Special Issue

Dynamic Analysis of Multibody Mechanical Systems

Message from the Guest Editor

The central goal of this Special Issue is to offer an overview of the state-of-the-art research in the kinematic, static, and dynamic analysis of multibody mechanical systems, on the development of effective and efficient algorithms to address these issues, and on the engineering applications that lie in this context. Consequently, the subjects covered in this Special Issue belong to a broad framework and encompass a wide range of fundamental aspects and engineering problems. The topics of interest for this Special Issue include, but are not limited to, mathematical modelling of articulated mechanical systems, dynamic and vibration analysis approaches, experimental model validation techniques, finite rotation and large deformation problems concerning rigid-flexible multibody systems, methodologies for formulating and solving the differential-algebraic equations of motion, nonlinear control techniques for controlling the dynamic behavior of multibody systems, developments in the finite element technologies, and advances in the kinematic and geometric description of the motion in general.

Guest Editor

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Deadline for manuscript submissions

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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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