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Environmental Catalysis in Advanced Oxidation Processes

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Message from the Guest Editors

Population growth, industry development, and an increase in agriculture are connected with the release into the environment of a large number of toxic pollutants, which cannot be degraded by natural means. In the last few decades, a group of chemical oxidative technologies classified as advanced oxidation processes (AOPs) have received significant interest as pollution removal applications. AOPs are based on generation of highly reactive and non-selective hydroxyl radicals (OH·). There are several approaches to the generation of hydroxyl radicals, such as Fenton-, UV-, and ozone-based processes as well as heterogeneous photocatalytic processes.

We invite authors to submit original research papers focused on the synthesis and characterization of novel heterogeneous catalysts and their utilization in AOPs for the removal of complex organic and recalcitrant contaminants from the environment. Particular interest will be given to papers that explore novel reactor systems and field applications of AOPs.