Special Issue

Catalytic Conversion of Light Alkanes

Message from the Guest Editors

Catalytic conversions of light alkanes into industrial chemicals are promising candidates for traditional petroleum-based or coal-based producing routes. The main aim remains to develop active, selective, and stable catalysts that are economical and environmentally friendly. New chemical-synthesizing strategies, structure-tuning methods, and novel catalyst systems are crucial to that end, but atomic-scale knowledge of catalyst structures and molecule-level understanding of reaction processes must be achieved in order to develop active and stable catalysts. Further advances are expected to combine theoretical simulation, spectroscopic characterization, and dynamic analysis to disclose the reaction mechanism under realistic reaction condition.

This Special Issue aims to report on recent progress and development in light-alkane-converting catalysts. It will focus on catalyst synthesis and characterization as well as research into understanding the reaction mechanism of alkane conversion.

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