

Special Issue

Advances in Biomass Waste Gasification

Message from the Guest Editors

In the last several decades, global warming, climate change issues, national energy security, and energy dependency issues have led to the need for alternatives to fossil fuels. Biomass, the fourth largest source of energy in the world after oil, coal, and natural gas, seems to be one of the most favorable renewable energy sources to replace fossil fuels. This Special Issue invites papers that consider the various aspects of converting biomass waste gasification to valuable products, covering all the technical chains from biomass production to residue management and, in particular, experimental and simulation works that investigate new processes and technologies at industrial, pilot, and bench scales. Topics of interests include, but are not restricted to:

- Advanced biomass pre-treatment (e.g., hydrothermal carbonization, torrefaction);
- Advanced cleaning and conditioning (e.g., plasma-enhanced catalytic oxidation, membranes);
- Advanced/integrated electrical/thermal energy, biofuel, bioplastic, biomaterials production (e.g., chemical looping gasification; carbon capture, storage, and use; power to gas);
- Advanced residues management;
- Life cycle assessment.

Guest Editors

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Deadline for manuscript submissions

closed (10 December 2022)



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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.

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