Special Issue

Advanced Technologies in Waste-to-Bioenergy

Message from the Guest Editors

We invite high-quality submissions that include, but are not limited to, the following topics:

- Waste feedstock characterization and valorization;
- Biofuel production via variant conversion processes (e.g., pyrolysis, gasification, hydrothermal liquefaction, catalytic hydrotreatment, anaerobic digestion, fermentation, etc.) from various wastes (e.g., agricultural, municipal, industrial, and food waste and non-food energy crops, etc.);
- Bioenergy production from diverse waste streams, including agricultural, municipal, industrial byproducts, food waste, and non-food energy crops;
- Techno-economic analysis (TEA) and life cycle assessment (LCA) of waste-to-bioenergy systems;
- Policy frameworks, sustainability metrics, and pathways to commercialization.

This Special Issue aims to showcase interdisciplinary approaches and breakthrough innovations that support the transition to low-carbon energy systems and sustainable waste valorization. Contributions from both academic and industrial researchers are welcome.

Guest Editors

Dr. Loukia P. Chrysikou

Chemical Process & Energy Resources Institute—CPERI, Centre for Research and Technology Hellas—CERTH, 6km Harilaou-Thermi, P.O. Box 57001, Thessaloniki, Greece

Dr. Stella Bezergianni

Chemical Process & Energy Resources Institute—CPERI, Centre for Research and Technology Hellas—CERTH, 6km Harilaou-Thermi, P.O. Box 57001, Thessaloniki, Greece

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

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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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