Special Issue

Catalysis in Hydrocarbon Functionalization

Message from the Guest Editor

The discovery of new technologies for minimizing the overall footprint of chemical processes ranks among the world most pressing problems. A clever strategy is the direct functionalization of renewable abundant feedstock to value-added chemicals, minimizing the chemical processes and reducing the undesired chemical waste. Accordingly, hydrocarbons are not only the main constituent of petroleum but could also be obtained from renewable sources. Thus, it offers the chemical industry the most sustainable carbon source. However, carbon-hydrogen bond is difficult to functionalize. This is largely due to its inherent low reactivity and high thermodynamic stability. I am convinced that catalysis as an enabling technology will play the main role to solve this global problem. The main focus of this Special Issue on “Catalysis in Hydrocarbon Functionalization” will be on innovative methodologies and mechanistic investigations for the functionalization of the carbon-hydrogen bonds and its application for total synthesis of natural product and late stage functionalization of pharmaceuticals. Original research papers and short reviews are invited for submission.

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