

Special Issue

Selective Catalytic Reduction: From Basic Science to deNO_x Applications

Message from the Guest Editors

The development and commercialization of catalytic processes for remediating toxic emissions from stationary sources and from vehicles has been a truly remarkable achievement for the environmental catalysis community. Selective catalytic reduction (SCR) of NO_x with ammonia is among the most important and successful such techniques that we have witnessed, evolving from vanadia- to exchanged zeolite-based over the past 50 years. This Special Issue welcomes both review and original research articles on all aspects of SCR catalysis, including but not limited to the following topics:

- Recent advances in the synthesis and optimization of oxide- and zeolite-based SCR catalytic materials;
- The latest studies on the chemical mechanisms of SCR;
- Studies on deactivation and regeneration of SCR catalysts;
- Advances in in situ and operando methods for studying SCR catalyst materials and processes;
- Recent advances in computational research for SCR research.

Guest Editors

Dr. Feng Gao

Institute for Integrated Catalysis, Pacific Northwest National Laboratory,
Richland, WA 99354, USA

Dr. Todd J. Toops

National Transportation Research Center, Oak Ridge National
Laboratory, Knoxville, TN 37932, USA

Deadline for manuscript submissions

closed (31 October 2020)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/44520

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 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).