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## Pacifichem 2015

January 1 – April 3 | Call for Abstracts February 2 | Housing Opens June 25 | Early Registration



Chemical Networking: Building Bridges Across the Pacific

## **Integrated Biomass Refinery by Precisely Designed Heterogeneous Catalysts (#54)**

Atsushi Fukuoka | Alexander Katz | Haichao Liu

Biomass is naturally occurring organic compounds, and production of renewable fuels and chemicals from biomass has attracted worldwide interest for nurturing sustainable societies. Although enzymatic and mineral acid processes have been mainly used for the conversion of biomass, heterogeneous catalytic processing would be an effective alternative route. Major targets in the catalytic biomass conversion are the depolymerization of lignocellulose (cellulose, hemicellulose and lignin) into platform chemicals and further transformation into biofuels and biochemicals. This symposium will focus on the conversion of biomass by non-enzymatic heterogeneous catalysts, particularly emphasizing the following topics: (1) synthesis of catalysts and reaction environments precisely designed at the molecular level, which includes the synthesis and chemical modification of support materials such as silica, alumina, activated carbon, zeolites, etc., (2) intensification of reaction processes using ionic liquids, hot compressed water and (3) transformation of platform chemicals and related compounds such as glucose, fructose, sorbitol, 5-hydroxymethofurfural and polyols into value-added chemicals. Other aspects of the biomass conversion by heterogeneous catalysts will also be included. The symposium will have half-day daytime oral sessions and a poster session in the evening. The oral sessions will include several invited lectures and contributed papers. Invited speakers are as follows: Mark E. Davis (Caltech), James A. Dumesic (Wisconsin), S. Ted Oyama (Tokyo), Keiichi Tomishige (Tohoku), Ye Wang (Xiamen), Tao Zhang (Dalian).

Date: December 19-20, 2015 Venue: Hyatt Regency Waikiki



