



Catalytic Transformation of Renewables (Olefin, Bio-sourced, et. al)

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Message from the Guest Editors

In recent decades, a wide variety of biomass-derived chemicals have emerged as key platform chemicals for the production of fine chemicals and liquid fuels. A range of heterogeneous catalysts have been evaluated for effective biomass conversion, such as supported metal nanoparticles, mixed metal oxides and zeolites, where the control of particle size, porosity, acid-basic and redox properties are crucial for providing active, stable and selective heterogeneous catalysts. Moreover, the crucial role of the solvent, choice of reactor design and final chemical processes for controlling activity, selectivity and deactivation phenomena has been demonstrated. We are particularly interested in articles describing:

- 1) Furfural transformation
- 2) HMF transformation
- 3) Bioethanol production from biomass
- 4) Olefin production from biomass-derived molecules
- 5) Deactivation studies using in situ and ex situ spectroscopic techniques
- 6) Computational modeling and simulation of biomass-derived processes

