

## Special Issue

# Catalytic Reforming for Syngas and H<sub>2</sub> Productions

### Message from the Guest Editors

Syngas is an important intermediate material for the production of hydrogen, ammonia, methanol, and synthetic hydrocarbon fuels. Syngas can be produced effectively via catalytic reactions from many sources, including natural gas, coal, biomass, or any hydrocarbon feedstock. Due to the advantages of non-toxic, clean, high heating value, and versatile applications, hydrogen plays a crucial role in the economy and it attracts significant interest from scientific researchers. In general, hydrogen can be obtained from the catalytically produced syngas via purification or separation techniques. This Special Issue will provide insights into the challenges of catalytic syngas and hydrogen production. These challenges include cost-effective catalyst design, catalyst deactivation resistance, energy consumption reduction, CO<sub>2</sub> emission reduction, feedstock pretreatment, and hydrogen separation. Submissions are welcome in the form of original research papers or short reviews that reflect the state-of-the-art of this research area.

### Guest Editors

Prof. Dr. Rei-Yu Chein

Department of Mechanical Engineering, National Chung Hsing University, Taichung 40227, Taiwan

Prof. Dr. Wei-Hsin Chen

Department of Aeronautics and Astronautics, National Cheng Kung University, Tainan 701, Taiwan

### Deadline for manuscript submissions

closed (31 August 2022)



## Catalysts

an Open Access Journal  
by MDPI

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/si/61907](https://mdpi.com/si/61907)

*Catalysts*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[catalysts@mdpi.com](mailto:catalysts@mdpi.com)

[mdpi.com/journal/  
catalysts](https://mdpi.com/journal/catalysts)





# Catalysts

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/journal/  
catalysts](https://mdpi.com/journal/catalysts)



## About the Journal

### Message from the Editor-in-Chief

---

#### Editor-in-Chief

Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan,  
KS, USA

---

#### Author Benefits

##### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

##### Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science )

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).