

# Special Issue

## Advancing Human-Robot Collaboration in Industry 4.0

### Message from the Guest Editor

Production process planning and management requires stable actions based on relevant collaborations between human and cobot. The performance and efficiency of complex manufacturing depends on real-time data analytics, flexible algorithms, synchronization, and the coexistence of human and robot. Currently, research is based on intelligent systems, real-time analytics, and relevant manufacturing knowledge. We are inviting you to contribute papers to this Special Issue on "Advancing Human-Robot Collaboration in Industry 4.0". This Special Issue represents a contribution to the theoretical and practical approaches for researchers and professionals in the area of advanced concepts of optimal coexistence. The submitted research papers are oriented to the following:

- Data analytics concepts of human–cobot workplace planning;
- Process management of flexibility and multitasking in real time;
- Modelling and simulation of optimal production flow;
- Concepts of collaborative workplace psychology and human–cobot ethics.

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### Guest Editor

Prof. Dr. Felicita Chromjaková

Department of Industrial Engineering and Information Systems, Faculty of Management and Economics, Tomas Bata University in Zlín, Mostní, 5139, 76001 Zlín, Czech Republic

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### Deadline for manuscript submissions

closed (31 October 2024)



# 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

CISE-Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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### 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 17.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).

