



Design and Experimental Activity of Testing Machines and Mechanical Test Rigs

Guest Editors:

Prof. Dr. Ciro Santus

Department of Civil and Industrial Engineering—DICI, University of Pisa, Largo Lucio Lazzarino 1, 56122 Pisa, Italy

Dr. Massimiliano De Agostinis

Department of Industrial Engineering, University of Bologna, Viale del Risorgimento, 2, 40136 Bologna, Italy

Deadline for manuscript submissions:

30 November 2024

Message from the Guest Editors

Many mechanical applications require very specific testing of components and materials, such as turbomachinery, which undergoes fretting fatigue or dynamic vibrations, full-scale testing of large components, or gears of any size and other mechanical power transmission components, etc. Each of these applications usually require a dedicated test rig or at least the development of a piece of equipment to be combined with an already-existing testing machine. Most of the time, these testing facilities need to be both conceived and then designed and commissioned. This activity is usually quite demanding, not only in terms of budget, but also quite challenging from a design point of view. Moreover, these testing machines usually require a significant electronic and control part which needs to be interfaced and properly tuned with the mechanical devices.

This Special Issue aims to comprehensively showcase all the steps of the design of any of these testing devices. Both the mechanical design and/or the control systems are interesting topics of this Special Issue.





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Control and Optimization)

Contact Us

Machines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/machines
machines@mdpi.com
[X@Machines_MDPI](https://twitter.com/Machines_MDPI)