



## New Insights in Catalytic Oxidation Processes for Water Treatment

Guest Editors:

**Prof. Dr. Fei Qi**

**Dr. Yang Guo**

**Dr. Yinqiao Zhang**

**Dr. Shangyi Li**

**Dr. Chen Li**

Deadline for manuscript  
submissions:

**10 August 2024**

### Message from the Guest Editors

Catalytic oxidation processes have been considered as promising for water and wastewater treatment. During the catalytic oxidation processes, highly reactive radicals such as hydroxyl, sulfate, chlorine, and nitrogen radicals are generated to oxidize a broad range of refractory organics (emerging contaminants and certain inorganic pollutants, etc) or to increase biodegradability as a pre-treatment prior to an ensuing biological treatment. However, how to produce and utilize reactive radicals effectively and stably are very crucial to catalytic oxidation processes. The practical application of catalytic oxidation processes is challenged by the reaction rates, harmful byproducts, scaling-up, etc. This Special Issue will focus on the kinetic studying, mechanistic understanding, and large-scale applications of catalytic oxidation processes for water and wastewater treatment, including ozone-, UV-, H<sub>2</sub>O<sub>2</sub>-, Cl<sub>2</sub>-, persulfate-, membrane-based catalytic oxidation; electrocatalytic catalytic oxidation; and photocatalytic catalytic oxidation processes. Research articles, reviews, and short communications on relevant topics are welcomed.





*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Jean-Luc PROBST

Laboratory of Functional Ecology and Environment, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, France

## Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Water Resources*) / CiteScore - Q1 (Water Science and Technology)

## Contact Us

---

Water Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)