
IJMRS overview

Dan Zhang

Department of Automotive, Mechanical and
Manufacturing Engineering,
Faculty of Engineering and Applied Science,
University of Ontario Institute of Technology,
2000 Simcoe Street North, Oshawa, Ontario, L1H 7K4, Canada
Fax: 905-721-3370 E-mail: Dan.Zhang@uoit.ca

Biographical notes: Dan Zhang is a Full Professor and Canada Research Chair in Robotics and Automation, Chair of the Department of Automotive, Mechanical and Manufacturing Engineering at University of Ontario Institute of Technology. He has published 164 journal and conference papers, four books, seven book chapters and numerous other technical publications. He serves as a member of Natural Sciences and Engineering Research Council of Canada (NSERC) Grant Selection Committee. He is also a Fellow of the Engineering Institute of Canada (EIC) and of the Canadian Society for Mechanical Engineering (CSME). He is a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE), of SME, and an ASME member.

The rapid development of integrated mechanisms and robotic technologies has made significant contributions in immensely different working environments ranging from modern manufacturing to social healthcare and medical applications. It is expected that progress in mechanism research and robotic systems will play an important role in enhancing the technical world and even improving the daily life of human beings in the 21st century. However, great challenges are continually encountered, in particular for performance-critical application scenarios where precision, safety, sustainability, resilience, and artificial intelligence are highly demanded.

As a consequence, the *International Journal of Mechanisms and Robotic Systems (IJMRS)* is launched, aiming to become an active forum for scholars, academia and research institutions, industries, policy makers and government agencies. *IJMRS* targets all topics from design to product, and from laboratory to industry in areas of mechanisms and robotics.

IJMRS is a multidisciplinary journal that publishes papers with high quality and significance associated with mechanisms and robotics to address the related issues in the fields of manufacturing, service, and healthcare, etc. Importance is also placed on robotic applications that are sustainable. The contributions can conduct state-of-the-art research on theoretical investigations and/or practical applications that will support and foster theory development and/or technology improvements related to the journal topics.

This journal covers novel design concepts, theories and methodologies, together with a diversity of application fields including: machine tools, vehicle simulator, medical robots, micro robots, pick-and-place robots, cable robots, reconfigurable robots, bio-inspired robots, flexible robots, mobile robots, humanoid robots and so on. *IJMRS* will become the effective world forum for stimulating and sharing global knowledge to advance the innovative theories and applications in mechanisms and robotics technology.