Special Issue

Heterogeneous Catalysis for Sustainable Conversion of Biomass, Carbon Dioxide and Plastic Waste into Fuels and Chemicals

Message from the Guest Editors

This is a Special Issue on the recent advances in the development and application of heterogenous catalysts for the sustainable conversion of biomass, carbon dioxide and plastic wastes into chemicals and fuels under reaction conditions. We are interested in both experimental and theoretical/computational investigations on this topic, at both the fundamental and more applied levels (i.e., under more realistic conditions; pilot-scale investigations). We are anticipating studies involving the detailed characterisation of catalysts, the establishment of structure–activity correlations, the investigation of reaction networks and the development of kinetic studies and kinetic models. Studies are not limited to the use of one single type of waste feedstock. We also welcome work exploring the potential synergisms between different types of wastes. Additionally, we are not only willing to receive contributions on the use of the heterogeneous catalysts under conventional thermal catalysis conditions, but also under more sustainable and innovative sources of energy, such as plasma, microwave, ultrasounds, electrochemistry, etc.

Guest Editors

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Deadline for manuscript submissions

closed (15 November 2024)

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Editor-in-Chief

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