

Special Issue

Advances in Biomass Conversion and Waste Treatment

Message from the Guest Editors

Recent advancements in biomass conversion and waste treatment are driving progress in renewable energy and environmental sustainability. Innovations in biomass conversion technologies, such as pyrolysis, gasification, and anaerobic digestion, have improved the efficiency of turning organic materials into bioenergy and valuable by-products. Additionally, developments in enzymes and microbial strains are making second-generation biofuels more economically viable. In waste treatment, advanced waste-to-energy (WtE) technologies are enhancing the conversion of municipal solid waste into electricity and heat, reducing landfill use and emissions. The integration of biological processes like anaerobic digestion with advanced sorting methods is further improving resource recovery from waste streams. These advances are crucial for reducing reliance on fossil fuels, minimizing waste, and contributing to a circular economy where resources are efficiently utilized.

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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.

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