

## Special Issue

# Recent Catalytic Progresses for Environmental Remediation and Pollutant Degradation

### Message from the Guest Editors

Contemporary research encourages the deployment of innovative catalytic processes to mitigate health concerns and curtail the operational expenses associated with chemical additives during aquatic remediation endeavors. Elements, such as inorganic ions, natural organic materials, trace metallic cations, nanoparticles, microplastics, and other inherent environmental substances, can be harnessed to initiate catalytic reactions, targeting the degradation of pollutants, particularly the emerging contaminants. Furthermore, functional materials with expansive surface areas and a good catalytic ability can activate oxidants like H<sub>2</sub>O<sub>2</sub>, O<sub>3</sub>, persulfate, peracetic acid, and permanganate with low dosage, and even utilize O<sub>2</sub> to decompose pollutants. This Special Issue aims to cover the reaction mechanisms and the roles of reactive species in novel catalytic processes and materials, with a special focus on the degradation of emergent contaminants and environmental remediation in reused, waste-, surface, and groundwater.

### Guest Editors

Dr. Ying Huang

School of Environment, Hangzhou Institute for Advanced Study,  
University of Chinese Academy of Sciences, Hangzhou 310024, China  
Prof. Dr. Sébastien Royer

Université Lille, Cité Scientifique, Bâtiment C3, 59650 Villeneuve d'Ascq  
Cedex, France

### Deadline for manuscript submissions

closed (31 July 2024)



## Catalysts

an Open Access Journal  
by MDPI

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/si/192052](https://mdpi.com/si/192052)

*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 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).