Special Issue

Zero Waste Technology from Biofuel Development

Message from the Guest Editors

Waste management remains a critical challenge in scientific research, as the industrial and agricultural sectors generate hundreds of millions of tons of waste annually. If left unutilized, this waste becomes an economic and environmental liability. However, through effective valorization strategies, by-products can be transformed into valuable resources, reducing raw material demand and minimizing energy consumption. This Special Issue explores common and innovative methods for industrial waste treatment, with a strong focus on resource recovery and biofuel development. Thorough experimental validation, scale-up studies, and techno-economic and environmental assessments are necessary.
Topics of interest:

- **Identification of novel waste materials**
- **Development and optimization of waste valorization technologies**
- **Techno-economic and environmental assessments**
- **Advancements in biorefineries for multi-product recovery**
- **Integration of mass and energy optimization strategies**
- **Process intensification techniques**
- **Biotechnological approaches**
- **Circular economy strategies**
- **Valorization of food and agricultural waste**

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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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