catalysts

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Catalysts in Transportation, Storage and Energy Systems

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Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

The zero CO2 balance and the pollutants reduction represent the main objectives for sustainability. Hence, the transition to more sustainable energy conversion/storage processes is strictly connected to the improvements on catalyst technologies. Carbon capture, NOx abatement, improvements of gasification of waste, optimization of H2 production are the main objectives that can drive the transition to a more sustainable energy conversion for transportation, storage and energy systems. In this context, complex physical and chemical processes are involved, whose comprehension is far to be fully understood and controlled. Among others, new materials, continuous reacting flow modeling, thermal storage influence on catalytic converters, photocatalysts have been recently investigated by scientists and engineers.

This Special Issue is aimed to cover, by means of experimental, numerical and theoretical approaches, the application of catalysts in applied energy technologies to improve the sustainability of energy conversion processes. Contributions on post-treatment of combustion exhausts and catalysts applied to energy conversion systems are kindly invited.