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State-of-the-Art Photocatalytical Technology in North America

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Message from the Guest Editors

This Special Issue strives to provide an overview on state-of-the-art photocatalytical technology in **North America**.

Recent studies have been devoted to the use of advanced oxidation processes (AOPs) for the destruction of organic materials from wastewater, mainly because AOPs can entirely eradicate organics. Depending on the applications, different AOPs have been studied. Among AOPs, photocatalysis is a promising process of eradicating almost all types of organics in wastewater. Despite all advantages of TiO_2, there are two major limitations in its photocatalytic activity, its activation in the ultraviolet range and a high rate of electron-hole recombination, leading to its low efficiency. Therefore, the photocatalytic efficiency depends on how well a photocatalyst can prevent electron-hole pair recombination.

This Special Issue will focus on the latest developments in photocatalysis including photochemical reaction engineering, photoreactor design, photocatalyst development, or combining photocatalysis with other processes to enhance organic degradation in water and wastewater.