



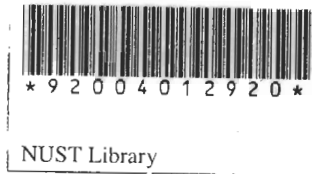
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FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF TEXTILE TECHNOLOGY

PROJECT TITLE : *TREATMENT OF REACTIVE DYE EFFLUENT FOR POSSIBLE REUSE IN THE DYEHOUSE PROCESSES*



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A DESSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF A BARCHELOR OF TEXTILE TECHNOLOGY HONOURS DEGREE
(JULY 2009)

Abstract

The purpose of the study was to investigate the effectiveness of Fenton's Reagent ($\text{Fe}^{2+}/\text{H}_2\text{O}_2$) on decolourisation of reactive dye wastewaters. Samples of different colours were collected and these were treated with different concentrations combination of hydrogen peroxide and ferrous iron. Figures of water consumption and cost were also collected to determine the cost per kg of textile product. Decolourisation in the range of 44.1% to 96.2% was obtained during the experimental procedure showing that Fenton's Reagent process can be suitable for degradation of reactive dye effluent.