



Advances in Catalytic Methods for Biomass Valorization for Fuel and Chemicals

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Message from the Guest Editors

Dear Colleagues,

Biomass is the first source of energy, materials, and medicals for humanity. In the last century, interest in biomass processing has increased significantly, due to successes in microbiological synthesis, the development of technological and engineering methods for processing biomass, and environmental friendliness of production. Despite the abundance of developments, only a small part of them reached industrial implementation, which shows the need to continue work on the creation of new catalysts and processes based on them.

This Special Issue aims to cover the most recent progress and the main challenges in biomass derivatives valorization. The main focus will be on modern catalytic approaches for the selective processing of ethanol, vegetable oils, including microalgae, biogas, lignin, and furfural.

I encourage you to share your new research results related to biomass catalytic valorization, including fuel components productions, platform molecules selective conversion to chemicals (furfural, ethanol, glycerol, vanillin, etc.), lignin gasification and liquefaction, and biogas involvement in production of organic molecules.

