



Novel Bimetallic Catalysts: Synthesis, Characterization, Evaluation, and Application

Guest Editor:

Dr. Weijian Diao

College of Engineering, Villanova
University, Villanova, USA

Deadline for manuscript
submissions:

closed (31 March 2023)

Message from the Guest Editor

In this Special Issue, we focus on the synthesis, characterization, evaluation, and application of novel bimetallic catalysts. The Special Issue aims to cover recent progresses and trends in rational synthesis methods and comprehensive characterization for bimetallic catalysts. Novel synthesis methods include but are not limited to deposition-precipitation, strong electrostatic adsorption (SEA), galvanic displacement, and electroless deposition/plating. Comprehensive characterization includes but is not limited to chemisorption, temperature-programmed reduction/oxidation, X-ray photoelectron spectroscopy, in situ and operando spectroscopy, EXAFS, and XANES. The aim and scope of this Special Issue also includes evaluation and application for bimetallic catalysts, such as selective hydrogenation/oxidation reactions, dehydrogenation reactions, CO₂ conversion, emission control reactions, fuel cell, and electrochemical applications.

