

## Special Issue

# 3D-Printed Machine Elements and Mechanical Devices

### Message from the Guest Editors

This Special Issue aims to bring together theoretical studies or applied work on the integrated use of state-of-the-art software tools for digital machine design, engineering, and manufacturing used to design and manufacture advanced 3D-printed machine elements and mechanical devices that exploit spatial design freedom, advanced materials, and unconventional manufacturing processes. Submissions should make a visible contribution to the state of the art and may include advances in fundamental theories, computational techniques, additive manufacturing materials and techniques, specialized 3D printing hardware, experimental testing (material, element, and system level), and engineering use case studies. The technologies developed can be used to replace or redesign conventional machine elements in maintenance engineering, or to develop entirely new monolithic mechanical design concepts for critical subsystems or devices that require less assembly and component integration.

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### Guest Editors

Dr. César Vasques

Dr. Adélio M. S. Cavadas

Dr. Fernando A. V. Figueiredo

Dr. Tarsis P. Barbosa

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### Deadline for manuscript submissions

closed (30 November 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  
CISE–Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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