Special Issue

Biomass and Waste-to-Energy for Sustainable Energy Production

Message from the Guest Editors

To produce valuable and carbon-rich biofuels and materials from lignocellulosic biomass or waste, the adopted processes can be mainly categorized into physical, thermochemical, and biochemical processes. The energy forms can be generated from biomass and lignocellulosic waste through combustion or cogeneration processes. The resulting biofuels generally refer to biogas, bioethanol, bio-oil/bio-coal, and syngas. In addition, the carbon-rich porous materials include biochar and activated carbon/biochar. Furthermore, these valuable materials have several emerging applications, including being adsorbents for emerging pollutants, catalysts for energy evolution in fuel cells, materials for energy storage in supercapacitors and ion batteries, food additives in the form of a black colorant, and sensors for environmental analysis. This Special Issue will promote a biocircular economy via the publication of research and review papers relevant to recent advances in biofuels, biomass-to-energy, waste-to-power, solid recovered fuel (SRF), and emerging applications of biomass-derived carbon materials (biochar and activated carbon/biochar).

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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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