued special certificates signed by IFToMM President and Rector of ISTU, the winners were given the gifts. A special prize – for a will-to-win spirit was awarded to the team of Wuhan University of Science and Technology (China).

The Olympiad was closed with the reception organized by the Rector of ISTU for all the participants.

Prof. Veniamin Goldfarb

(Chairman of SIOMMS 2011 Organizing Committee)

2nd IFToMM Students International Olympiad on MMS SIOMMS 2013

Shanghai Jiao Tong University (SJTU) is pleased to invite university teams to participate at The 2nd IFToMM Students International Olympiad on Mechanism and Machine Science (SIOMMS 2013) that will be held on April 19-21, 2013. This second IFToMM International Student Olympiad is scheduled as one of the main activity of IFToMM, the International Federation for the Promotion of Mechanism and Machine Science. The first IFToMM SIOMMS was successfully held in Izhevsk State Technical University (ISTU), Izhevsk, Russia in 2011.

The teams consisting of 3 bachelor and master students and 1 or more tutors are invited to take part in the Olympiad. Each university may send only one team. The students for each

university team may be selected on the basis of its own local selection competition.

The working language of the Olympiad is English. The problem topics at the SIOMMS 2013 will include structural analysis and synthesis of mechanisms, kinematics of planar mechanisms, force analysis of mechanisms, kinematic analysis of cam mechanisms, gearings (kinematics, geometry, efficiency), adjustment of dynamic characteristics, mechanical governors, and balancing of rotating masses.

The application can be via website or by email. The application form will be available from the website <http://siomms2013.sjtu.edu.cn>. The deadline to submit electronic application form is October 31, 2012, and the registration fee should be paid before December 31, 2012. The registration fee is 150 USD for each participant, which covers the participation in the Olympiad, meals and social program. The accommodation has to be covered by the participants.

The host city Shanghai is the largest and most prosperous city in China. It lies on the west coast of the Pacific, and is at the mouth of the Yangtze River. Shanghai occupies an area of 7 thousand square kilometers and has a population of 19 million. Shanghai is a modern and fast paced city, rich in history and culture. It is a fantastic city to be walked, wandered, explored and discovered in your own time and, in your own style. More information can be found at <http://www.meet-in-shanghai.net>.

The transportation to and in Shanghai is very convenient. There are two international airports, i.e. Shanghai Pudong International Airport (PVG) and Shanghai Hongqiao International Airport (SHA), three large stations, i.e. Shanghai Railway Station, Shanghai South Railway Station and Shanghai Hongqiao Railway Station, airport shuttle buses, 11 subways, buses, and taxi.

The host university Shanghai Jiao Tong University (SJTU) is the second oldest modern university and among top ten universities in China. The name "Jiao Tong" comes from the book Yi Jing. Literally, "Jiao" means unite and "Tong" means harmony. In the book it says, when heaven and earth unite in deep harmony, peace and blessing descend upon all living things; when leaders and people unite and combine their influences, the nation enjoys universal flowering and prosperity. With a shining history of more than 115 years, SJTU has grown with and shared weal and woe with the country. At present, it is implementing a grand blueprint for future development and determined to make continued efforts to build itself into a first class university in the world. More information can be found at the website <http://en.sjtu.edu.cn>.

For more information please visit the SIOMMS webpage and/or contact

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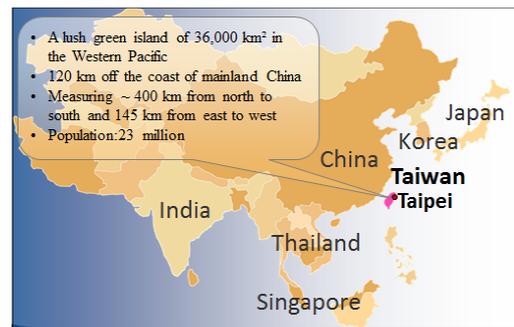
Call for 2015 IFToMM World Congress

Date: October 25-30, 2015
Venue: Taipei, Taiwan
Webpage: www.iftomm2015.org
Secretariat Email: iftomm2015@ntu.edu.tw
General Chair: Prof. Shuo Hung Chang
Email: shchang@ntu.edu.tw
Tel: +886 2 3366 2694
Fax: +886 2 2363 1755
Department of Mechanical Engineering
National Taiwan University, Taiwan (China-Taipei)

Taipei City has top wireless broadband coverage in the world. Majority of countries do not need visa to enter Taiwan for a 30 days visit. VISA requirement can be found in www.boca.gov.tw.

Traveling information is available in <http://taipeitravel.net/en/>

Weather in October is usually with 21~27°C.



Taipei is easy to access by 200 flights from 56 major cities.



Taipei 101 is the 2nd tallest building in the world with height of 508 meters.

Forthcoming IFToMM Sponsored Conferences

Event	Place	Date	Contact person
HMM2012 Intl. Symposium on History of Machines and Mechanisms	Amsterdam, The Netherlands	May 7-11, 2012	Teun Koetsier t.koetsier@vu.nl http://hmm2012.few.vu.nl/home
14th IFAC Symposium on Information Control Problems, INCOM2012	Bucharest, Romania	May 23-25, 2012	Theodor Borangiu incom12@cimr.pub.ro http://www.incom12.ro/
The 7th Int. Symposium Machine and Industrial Design in Mechanical Engineering KOD 2012	Balatonfüred, Hungary	May 24-26, 2012	Siniša Kuzmanović kod@uns.ac.rs www.kod.ftn.uns.ac.rs
IMSD The Second Joint International Conference on Multibody System Dynamics	Stuttgart, Germany	May 29-June 1st 2012	Prof. Peter Eberhard peter.eberhard@itm.uni-stuttgart.de http://www.imsd2012.uni-stuttgart.de/
MTM - Robotics 2012 The Joint Int.Conference of the XI Int.Conference on Mechanisms and Mechanical Transmissions and the Int. Conference on Robotics	Clermont-Ferrand, France	June 6-8, 2012	Prof. Grigori Gogu E-mail: mtm.robotics2012@ifma.fr http://www.ifma.fr/mtm-robotics2012
13th International Symposium Advances in Robot Kinematics	Innsbruck, Austria	June 24-28, 2012	ark2012@uibk.ac.at http://geometrie.uibk.ac.at/ark2012/
The Second ASME/IFToMM Int. Conference on Reconfigurable Mechanisms and Robotics ReMAR	Tianjin University, Tianjin, China-Taipei	July 8-11, 2012	Prof. Jian S Dai, jian.dai@kcl.ac.uk www.ReMAR2012.com
8th International Conference "Mechatronic Systems and Materials" MSM'2012	Bialystok, Poland,	July 8-13, 2012	Zbigniew Kulesza z.kulesza@pb.edu.pl http://www.msm2012.pb.edu.pl
2 nd IFToMM Int'l Workshop on Hybrids	Moscow, Russia	July 15-16, 2012	Madhu Raghavan madhu.rahgavan@gm.com
15th Int. Conference on Geometry & Graphics	McGill University, Montreal, Canada	Aug 1- 5, 2012	Paul Zsombor-Murray http://www.icgg2012.org
The 6th Asian Conference on Multi-body Dynamics (ACMD 2012)	Shanghai Jiao Tong University, China	August 26-30, 2012	Professor Yoshiaki Terumichi y-terumi@sophia.ac.jp
The Eight International Conference on Vibration Engineering and Technology of Machinery (VETOMAC-VIII)	Gdansk, Poland	September 3-6, 2012	Prof. Romuald Rzadkowski , z3@imp.gda.pl http://www.imp.gda.pl/vetomac-viii
21th International Workshop on Robotics in Alpe-Adria-Danube Region RAAD 2012	Naples, Italy	Sep 17-20, 2012	Prof.Cesare Rossi cesare.rossi@unina.it raad2012secretariat@unina.it www.raad2012.unina.it
20th Int. Conference on Material Handling, Constructions and Logistics, MHCL2012	Belgrade, Serbia	October 3-5, 2012	Prof. Nenad Zrnica nzrnica@mas.bg.ac.rs conference@mhcl.info http://www.mhcl.info
2nd IFToMM Symposium on Mechanism Design for Robotics	Beijing, China	Oct 12-14, 2012	Prof. Lu Zhen, zhenluh@buaa.edu.cn shijian@buaa.edu.cn http://IFTOMM-MDR2012.buaa.edu.cn
The 2nd IFToMM Asian Conference on Mechanism and Machine Science	Tokyo Institute of Technology, Japan	November 7-10, 2012	Prof. Masafumi Okada, Asian-MMS2012@jc-iftomm.org http://www.jc-iftomm.org/Asian-MMS2012/
IFToMM Int. Student Olympiad on MMS SIOMMS 2013	Shanghai, China	April 19-21, 2013	Weizhong Guo, wzguo@situ.edu.cn
5 th World Tribology Congress	Torino, Italy	September 8-13, 2013	Prof. Terenziano Raparelli terenziano.raparelli@polito.it www.wtc2013.it
The Second Workshop on Mechanisms, Transmissions and Applications	Bilbao, Spain	October 02-04, 2013	Victor Petuya victor.petuya@ehu.es

IFToMM publication frames

• affiliated Journals:

Mechanism and Machine Theory <http://www.elsevier.com>
Problems of Mechanics <http://pam.edu.ge>
Open-access Mechanical Sciences <http://www.mech-sci.net>
Chinese Journal of Mechanical Engineering
<http://www.cjmenet.com>
Advances in Vibration Engineering
<http://www.tvi-in.com/index.asp>
Mechanics Based Design of Structures and Machines
<http://www.tandf.co.uk/journals/titles/15397734.asp>

- Book series on MMS <http://www.springer.com/series/8779>
- Book series on History of MMS
<http://www.springer.com/series/7481>

IFToMM bodies and contacts

General Assembly

The General Assembly is the supreme body of the Federation and determines its policy. It is composed of the Chief Delegates of IFToMM Organization Members and members of the Executive Council.

Executive Council

The Executive Council manages the affairs of the Federation between the sessions of the General Assembly. It is elected every four years, meets annually, and is composed of the President, Vice-President, Secretary-General, Treasurer, and six ordinary members.

Commissions and Committees

Each Permanent Commission and Technical Committee is composed of a Chairperson, appointed by the Executive Council, a Secretary and members, nominated by the Chairperson and appointed by the Executive Council. A Chairperson shall not serve for more than two terms consecutively. The general goals for the work of the Commissions and Committees are aimed at promoting their fields of interest by attracting researchers and practitioners, including young individuals, in order to:

- define new directions in research and development within their technical areas;
- establish contacts between researchers and engineers;
- initiate and develop bases and procedures for modern problems;
- promote the exchange of information;
- organize national and international symposia, conferences, summer schools, and meetings.

Mission:

To promote research and development in the field of Machines and Mechanisms by theoretical and experimental methods, along with their practical applications

Vision:

To provide leadership for cooperation and development of modern results in the Mechanism and Machine Sciences by assisting and enhancing international collaboration.

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- Gearing and Transmissions
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- Reliability
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- Rotordynamics
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