Special Issue

Recent Advances in Thermochemical Conversion of Biomass and Waste to Fuels, Chemicals and Materials

Message from the Guest Editors

The Special Issue focuses on the recent advances in thermochemical conversion of biomass and waste into fuels, chemicals, and materials. We kindly invite authors to submit high-quality original communications, full-length articles on experimental and numerical studies, and state-of-the-art reviews addressing their research on the use of thermochemical processes and emerging strategies for biomass and waste valorization. We invite contributions that delve into process optimization, technological advances, and challenges encountered in the exploitation of biomass and waste for their efficient and sustainable thermochemical conversion. **Key**

Topics:

- Novel advances in biomass and waste thermochemical conversion processes
- Process optimization strategies for enhancing fuel, chemical, and material yields
- Reactor and catalyst development for improved thermochemical conversion
- Techno-economic and environmental assessments of thermochemical conversion processes
- Integration of thermochemical conversion into existing energy systems

Guest Editors

Prof. Dr. Fabrizio Scala

Dr. Paola Brachi

Dr. Antonio Coppola

Dr. Massimo Urciuolo

Deadline for manuscript submissions

31 December 2025



Biomass

an Open Access Journal by MDPI

CiteScore 4.2 Tracked for Impact Factor



mdpi.com/si/239158

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

mdpi.com/journal/ biomass





Biomass

an Open Access Journal by MDPI

CiteScore 4.2
Tracked for Impact Factor



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Dr. Dimitris P. Makris

Department of Food Science & Nutrition, School of Agricultural Sciences, University of Thessaly, N. Temponera Street, 43100 Karditsa, Greece

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.8 days after submission; acceptance to publication is undertaken in 3.7 days (median values for papers published in this journal in the first half of 2025).

Journal Rank:

CiteScore - Q1 (Forestry)

