Special Issue

Catalysis for Sustainable Refinery and Bio-Refinery

Message from the Guest Editors

This Special Issue of *Catalysts*, "Catalysis for Sustainable Refinery and Biorefinery", is aimed at addressing the main current research in the fields of novel catalyst synthesis and characterization, catalytic and kinetic studies, process development/simulation, and technology, related to the novel challenges dictated by the use of alternative raw materials into sustainable and biorefinery.

- Conversion of biofeedstock and biowaste (such as that used cooking oils (UCOs), crude tall oil (CTO), vegetable oils, animal oils, etc.) into novel fuels and additives through catalytic technologies (i.e., hydrodeoxygenation, decarboxylation, decarbonylation, etc.);
- Co-processing fats and vegetable oils with petroleum cuts during conventional refining processes for the production of biofuels;
- Transesterification of vegetable and animal oils to produce biodiesel;
- Thermochemical conversion technologies, including gasification and pyrolysis of biomass, as well as upgrading of the resultant gaseous or liquid fuels;
- Optimization of biofuel quality and stability;
- Catalytic chemical conversion of biomass, such as sugars, cellulose, etc. to chemicals and other bioproducts.

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