Special Issue

Nanostructured Catalysts for Petrochemistry and Oil Processing: Recent Advances and Prospectives

Message from the Guest Editors

Dear Colleague. With the recent advent of nanotechnology, the design of catalysts based on nanostructured materials is of great interest. Novel techniques are being developed by engineers and researchers to create, characterize, and evaluate nanostructured catalysts for a wide range of applications, including conventional processes of oil refining and petrochemistry. The catalysis community is faced with challenges for new process development, and this research area could be significantly boosted by nanostructured catalysts with tuned properties, e.g., structure, surface morphology, active sites, acidity, etc. This Special Issue aims to cover the most recent advances in the field of synthesis, characterization, and evaluation of catalytic properties of nanostructured materials for petrochemistry and oil processing. This includes, but is not limited to, hydroprocessing (including hydrotreating, isomerization, reforming, selective hydrogenation), renewables processing, catalytic cracking, C-1 chemistry, hydroformylation, valuable chemicals synthesis, and photocatalysis.

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