Special Issue

Catalytic Hydrogen Generation and Use for Production of Fuels

Message from the Guest Editor

Dear colleagues, Hydrogen is considered as a fuel for the future. Catalytic approaches to producing hydrogen involve dehydrogenation, gasification, water–gas shift, as well as steam and dry reforming reactions. Recent studies consider the utilization of new sources of hydrogen like biomass, as well as liquid organic and solid hydrogen carriers. Photo- and electrocatalytic methods for hydrogen production become important. Hydrogen is also intensively used for the synthesis of fuels using catalysis. Active, selective, and stable supported catalysts are needed for all these processes. The aim of this Special Issue is to discuss the field of catalytic hydrogen production and application for the synthesis of fuels. The topics of the development of efficient homogeneous or heterogeneous catalysts, reaction mechanisms and kinetics, and reactor systems engineering could be discussed in this Issue. We invite researchers to submit their theoretical and experimental original results.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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