



energies



an Open Access Journal by MDPI

Going Carbon Neutral and Carbon Negative through Thermochemical Conversion of Biomass

Guest Editors:

Dr. Vera Marcantonio

Unit of Process Engineering,
Department of Engineering,
University “Campus Bio-Medico”
di Roma, Via Álvaro Del Portillo
21, 00128 Rome, Italy

Dr. Enrico Bocci

Department of Industrial
Engineering and Innovation,
Faculty of Science and
Technology, University of Studies
Guiglielmo Marconi, 00193 Rome,
Italy

Prof. Dr. Mauro Capocelli

Unit of Process Engineering,
Department of Engineering,
University “Campus Bio-Medico”
di Roma, Via Álvaro Del Portillo
21, 00128 Rome, Italy

Deadline for manuscript
submissions:

closed (31 August 2024)

Message from the Guest Editors

A viable alternative to fossil fuels is represented by biomass, which is an abundant and dispatchable source of renewable energy. Moreover, this energy source enables a net-zero carbon balance, since the amount of carbon dioxide produced during the combustion process is virtually entirely used for oxygen production during photosynthesis. Additionally, capturing CO₂ during the production of energy or energy vectors from biomasses enables carbon removal because the carbon dioxide that is absorbed during growth is not re-released but, instead, captured and removed from the natural carbon cycle.

For this Special Issue, we invite papers that consider the various aspects of converting biomass waste by means of pyrolysis and gasification into valuable products, with special attention to experimental and simulation works that investigate new processes and technologies at relatively high technological readiness levels (industrial and pilot scales) as well as the pretreatment and upgrading processes realized to enhance the productivity and efficiency of thermochemical conversion.



mdpi.com/si/162519

Special Issue



energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

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 Compindex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)