

## Special Issue

# Digital Twins and Advanced Fault Modeling in the Condition Monitoring of Electric Machines

### Message from the Guest Editor

A digital twin serves as a dynamic, real-time, virtual replica of an electric machine, which enables detailed analysis of electric machine operation under varying operating conditions. This feature of digital twins, as a result, leads to a more accurate investigation and better understanding of the monitoring and fault detection of electric machines. Additionally, advanced fault modeling allows researchers to replicate a wide range of fault scenarios, including electrical, mechanical, and thermal, and to improve the understanding of the most significant operational system parameters, and use this knowledge to enhance the accuracy, reliability, and efficiency of electric machines. This is a call for papers for a Special Issue on “**Digital Twins and Advanced Fault Modeling in the Condition Monitoring of Electric Machines**”. This Special Issue aims to provide a platform for scientists and researchers to present their latest advancements, showcase significant achievements, and discuss ongoing challenges and future directions in this rapidly evolving field.

### Guest Editor

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### Deadline for manuscript submissions

28 February 2026



## Machines

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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.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
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