

## Special Issue

# Future Trends in Advanced Design of Electrical Machines, Drives and Electric Vehicles Using Additive Manufacturing Approaches

### Message from the Guest Editors

The additive manufacturing approach is considered a new manufacturing technology method and is evolving dynamically in recent years. This novel approach opens a new path to overcome the conventional manufacturing problems and challenges by providing more design freedom, new ranges of materials, and lightweight and complex geometries. This Special Issue will provide a forum for researchers and practitioners to exchange their latest theoretical and technological achievements and identify critical issues and challenges for future investigation in the design of electric machine drives using additive manufacturing approaches. The submitted papers are expected to raise original ideas and potential contributions to theory and practice. Topics include, but are not limited to, the following research areas: - Iron core; - Windings and insulations materials; - Permanent magnets; - Mechanical and structural parts; - Thermal management systems; - Integrated electrical machines and drives (IMD); - Multi-material systems for the fully additively manufactured electrical machines.

### Guest Editors

Prof. Dr. Antonio J. Marques Cardoso

Dr. Payam Shams Ghahfarokhi

Prof. Ants Kallaste

Dr. Fan Wu

### Deadline for manuscript submissions

closed (17 July 2023)



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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

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