





an Open Access Journal by MDPI

Catalyst for Hydrogenation of CO2 to Fuels

Guest Editor:

Prof. Dr. Shyam Kattel

Department of Physics, Florida A&M University, 1601 S Martin Luther King Jr Blvd, Tallahassee, FL 32307, USA

Deadline for manuscript submissions:

closed (20 June 2021)

Message from the Guest Editor

Dear Colleagues,

The global demand for energy is steadily increasing, mainly because of the increasing population. Current energy production is heavily dependent on fossil fuels and emits greenhouse gases. Therefore, CO₂ management is one of the most challenging issues of the current generation.

Various schemes of carbon management have been put forward as ways to tackle this issue. Among them, chemical conversion of CO₂, which is enabled by the use of catalysts, is one of the promising ways to transform CO₂ to fuels and chemicals. Thus, generated fuels and chemicals can be directly used as fuels or feedstocks in existing industrial processes without a need to reinvent the new infrastructures.

This Special Issue, therefore, seeks to contribute to a fundamental understanding of the catalytic hydrogenation of CO₂ to fuels and feedstock chemicals. Topics of interest for publication include but are not limited to the following:

Experimental (ex-situ and in-situ) and theoretical studies of

- -Catalytic CO₂ conversion;
- -Reactions of CO₂ with molecules;
- -Catalyst design for CO₂ conversion and reaction of CO₂ with other molecules.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (*Engineering (miscellaneous)*)

Contact Us