

Special Issue

Sustainable Catalytic Routes for the Production of Green Synthetic Fuels and Other Value-Added Products

Message from the Guest Editor

Increasing concern with regard to fuel fossil dependency and climate change has triggered the search for sustainable energy and clean production processes. Various strategies have been considered to this end, wherein catalytic CO₂ hydrogenation to obtain high-added-value products has received particular attention. CO₂ hydrogenation has gained renewed interest boosted by the development of green hydrogen. Among the possible products of this process, green gasoline appears promising for extending the life of the current automotive fleet and fuel distribution infrastructure.

Another outstanding strategy for the production of fuels and chemicals relies on biomass valorization through the use of building block molecules for their subsequent conversion to chemicals and fuels.

This Special Issue is dedicated to the use of heterogeneous catalysis for the transformation of materials classified as pollutant or waste into high-added-value, sustainable products. High-quality research in the field utilizing experimental, theoretical and economical analysis and focusing on the development of new catalysts are welcome.

Guest Editor

Dr. Adriana Maria da Silva

Instituto Nacional de Metrologia, Qualidade e Tecnologia (INMETRO),
Duque de Caxias, RJ, Brazil

Deadline for manuscript submissions

closed (28 February 2025)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/191560

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

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