

Special Issue

Biomass Power Generation and Gasification Technology

Message from the Guest Editors

Biomass can be burned, gasified, fermented, biologically digested, or transformed into liquid fuels that power a generator to provide energy. Carbon-neutral electricity may be achieved in the specific case of biomass-based gasification being integrated with power networks. However, in comparison to other methods of utilizing biomass energy, biomass gasification has not yet solidified its position. Despite its benefits in areas such as increased efficiency and lower CO₂ emissions, gasification has not gained enough traction to increase its level of implementation in research, recent plant construction, or even government support. This is because the biomass energy conversion methods listed above are strong competitors. In this Special Issue, we are looking for contributions on the various biomass conversion methods, with special emphasis on the gasification processes. Topics include, but are not limited to, the following:

- Biomass-based combined heat and power plants;
- Biomass-based combined cycle plants;
- Economic analysis of biomass-based power plants.

Guest Editors

Dr. Eliseu Monteiro

Faculty of Engineering, University of Porto, 4200 Porto, Portugal

Dr. Abel Rouboa

Faculty of Engineering, University of Porto, 4200 Porto, Portugal

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

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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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