

## Special Issue

# Machine Tools, Advanced Machining and Ultraprecision Machining

### Message from the Guest Editors

This Special Issue aims to provide a forum for researchers and practitioners to exchange their latest theoretical and engineering achievements, as well as to identify critical issues and challenges for future studies concerning machine tools and ultraprecision machining. Experimental research field condition results are especially encouraged for submission; theoretical papers accepted into this Special Issue are expected to contain original ideas and potential solutions to real problems. Topics include, but are not limited to, the following domains:

- Case studies of ultraprecision machining and micromachining.
- Cutting tools: materials, geometry and coatings.
- Cutting fluids.
- Inspection of ultraprecision parts.
- Machine design: structural and kinematic.
- Machining process modelling and simulation.
- Industry 4.0: monitoring and controlling the machine, process and the manufactured parts.
- Controller: CNC interpolation, control loop, precision and high-speed processing.
- Modal analysis, stiffness of the tool holder/cutting tool and part fixture.
- Machine modelling and simulation.

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### Guest Editors

Prof. Dr. Adriano Fagali de Souza

Prof. Dr. Luis Norberto López De Lacalle

Prof. Dr. Álisson Rocha Machado

Prof. Dr. Alessandro Roger Rodrigues

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### Deadline for manuscript submissions

closed (30 April 2023)



## 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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### Author Benefits

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#### 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).