

Special Issue

Recent Advances in Manufacturing and Circular Economy

Message from the Guest Editor

Manufacturing plays a pivotal role in the adoption and implementation of the circular economy by redefining traditional production processes to prioritize resource efficiency, waste reduction, and sustainable practices. Through strategies like product design for disassembly and remanufacturing, manufacturing can extend product lifecycles, minimize waste generation, and reduce the environmental footprint of industrial activities. Embracing the circular economy principles within manufacturing not only contributes to environmental sustainability, but also offers economic benefits by optimizing resource use and reducing production costs. This Special Issue will provide a platform for researchers, practitioners, and experts to delve into various aspects of sustainable manufacturing, resource efficiency, and circularity within industrial processes. Topics include, but are not limited to, the following:

- Sustainable manufacturing practices;
- Product life cycle assessment;
- Remanufacturing and refurbishment;
- Sustainable materials and design;
- Automation and control;
- Circular economy and industry 4.0;
- Waste reduction strategies in manufacturing.

Guest Editor

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Deadline for manuscript submissions

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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.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
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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).