

Special Issue

Bioconversion and Thermochemical Processing of Waste Biomass for Sustainable Energy

Message from the Guest Editors

This Special Issue on the “Bioprocessing and Thermochemical Conversion of Waste Biomass for Sustainable Energy” seeks high-quality research on innovative approaches to biomass valorization, energy-efficient process development, and sustainability assessments. Topics include, but are not limited to, the following:

- Bioprocessing technologies such as anaerobic digestion and microbial fermentation for biofuels and biogas production.
- Thermochemical conversion methods, including HTL, pyrolysis, and gasification for biofuels, biochar, and syngas.
- Integration of biological and thermochemical processes to enhance energy yield and product quality.
- Machine learning and AI applications for process optimization and predictive modeling.
- Techno-economic analysis and life cycle assessment of biomass-to-energy systems.
- Co-processing of waste biomass with other renewable energy sources for improved conversion efficiency.

We welcome original research articles, reviews, and case studies that align with the theme of this Special Issue.

Guest Editors

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Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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