Special Issue

New Insights in Catalytic Oxidation Processes for Water Treatment

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-, H2O2-, Cl2-, persulfate-, membrane-based catalytic oxidation; electrocatalytic catalytic oxidation; and photocatalytic catalytic oxidation processes. Research articles, reviews, and short communications on relevant topics are welcomed.

Guest Editors

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Deadline for manuscript submissions

closed (10 August 2024)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/172665

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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.

Editor-in-Chief

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