Special Issue

Catalytic Conversion of Biomass and Its Derivatives

Message from the Guest Editors

The catalytic conversion of biomass and its derivatives represents a promising pathway for producing sustainable fuels and chemicals, which provide an alternative to the consumption of finite fossil resources. Biomass, which consists of carbohydrates, lignin, and triglycerides, can be transformed into a wide variety of valuable products through catalytic processes. These transformations typically include pyrolysis, hydrothermal liquefaction, hydrogenation, catalytic cracking, etc., which convert raw biomass or its derivatives into hydrocarbons, bio-oils, and other chemicals. The use of heterogeneous and homogeneous catalysts has enabled high-efficiency processes that optimize conversion and selectivity, which is crucial for industrial-scale applications.

- Scope
- Upgrading of biomass to fuels and chemicals;
- Platform chemicals prepared from the biomass;
- Catalytic depolymerization of biomass and polymerization of biomass derivatives;
- Catalytic conversion of biomass derivatives;
- Biorefining of biomass and platform chemicals;
- Process development and scale-up related to biomass conversion.

Guest Editors

Prof. Dr. Haiyang Cheng Prof. Dr. Chao Zhang Dr. Meng Zhang

Deadline for manuscript submissions

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Message from the Editor-in-Chief

Chemistry is a broad science and in *Chemistry* we hope to showcase the excellence of this fundamental discipline. Open Access publishing allows scientists to publish their research in a way that reaches the widest possible audience. In Chemistry we aspire to build a genuinely transdisciplinary culture in which communication of results between scientists active in different areas and between scientists and the broader public highlights the benefits that chemistry can bring to society. We encourage papers on all aspects of chemistry ranging from astrochemistry to zoochemistry, with everything in between. We also very strongly welcome inter- and multidisciplinary papers which expand the subject beyond its present horizons. We also welcome themed issues collecting reviews and state-of-the-art papers in topical areas of chemical science.

Editor-in-Chief

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