

Special Issue

Advances in the Pyrolysis of Lignocellulosic Biomass

Message from the Guest Editors

Lignocellulosic biomass is one of the most abundant and renewable energy sources in the world.

Thermochemical processing of lignocellulosic biomass, including incineration, gasification, and pyrolysis, provide multiple benefits such as energy production and densification, production of activated carbon precursors and soil amendment materials, reduction of greenhouse gas emissions, etc. Pyrolysis, which involves the thermal decomposition of organic matter under inert conditions, enables the production of biochars and bio-oils, as well as energy from lignocellulosic biomass. With current global challenges such as depleting fossil resources, increasing global population, and global warming, the need for sustainable chemical and energy production is increasingly critical. This Special Issue aims to survey the recent advances in the pyrolysis of lignocellulosic biomass. Review articles are invited on pyrolysis processes including torrefaction, slow pyrolysis, intermediate pyrolysis and fast pyrolysis, catalytic pyrolysis, pyrolysis kinetics, energy production, pyrolysis feedstocks, and the valorization of biochars, bio-oils, and pyrolysis volatiles.

Guest Editors

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