

عنوان مقاله:

Degradation of Reactive red 195 from textile wastewater by UV/ZnO and photo Fenton processes

محل انتشار:

سومین همایش ملی تکنولوژی های نوین در شیمی،پتروشیمی و نانو ایران (سال: 1395)

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خلاصه مقاله:

In this work, degradation of reactive red 195 (RR195) in aqueous solution was explored by UV/ZnO and photo-Fenton processes in a batch photo reactor. The influence of main operating factors such as initial pH, the concentration of hydrogen peroxide, RR195, Ferrous ion and catalyst on degradation efficiency were studied. The Spectrophotometric and chemical oxygen demand (COD) tests were applied for measurement of degradation efficiency. The degradation efficiency in photo Fenton process (98.5% in 20 min of reaction) was higher than UV/ZnO process (70.5% in 60 min). After 60 min of reaction, the removal of COD in photo Fenton and UV/ZnO processes was 65.5 and 36%, respectively

کلمات کلیدی: Chemical oxygen demand (COD), Batch photo reactor, Reactive red 195, photo Fenton process, UV/ZnO

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