Special Issue

Recent Advancements in Biomass/Waste-Derived Materials in Catalysis, Energy Storage, and Computational Modeling

Message from the Guest Editors

Research related to thermochemical processing of biomass and solid wastes has been experiencing rapid development during the past 20 years. The topics include fundamental reaction mechanisms and kinetics, lab-scale and demonstration-scale reactor design and operation, complex modeling, and process simulation. Ongoing research is still struggling to explore effective strategies/techniques to utilizing biomass- and waste-derived materials in catalysis, energy storage, and computational modeling applications. This Special Issue aims to cover promising and dynamic areas of research and contributions on recent developments in catalysis, energy storage, and computational modeling related to biomass/waste-derived materials. This thematic issue will present the most advanced progress involving biomass-derived carbons for use in various applications. such as chemical reactions, fuel cells, electrocatalytic water splitting devices, supercapacitors. and lithium-ion batteries. In addition, advanced machine learning tools such as artificial neural network or genetic algorithm studies to predict process behavior will be a part of this potential thematic issue.

Guest Editors

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Deadline for manuscript submissions

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