

Special Issue

Catalytic Reforming of Methane

Message from the Guest Editors

Natural gas reforming by means of dry reforming has recently achieved great importance as a way of producing syngas. Great attention is being paid to the conversion of CH₄ and CO₂, the cheapest carbon-containing materials, into more valuable compounds by catalytic reactions. This particular Special Issue of *Catalysts* is, therefore, on the following topics:

- Tackling the issue of catalyst design based on an understanding of its deactivation mechanism;
- Active catalysts with a small particle size, appropriate metal-support interaction but nonetheless good reducibility, and a certain tolerance to carbon formation;
- Investigating the prevention of carbon diffusion into active metal crystallites while maintaining acceptable activity;
- Optimizing of the reaction conditions for the process in a variety of different catalytic material classes, including perovskite mixed oxides, metal-oxide systems, and intermetallic compounds;
- Combining catalysis and plasma, which can be an alternative to integrate the advantages of catalysis and plasma.

Guest Editors

Dr. Hamidreza Arandiyani

Laboratory of Advanced Catalysis for Sustainability, School of Chemistry, The University of Sydney, Sydney 2006, Australia

Prof. Dr. Mehran Rezaei

Catalyst and Advanced Materials Research Laboratory, Chemical Engineering Department, University of Kashan, Kashan, Iran

Deadline for manuscript submissions

closed (31 March 2019)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/16140

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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 15.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).