

عنوان مقاله:

Treatment of Azo dye in wastewater by UV/ZnO/Bentonite processes

محل انتشار:

اولین همایش ملی محیط زیست طبیعی (سال: 1394)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:

In this research, degradation of Azo dye such as Acid Red 52 (C₂₇H₂₉N₂NaO₇S₂) that is a pollutant dye of the wastewater from textile industries was investigated by photo catalytic process. The effect of some operational parameters such as pH, dye concentration, amount of catalyst, temperature was investigated. The rate of degradation was decreased with increase in dye concentration. In optimum conditions (100 mg/l of catalyst, pH at 5 and initial dye concentrations at 15 mg/l), 99% of pollutant degradation and 65% of COD removal were achieved in 120 min of .reaction. In this study the apparent first order kinetic model derived from Langmuir-Hinshelwood equation, was used

کلمات کلیدی:

Acid Red 52, degradation, photo catalyst, photo Fenton, iron (III) concentration

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