

## Special Issue

# Treatment of Liquid and Gaseous Effluents by Advanced Catalytic Oxidation Processes

### Message from the Guest Editors

Advanced oxidation processes (AOPs) are responsible for the partial or total elimination of these contaminants and microorganisms through their oxidation by the highly oxidative radicals that are formed. Such radicals are generated from different species, including hydrogen peroxide, oxygen, ozone, chlorine, and persulfate (among others), particularly through catalyzed processes or by the simple use of radiation. The application of such technologies has shown promise in the decontamination of liquid and gaseous effluents and the inactivation of bacteria and viruses. For this Special Issue of *Catalysts*, we encourage you to submit an original research article or review paper that focuses on any AOP and addresses at least one of the following issues:

- abatement of organic pollutants in water/wastewater;
- treatment of gas streams containing organic or inorganic contaminants;
- application of AOPs in the disinfection of water/wastewater;
- new catalysts or photocatalytic materials for the removal of pollutants;
- catalyst or semiconductor materials for the inactivation of pathogenic and antibiotic-resistant microorganisms.

### Guest Editors

Dr. Carmen S. D. Rodrigues

Department of Chemical Engineering; Faculty of Engineering, University of Porto, 4200-465 Porto, Portugal

Prof. Dr. Luís M. Madeira

LEPABE—Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

### Deadline for manuscript submissions

closed (20 November 2023)



## Catalysts

an Open Access Journal  
by MDPI

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/si/52351](https://mdpi.com/si/52351)

*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).