



## Catalytic Biomass Fractionation

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### Message from the Guest Editor

The depletion of fossil resources and food and water shortage associated with population growth encourage the search for alternative way to produce fuels, chemicals, and materials. Perspective solutions should mitigate climate change, reduce fossil-fuel dependence, and not be competitive with the food production. The replacement of fossil raw materials by biomass is foreseen.

The conversion of biomass is difficult and inefficient due to biomass recalcitrance. Many factors contribute to the recalcitrance of biomass to chemicals and enzymes. The complexity of the biomass matrix, crystallinity of cellulose, and the inhibition of enzymatic activity by lignin are a few among them. Biomass fractionation is the key process to unlock biomass potential and enable its full utilization. The aim of this Special Issue is to cover an efficient and green catalytic pretreatment and fractionation methods. Successful methods should be able to overcome biomass recalcitrance and enable tailoring valorization.





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## Message from the Editor-in-Chief

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