Special Issue

Advances in Dynamic Analysis of Multibody Mechanical Systems

Message from the Guest Editors

This Special Issue aims to explore the latest advancements in the modeling, simulation, and dynamic analysis of multibody mechanical systems. These systems, composed of multiple interconnected bodies interacting through joints and external forces, find applications in a wide range of fields, from automotive to aerospace and robotics to biomechanics. In particular, it will focus on theoretical and practical developments that enhance the understanding of complex dynamic behaviors, with particular attention to innovative numerical approaches, optimization methods, and advanced control techniques. Studies addressing topics such as nonlinear dynamics, system stability, and realtime simulation will be of special interest. Contributions that demonstrate the application of these advancements in real-world scenarios, highlighting improvements in efficiency, accuracy, and computational performance, are highly encouraged.

Guest Editors

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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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