

## Special Issue

# Innovative Applications of Multiphase Machines

### Message from the Guest Editors

Machines with more than three phases provide multiple advantages in comparison to conventional three-phase ones. The fact that the power is split among a higher number of phases makes it possible to decrease the rating of the power semiconductors. On the other hand, the greater number of degrees of freedom enables enhanced potential regarding applications such as fault-tolerant drives, integrated battery chargers, bearingless machines, multimotor drives, increased power density by harmonic injection, or parameter estimation. Accordingly, the attention devoted to multiphase drives has not ceased to increase in recent years in different contexts, including electric transportation and wind or marine generation. This Special Issue calls for papers that explore innovative applications of multiphase drives, in terms of novel control and modulation techniques, design and modeling approaches, drive topologies, or fault diagnosis algorithms.

### Guest Editors

Dr. Alejandro Gómez Yepes

Dr. Ignacio Gonzalez Prieto

Prof. Dr. Ayman Abdel-Khalik

### Deadline for manuscript submissions

closed (31 October 2022)



## 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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