

## Chemical Treatment and Advanced Catalysis Process in Water

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

Climate change has emerged as an urgent global concern. In the pursuit of achieving carbon neutrality, significant advancements have been made in water-related catalytic processes over the past few decades, such as water splitting for hydrogen production, ammonia synthesis using nitrate solutions, CO<sub>2</sub> reduction, and hydrogenation reactions. Water, whether utilized as a reactant or a reaction medium, assumes a pivotal role in catalytic processes. However, comprehending these catalysis processes in an aqueous environment remains challenging due to the involvement of multiple phases. Furthermore, practical implementation lags behind in current research on water catalysis reactions, primarily due to issues of low efficiency and stability.

This [Special Issue](#) aims to spotlight the latest breakthroughs in water-related catalytic reactions as enumerated above. The scope encompasses both fundamental research and practical application endeavors. Additionally, we invite contributions that delve into other water-related catalytic techniques relevant to energy generation and conversion.

Dr. Wenchao Wan





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## Message from the Editor-in-Chief

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