Special Issue

Advanced in Simulation and Applications of High-Performance Turbomachinery

Message from the Guest Editors

Turbomachinery plays a pivotal role in various energyrelated sectors, from power generation and aerospace to automotive industries. In the context of the current energy transition, the optimization of turbomachinery components, including compressors, turbines, and pumps, holds high strategic significance. This optimization is indispensable for bolstering energy efficiency and safeguarding environmental sustainability. Computational fluid dynamics (CFD) simulations have become indispensable in analyzing, designing, and optimizing turbomachinery systems. Gas turbines, steam turbines, wind turbines, thermal dynamics, combustion, and compressors represent integral aspects within this Special Issue, given their substantial contributions to energy generation and utilization. This Special Issue aims to foster discussions, share insights, and promote collaboration among academia, industry, and research institutions in advancing energy-focused turbomachinery simulations.

Guest Editors

Dr. Davide Marsano

Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Università degli Studi di Genova, Via Montallegro 1, 16145 Genova, Italy

Dr. Carlo Cravero

Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Università degli Studi di Genova, Via Montallegro 1, 16145 Genova, Italy

Deadline for manuscript submissions

15 December 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/203229

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

mdpi.com/journal/energies





Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)

