Special Issue

Advances in Bioenergy and Bioproducts Innovation

Message from the Guest Editor

This Special Issue highlights breakthroughs in bioenergy and bioproducts, emphasizing scalable technologies, sustainability metrics, and socio-economic strategies. Topics of interest for publication include, but are not limited to, the following:

- Next-Generation Biofuels: Advances in algal biofuel, lignocellulosic ethanol, and waste-derived biodiesel.
- Circular Biorefineries: Integrated systems for coproducing energy, chemicals, and materials.
- Carbon-Negative Technologies: BECCS, biochar, and microbial carbon sequestration.
- Al-Driven Optimization: Machine learning for biomass conversion and supply chain efficiency.
- Sustainable Feedstock Innovation: Low-impact crops, agro-residue valorization, and algae cultivation.
- Waste-to-Energy Solutions: The anaerobic digestion, gasification, and pyrolysis of organic/industrial waste.
- Bio-Based Materials: Bioplastics, green chemicals, and lignin valorization.
- Policy and Market Strategies: Incentives, lifecycle regulations, and global bioeconomy frameworks.

Guest Editor

Dr. Ravindra Prajapati

Prairie Research Institute—Illinois Sustainable Technology Center, University of Illinois Urbana Champaign, Champaign, IL 61820, USA

Deadline for manuscript submissions

30 September 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/236877

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)

