



## From Waste to Wealth: Sustainable Synthesis and Processes for Environment and Energy Applications

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Deadline for manuscript  
submissions:

**closed (30 September 2023)**

### Message from the Guest Editors

Dear Colleagues,

The alarming level of waste generation has urged more studies and research to focus on approaches related to waste management, product life cycle assessment, and circular economy. Circular economy frameworks offer an opportunity for various technological innovations. This resource-efficient model emphasizes eliminating waste and makes the entire economy more sustainable through waste reuse, reduction, and recycling. Numerous efforts have been devoted to minimizing the environmental impacts of a wide range of material production and industrial processes. These efforts include reducing the use of chemicals or using green solvents as alternatives to hazardous solvents. Developing sustainable, bio-based, and biodegradable materials is another straightforward strategy for achieving this goal.

Research areas may include the following:

- Waste reutilization for material synthesis;
- Waste conversions via bioremediation;
- Green solvent for material synthesis;
- Green manufacturing;
- Sustainable waste conversions;
- Water and wastewater treatment;
- Biofuel and bioenergy;
- Hydrogen production and utilization;
- Hydrogen storage and transportation;
- Renewable energy;





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## Message from the Editor-in-Chief

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