




In Memory of Past PC Members

Marco Ceccarelli^(✉) 

University of Rome Tor Vergata, Rome, Italy
marco.ceccarelli@uniroma2.it

Considering the generational change in progress and desirable to confirm the success of the PC for History of MMS commission, the HMM2022 symposium is also planned with particular attention to the memory and merit of the commission members who recently passed away. In particular, the HMM2022 symposium was also organized in memory of the emblematic personality of the following past PC members: Carlos Lopez-Cajun, Mexico; Stefano Paipetis, Greece; J.S. Rao, India; Alberto Rovetta, Italy; who have made notable contributions not only to the commission and IFToMM community but also in various technical-scientific fields of the MMS disciplines. Below are short biographical notes in memory and indication of their personalities as an example of inspiration for the activities within the commission and the entire IFToMM community.

1 Prof Carlos López-Cajún (1948–2020)



Prof Carlos López-Cajún has been a great IFToMMist contributing and supporting significantly activities of the Permanent Commission of History of MMS in organization of events and exploration of the history of IFToMM and MMS with very valuable publications.

He was born on January 18, 1948 in Campeche, Mexico and passed away on Sunday 20 December 2020 in hospital in Queretaro, Mexico.

Prof Carlos López-Cajún has been a great IFToMMist as a distinguished MMS scientist figure with a gentleman dynamic attitude in his ideas and proposals with a remarkable ability to connect people and to make things happen. He has been a very prolific MMS scientist with a great reputation worldwide, not only within the IFToMM

community, in domains of design and kinematics of mechanisms, with a great interest on the history of MMS and related people.

Prof. López-Cajún got his Bachelor and Master degrees on Mechanical Engineering from Universidad Nacional Autónoma de México (UNAM) in Mexico City and his PhD from Case Western Reserve University, USA in 1982. He worked for some years in Industry and then he moved to Universidad Autónoma de Querétaro, campus San Juan del Río, where he got the position of Full Professor in Mechanical Engineering in 1996. He has been Visiting Researcher at McGill University, Quebec, CA, and at University of Notre Dame, USA, while being Professor at the Faculty of Engineering of UNAM. He was a member of the Mexican Academy of Engineering, Member of ASME, strong promoter of IFToMM Mexico, and a Founder Member of the Mexican Society of Mechanical Engineering (SOMIM). He has been awarded with several honors by local, national and international institutions, among which it may be highlighted the Mexican National Researcher award. He served IFToMM as Member of the PC on History of MMS, Member of the Executive Council and also as Secretary General in 2008–2011. Moreover, he proposed and contributed to the organization of the 13th IFToMM World Congress held at Guanajuato, México in 2011 and he also was Chair of the HMM2016 Symposium on History of Mechanism and Machines held at Querétaro, México in 2016.

Since the beginning of his long academic career he gave courses on Mechanics of Transmissions and Mechanism Design, and many other courses always with special attention to Mechanism Science, even within invited activities all around the world so that he is remembered also as a great teacher.

He has been member of several scientific committees for international conferences and journals as result of his reputation of an intense scientific activity that is documents by papers, books (for teaching and with research results), and patents. Significant are the book on Cam Transmissions co-authored with prof Jorge Angeles and the book on Mechanism Design (in Spanish) coauthored with prof Marco Ceccarelli. He has contributed to many projects in different topics, beside Mechanism Design, like in Biomedical devices, Space systems, and History of Engineering and Machines with achievements in highly disseminated publications.

Prof Carlos López-Cajún has been a prestigious figure, who has been admired worldwide also for his unique attitude to combine friendships and scientific activity in working the true spirit of IFToMM for collaboration, sharing, and improving the technology for the benefit of the society in the welfare of human beings.

Mario Acevedo, Chair of IFToMM Mexico.

Marco Ceccarelli, past IFToMM President.

2 Stefanos A. Paipetis (1938–2020)



On May 8, 2020, Professor Stefanos A. Paipetis passed away at the age of 82 after a short fight with heart illness.

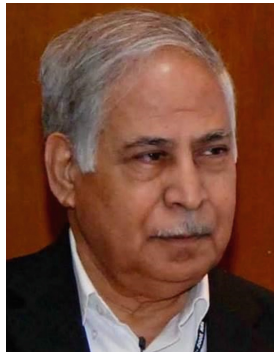
He served the University of Patras from many positions, as a member of the Rectorate Board, the Chairman of the Mechanical Engineering and Aeronautics Department Faculty Board and many other Committees. Prof Paipetis broad research reached across disciplines and captivated both students and faculty with his insight and enthusiasm. His immense and rich work has influenced the research of many of us and has shaped several generations of researchers worldwide, not only in Greece.

He was a distinguished member of IFToMM Greece and his contribution in Mechanics, mechanics of materials, fracture mechanics, Vibration, and the History of Technology is highly esteemed. He is the author of numerous papers and books on a vast area of research issues in engineering, along with a wealth of works on history, poetry, and art. A keen interest in the origins of technology in the ancient world, and the contribution of ancient inventions in the progress of human society can be traced in the books and Conference Proceedings that Prof Paipetis has edited during his lifelong career of service and leadership at the University of Patras. We are all immeasurably grateful for all he has given to us through his lifetime in the IFToMM federation since its very beginning, both institutionally and scientifically, as well as personally.

Thomas Chondros, Chair of IFToMM Greece.

Marco Ceccarelli, past IFToMM President.

3 J. S. Rao (1939–2020)



Prof. J. S. Rao made phenomenal contributions to the fields of engineering and education, including history of mechanical engineering. He was an inspiring teacher much loved by his students, and a dedicated professional immensely admired by colleagues and associates.

Jammi Srinivasa Rao was born on 27th December 1939 in Madugula village in Visakhapatnam district in the state of Andhra Pradesh in India. His father was an official at the Madugula Fort estate. He lost his mother at a very early age and was brought up by his sisters. The most significant moment of his early life was to have received the blessings of the Father of the Nation Mahatma Gandhi, at Samalkot railway station.

He received his Bachelor of Engineering degree in Mechanical Engineering with Honours in 1960 from Andhra University. Thereafter he completed his M.Tech. from the Indian Institute of Technology (IIT) Kharagpur in 1963 and obtained his Ph.D. (1965) and D.Sc. (1971 while being on the faculty from the same institute. Professor J.S. Rao became a full professor at IIT Kharagpur in 1970. He then moved to IIT Delhi in 1975, to establish the Center for Industrial Tribology, Machine Dynamics and Maintenance Engineering. He also chaired the Department of Mechanical Engineering at IIT Delhi and subsequently occupied the Bharat Heavy Electricals Ltd. (BHEL) endowed Chair. Prof. Rao served the Government of India for five years during 1981–86 as Science Counsellor at the Indian Embassy in Washington DC. He played an important role in setting up linkages in science and technology between the US and India. In the year 2000 Professor Rao moved from academics to industry on a permanent basis. He became the Chief Technology Officer at QUEST, Bangalore and played a major role in its rapid, nearly ten-fold, growth in four years. He later assumed the role of CSO at ALTAIR, Bangalore. He also provided academic services to Kumaraguru College of Technology, Coimbatore, KL Deemed University, Vijayawada and several other Educational Institutions.

Prof. J.S. Rao's research interests covered Vibrations, Blade and Rotor Dynamics, Design, Theory of Machines and Mechanisms and Thermo Fluid Mechanics, with interest on historical backgrounds. He was very active in servicing in the community at several positions and very prolific in publications and teaching.

Professor J.S. Rao was a visiting Professor at many universities around the world.

Notable accomplishments amongst several consultancy jobs were, investigation of the catastrophic failure of an Atomic Power plant in Narora, India, where the root cause was identified through successful analytical simulations, and investigations into the brake-squeal problem of Washington Metro trains. He was a full-time consultant to Stress Technology Inc., Rochester.

Prof. J.S. Rao played a significant role in advancing design culture in private industry in India, particularly in the fields of rotor and blade dynamic technologies for several multinational companies like, General Electric, Nuovo Pignone, Pratt and Whitney, Rolls Royce and GE Hydro. He contributed significantly to the design of LP Compressor for the Kaveri engine of the Light Combat Aircraft and to the rotor dynamic design of High-Speed Cryogenic Pumps for Last Stage of Geostationary Launch Vehicle for ISRO. Professor Rao was also a Director on the Board of GMR Energy Group.

Prof. J.S. Rao played a significant role in the establishment of IFToMM, right from its inception – in preparing the constitution and signing the same at the inaugural ceremony in 1969 in Poland. He was Chairman for the Sixth Congress held in New Delhi in 1983. He was a member of its executive council. He also played a major role in establishing the Rotor Dynamics Technical Committee of IFToMM and chaired it for two terms, steering it into a leading and very reputed international body; he was elected lifetime Emeritus Chairman of this committee. He was also chairman of Permanent Commission on Conferences and member of several committees over the years for IFToMM, including the Permanent Commission for History of MMS.

Prof. J.S. Rao was honoured by several bodies in India and worldwide for his outstanding scientific achievements and developing international understanding in science and technology. He was President of the Indian Society of Theoretical and Applied Mechanics (ISTAM) and founder President of the Vibration Institute of India (TVII). Prof Rao was the Chief Editor and also the Founding Editor of the journal “Advances in Vibration Engineering” (AVE) which was established in 2002. The journal was subsequently renamed as “Journal of Vibration Engineering & Technologies” (JVET) in 2014. He was honoured with the IFToMM Distinguished Service Award 2004 and in 2011 with IFToMM honorary membership. The J.S. Rao Medal in Vibration Engineering was established in 2017 in honour of Prof. J.S. Rao for his enormous contributions in the relevant field.

Prof. J.S. Rao passed away in Bangalore, in the early hours of 4th July 2020 after a brief illness.

Chitta Amarnath, Chair of IFToMM India.

Marco Ceccarelli, past IFToMM President.

4 Prof Alberto Rovetta (1940–2020)



Prof Alberto Rovetta has been a great IFToMMist of a polyhedric activity and figure with a dynamic (volcanic) attitude in his ideas and proposals. He has been a very prolific MMS scientist with a great reputation worldwide not only within the IFToMM community, with interest in the history of IFToMM and MMS documented with very valuable publications.

He was born in Brescia on 19 June 1940 and he worked out a brilliant academic career at Politecnico di Milano. He started his research activity under the guidance of Prof Giovanni Bianchi, co-founder of IFToMM and former IFToMM president, and got the full professor position for Mechanics of Machinery in 1980. Since then he gave courses on Mechanics of Robots, and many other courses in the domain of Mechanics of Systems with special attention to robots, also abroad in several periods along his career all around the world.

Prof Alberto Rovetta worked positions in several international bodies (IEEE, IFAC, ASME, NASA, NATO, UNESCO and Academies) and mainly in IFToMM for which he was member of IFToMM Executive Council and chair of the TC Micromachines, beside being member in several TCs and PCs also with an initiator activity and continuous participation. He has been member of scientific committees for international conferences and journals as result of his reputation of an intense scientific activity that is documents by more than 400 papers, over 20 books (for teaching and with research results), and several patents. He has contributed to many international projects in different topics, beside Robotics, like in Biomedical devices, Space systems, tele-surgery, Cultural Heritage, and history of engineering and technology. He has been promoter and organizer of events for scientific dissemination and promotion, among which it is to note the 1995 IFToMM world Congress that was held very successfully in Milan. His achievements range from pioneering robot designs like a very first wrapping tendon-driven hand through medical devices like innovative limb prosthesis to discovering the ancient machine technologies like in the bearing design in the Tutankhamen chariot. He has been awarded with several honors by local, national and international institution, among which it may heighthed the IFToMM Award of Merit in 2010.

Prof Alberto Rovetta has been a prestigious figure, who has been admired and to be taken as inspiration, also for his unique attitude to combine friendships and rigorous scientific activity in working out the true spirit of IFToMM for collaboration, sharing, and improving the technology for the benefit of the society in the welfare of human beings.

He passed on Wednesday 25 November 2020 at his home in Milan.

Alessandro Gasparetto, Chair of IFToMM Italy.

Marco Ceccarelli, past IFToMM President.