

Oxidation Characteristics for Non-Biodegradable Dyes

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Intensive industrial development without efficient wastewater and emission controls to protect the environment may lead to the accumulation of high amounts of heavy metals in water and soil.

Dyes have very complex structure to exhibit properties such as superior light and wash-fastness and the wastewater has high color. Thus, the dye wastewater treatments are important problems, due to the difficulty in treating them by the usual method.

Addition of auxiliary chemicals used during the dyeing processes increased the degree of color and the amount of other pollutant in textile wastewaters.

This study evaluates the feasibility of the treatment of textile effluents by Fe salt/H₂O₂/Ozone oxidation to remove the color and reuse it in textile dyeing processes.

The effective removal of pollutants from dye wastewater was investigated by advanced oxidation method with various sources and treatment condions.