Advances in Methanol Production from Biomass

Message from the Guest Editors

Biomass utilization to produce chemicals and energy vectors represents the most appealing way to reduce the use of fossil resources and decrease pollution and the green-house effect. Intensive research in academia and industry is devoted to the application of renewable biomass-based sources for methanol production. We invite scientists working in the area of to contribute:

- Innovative catalysts for methanol production
- New synthetic procedures for catalysts synthesis
- Kinetics and thermodynamic analysis involving biomass gasification and methanol production
- Experimental data regarding methanol synthesis in the presence of CO$_2$ and/or other impurities
- Automatic control of water and wastewater treatment processes for nitrogen and phosphorus
- Economic analysis of methanol-from-biomass production, or of a specific, related unit operation
- A Life Cycle Analysis (LCA) study concerning methanol production using traditional and innovative raw materials
- Strategy for improving the sustainability of biomass transformation into methanol

Keywords: methanol from biomass, catalysis and kinetics, process design and simulation, LCA, carbon dioxide