



Advances in Biomass Preprocessing and Pretreatments and Valorization to Energy

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Message from the Guest Editor

Biomass physical properties and chemical composition impact biofuels production. Particle size, density, chemical composition of biomass are important specifications for both biochemical and thermochemical conversion pathways. Also these properties influence the feeding, handling, storage and transportation.

Size reduction of biomass using grinding equipment helps to meet the desired specifications in terms of particle size. Densification ensures the biomass has a uniform format with consistent physical properties which significantly influence storage, transportation and handling characteristics. Torrefaction, which is a thermal pretreatment method, makes biomass brittle making it easier to grind, changes the chemical composition, and increases the net energy content of the biomass.

The emphasis of this Special Issue is to examine the advances in biomass size reduction, densification and torrefaction technologies and their impact on physical, chemical and energy properties for biofuels production.





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