Special Issue

Health Condition Monitoring, Intelligent Operation and Maintenance of Wind Turbines

Message from the Guest Editors

This Special Issue focuses on the health condition monitoring and intelligent O&M of wind turbine generators. It aims to gather the latest research findings and advancements in relevant fields both domestically and internationally, facilitate academic exchanges, and promote the development and application of intelligent O&M technologies for wind turbines. The topics of interest for this Special Issue include, but are not limited to, the following:

- Intelligent sensing technologies;
- Advanced signal processing algorithms;
- Dynamic modeling and fault simulation of key components;
- Fault warning and identification of key components in wind turbine generators;
- Remaining useful life prediction based on deep learning;
- Digital twin-driven fault diagnosis of wind turbines;
- Knowledge graph and large-model technologies;
- Research on O&M technologies and modes for offshore wind power in deep and far sea areas;
- Predictive maintenance strategies for wind turbine generators.

Guest Editors

Prof. Dr. Ronghua Zhu

Dr. Cailiang Zhang

Dr. Chaoge Wang

Dr. Zepeng Liu

Deadline for manuscript submissions

15 March 2026

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About the Journal

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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