Special Issue

Sustainable Biomass Conversion: Innovations and Environmental Impacts

Message from the Guest Editor

The global demand for energy is on the rise, and, as fossil fuel resources are depleting, they may not be sufficient to meet demand in the near future. Hence, new ecological energy sources should be sought that will supplement our energy needs without negatively impacting the natural environment. Biomass in the form of waste from agriculture, forestry, and the wood or food industry is playing an increasingly important role in the energy sector. In order to increase its sustainable and efficient use for energy purposes, it is necessary to process biomass using various methods to obtain appropriate fuels or products with the right properties. This Special Issue aims to present new and innovative achievements in scientific research on biomass conversion to selected forms of energy and its practical application in the energy sector. The scope includes experimental studies, industrial applications, process modeling and simulation, life cycle assessments (LCAs), and artificial intelligence (AI) applications supporting these processes, as well as economic considerations on the efficiency and feasibility of biomass conversion techniques.

Guest Editor

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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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