## **Special Issue**

# Advances in Electrical Machines, Drives and Vehicles

## Message from the Guest Editors

The current industrial revolution requires a high level of control and efficiency in electrical machines.

Additionally, the electrification of many types of equipment and machines such as vehicles requires very high power electronics capabilities. In light of the two aforementioned facts, IEEE Industrial Electronics Egypt, Guadalajara, and its joint Austria chapter are organizing a conference to study the advances in electrical machines, drives, and vehicles. In relation to the conference, we are also organizing a Special Issue targeting cutting-edge research on this topical issue.

Topics may include, but are not limited to, the following

## Topics may include, but are not limited to, the following themes:

- Power management in electrical machines;
- Modern electrical drives;
- Power electronics and control in electric vehicles;
- Optimization in electric vehicles operation;
- IoT in EV applications;
- Modern control of electrical machines;
- Electrical machines and power electronics advances in renewable energy systems;
- Digital twin of complex machines and drives systems;
- Novel power electronics applications in motors operations and industry;
- Role of modern electric drives in 4th and 5th industry revolutions.

## **Guest Editors**

Dr. Hady H. Fayek

Electromechanics Engineering Department, Faculty of Engineering, Heliopolis University, Cairo 11785, Egypt

Prof. Dr. Christoph M. Hackl

Department of Electrical Engineering and Information Technology, Munich University of Applied Sciences (MUAS), 80335 Munich, Germany

## Deadline for manuscript submissions

closed (30 September 2022)



## **Machines**

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.7



mdpi.com/si/95066

Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
machines@mdpi.com

mdpi.com/journal/machines





an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.7



## **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, Calcada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

#### **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

## **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

