



ENHANCED DECOLORIZATION OF REACTIVE BLUE 19 DYE FROM SYNTHETIC TEXTILE WASTEWATER THROUGH UV PHOTOLYSIS IN ALKALINE CONDITIONS

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Abstract

Laboratory scale experiments were conducted in order to investigate the photolysis of Reactive Blue 19 (RB 19) dye using UV as the irradiation source in alkaline solution. The effects of operating parameters such as, pH, initial dye concentration, UV dosage, hydrogen peroxide and oxygen have been evaluated. The results indicate that the UV photolysis process in alkaline solution is ideal for decolorizing of RB 19 and it can be taken as a starting step to establish the economical feasibility of the method for the decolorization of wastewater from textile industries.

Key words: alkaline solution, decolorization, Reactive Blue 19, textile dyestuffs, UV photolysis

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