



machines

an Open Access Journal by MDPI

IMPACT
FACTOR
2.6

CITESCORE
2.1

State of the Art in the Field of Machine and System Testing to Assist in the Diagnosis and Prognosis of Failures

Guest Editor:

Dr. Pascal Vrignat

PRISME, University of Orléans, EA
4229, 45072 Orléans, France

Deadline for manuscript
submissions:

15 October 2024

Message from the Guest Editor

Dear Colleagues,

The increasing complexity of industrial processes, the continued goal of achieving higher profits, and increasingly demanding production constraints call for the implementation of a proactive and sustainable maintenance policy. Adapting maintenance policies that integrate the concepts and obligations of so-called sustainable development is a real challenge for companies. This can concern proactive maintenance operations aimed at providing balance between the social, environmental, and economic dimensions. Such a policy requires the introduction of substantial upstream analysis and the establishment of tools to validate process performance continuity. Consequently, and in an Industry 4.0 context, being able to anticipate a system breakdown based on its estimated degradation, while proposing a time window for a maintenance intervention has become essential. The aim is to avoid a failure with a particularly significant impact. The approaches and methods of Prognostics and Health Management (P.H.M) provide many answers.

This Special Issue looks at the current methods and tools available to meet the needs of P.H.M.



mdpi.com/si/178635

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*)

Contact Us

Machines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/machines
machines@mdpi.com
X@Machines_MDPI