

Special Issue

Advanced Bioenergy, Biomass and Waste Conversion Technologies: 2nd Edition

Message from the Guest Editor

This Special Issue (second edition) aims to showcase recent advances in bioenergy production through biomass and waste conversion, encompassing pyrolysis, gasification, liquefaction, torrefaction, hydrothermal carbonization, direct combustion, and co-combustion. Furthermore, it highlights the utilization and valorization of by-products and residues from these processes in alignment with circular economy principles. Topics of interest include, but are not limited to, the following:

- Advanced methods for biomass and waste-to-energy conversion;
- The optimization of pyrolysis, gasification, and liquefaction processes;
- Innovations in torrefaction and hydrothermal carbonization;
- Co-combustion strategies for enhanced energy recovery;
- The utilization and valorization of process residues and by-products;
- Environmental impact assessments and sustainability analyses;
- Techno-economic evaluations of bioenergy systems;
- Life cycle assessment and circular economy approaches.

Guest Editor

Dr. Małgorzata Sieradzka

Department of Thermal Technology and Environmental Protection,
Faculty of Metal Engineering and Industrial Computer Science, AGH
University of Krakow, Mickiewicza 30 Av., 30-059 Krakow, Poland

Deadline for manuscript submissions

10 September 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/234032

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



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)