

Special Issue

Catalytic Biomass Conversions into Fuels and Materials—Sustainable Technologies and Applications

Message from the Guest Editor

To meet the ever-increasing global energy demand and the need for sustainable chemical processes, the adoption of the circular economy model within the biorefinery concept is becoming essential. The use of feedstocks derived from both lignocellulosic and oily biomass is considered a potential source of clean energy; however, there is a challenge to utilize this form of biomass in industry. In order to improve output efficiency to ensure low production costs, the development of new catalytic processes for renewable solid/liquid source conversion into bio-fuels and bio-materials is becoming a key factor in the reduction of fossil raw materials utilization and the emission of greenhouse gasses. This Special Issue provides a comprehensive overview description of recent catalytic technologies and processes involved in biomass and biomass-derived conversion towards next generation energy products and valuable bio-chemical products, or bio-materials with emphasis on platform molecules production and conversion.

- biomass conversion
- catalysis
- integrated bio-catalysis
- bio fuels
- bio-materials
- platform molecules

Guest Editor

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Deadline for manuscript submissions

30 September 2025



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/218803

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