## **Special Issue**

# Advanced Thermochemical and Biochemical Processes for Biomass Transformation to Biofuels and Biochemicals

## Message from the Guest Editors

This Special Issue focuses on different sources of biomass, thermochemical and biochemical processes, and their applications in low-carbon demand industries for the production of carbonized solid biofuels and value-added bio-products. Topics of interest for publication include, but are not limited to, the following:

- Thermochemical conversion of different biomass sources such as torrefaction, pyrolysis, gasification;
- Hydrothermal processes such as -hydrolysis (HTH), carbonization (HTC), -liquefaction (HTL), and gasification (HTG);
- Integration of thermochemical processes with biological processes such as hybrid pyrolysisanaerobic digestion, HTC with anaerobic digestion, HTC with dark fermentation and photofermentation, HTL and HTG with bioconversion:
- Biohydrogen production processes;
- Decarbonization via waste valorization processes;
- Safety aspects of biomass conversion processes on a semi- and industrial scalel:
- Environmental assessment of biomass conversion;
- LCA and TEA of biorefinery plants.

## **Guest Editors**

Prof. Dr. Stanislaw Ledakowicz

Faculty of Process and Environmental Engineering, Lodz University of Technology, Wolczanska 213, 90-924 Lodz, Poland

Dr. Szymon Szufa

Faculty of Process and Environmental Engineering, Lodz University of Technology, 90-924 Lodz, Poland

## Deadline for manuscript submissions

closed (15 October 2025)



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

mdpi.com/journal/ energies





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## **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

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