

عنوان مقاله:

Photocatalytic Degradation of Dye Using UV/ZrO₂

محل انتشار:

کنگره ملی شیمی و نانو شیمی از پژوهش تا توسعه ملی (سال: 1396)

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نویسندگان:

Zahra Faraji Chamzini - *Department of Chemical Engineering, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran*

Sohrab Fathi - *Department of Chemical Engineering, Kermanshah University of Technology, Kermanshah, Iran*

Mohsen Mansouri - *Department of Chemical Engineering, Ilam University, Ilam, Iran*

خلاصه مقاله:

In this work, the zirconium dioxide nanocatalyst was primed by sol-gel method for degradation of Acid Red 40 (AR 40) solution in water. The effectiveness of the treatment method applied for the degradation of AR 40 based on an advanced photocatalytic oxidation process was investigated. The three various key parameters were optimized by using response surface modeling namely: pH, ZrO₂ concentration and the initial AR 40 concentrations. The optimized values were obtained at the PH (11), ZrO₂ concentration (0.04 g/L), and the initial AR 40 concentration (18.11 mg/L).

کلمات کلیدی:

Photocatalytic degradation; ZrO₂ catalyst; response surface modeling

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