Special Issue

Aerodynamic Design and Optimization for Turbomachinery

Message from the Guest Editors

The proposed Special Issue particularly fits the following scopes of MDPI's *Machines* journal:

- All aspects of turbomachinery design and optimization methods;
- New turbomachinery design method/theory/modified empirical formula;
- Turbomachinery aerodynamic performance test platform and experimental research;
- Advances in fluid dynamics of turbomachinery and high-precision numerical simulation methods;
- Application of multi/many objectives optimization algorithm in turbomachinery optimization;
- Design optimization methods and CFD analysis of turbomachinery components;
- Multidisciplinary design of turbomachinery (e.g., efficiency, acoustics, strength, and vibration);
- Two-phase flow and multi-phase flow in turbomachinery;
- Vortex dynamics and boundary layers in turbomachinery;
- The prediction of stall and surge condition, and flow range extension method of turbomachinery

Guest Editors

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Deadline for manuscript submissions

closed (15 January 2024)

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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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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).