

Special Issue

Applied Catalysis in Chemical Industry: Synthesis, Catalyst Design, and Evaluation, 2nd Edition

Message from the Guest Editor

This Special Issue aims to design and characterization of heterogeneous catalytic systems for industrial chemical processes. Contributions in the form of original research articles, short communications, perspective articles, and review articles reflecting the progress in the proposed topics are welcome. The main focus will be on comprehensive experimental studies of synthesis, characterization, and evaluation of catalyst performance in industrial processes. The proposed topics include, but are not limited to, the following:

- methane conversion;
- water–gas shift reaction;
- ammonia synthesis;
- ammonia decomposition;
- ammonia oxidation;
- carbon oxides methanation;
- selective catalytic reduction of nitrogen oxides;
- N₂O decomposition;
- hydrogen production processes.

The scope also includes an investigation of catalysts under conditions close to the industrial ones, a comparison of the studied catalytic systems with the currently operating commercial systems, and a demonstration of the validity of their application in a given chemical process.

Guest Editor

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closed (15 July 2024)



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