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Trends in Catalytic Advanced Oxidation Processes

Guest Editor:

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Message from the Guest Editor

Advanced oxidation processes (AOPs) are a one of the most studied group of technologies for water and wastewater treatment. The biggest potential comes from catalytic processes providing enhanced conversion of external oxidants to active radical species, increased reaction rates, and complete mineralization of the degraded organic compounds. In addition to catalytic AOPs based on the formation of hydroxyl radicals from oxygen, hydrogen peroxide and ozone, as well as photocatalytic approaches, recently, the attention of scientists has predominantly been focused on catalysts for the activation of persulfates (sulfate radicals-based AOPs—S-AOPs) as well as catalysts for cavitation-based AOPs.

This Special Issue is dedicated to novel achievements in the field of catalytic advanced oxidation processes. The contributions should be related to the listed topics:

- Catalytic processes in water and wastewater treatment
- Developments in Fenton-like AOPs
- Activation of Persulfates for AOPs
- Formation of sulfate radicals
- Catalytic cavitation-based AOPs (hydrodynamic cavitation and acoustic cavitation)
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