

Special Issue

Environmental Sustainability Through Innovative Biomass Waste Treatment and Degradation Strategies

Message from the Guest Editors

Biomass waste, such as straw biomass, sewage sludge, food waste, etc., is an important renewable biomass resource, which has the potential to be converted into biofuels for use in the case of energy shortage and for the sake of environmental sustainability. From the perspectives of environmental sustainability and the circular economy, the transformation of biomass waste for biofuels or even valuable products has gained particular attention. However, due to the extremely complex and resistant rigid structure of biomass waste, the hydrolysis of lignocellulose has always been the bottleneck in sustainable resource utilization. This Special Issue aims to highlight innovative treatment and degradation strategies for the conversion of various biomass waste into biofuels and bioenergy. In this Special Issue, original research articles and reviews are welcome. Research areas may include (not limited to) the following subjects: 1. Biological waste treatment and resource recovery; 2. Biofuels and biorefineries; 3. Microbial bioprocesses and products; 4. Thermochemical processes for lignocellulose and algal biomass; 5. Novel pretreatment technologies.

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