Environmental Engineering and Management Journal, October 2006, Vol.5, No.4, 661-674
http://omicron.ch.tuiasi.ro/EEMJ/

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OXIDATIVE DEGRADATION OF 4-CHLOROPHENOL FROM AQUEOUS SOLUTION BY PHOTO-FENTON ADVANCED OXIDATION PROCESS

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Abstract

An experimental study on 4-chlorophenol (4-CP) degradation with hydrogen peroxide by advanced oxidation process Photo-Fenton type is presented. The oxidation process is determined by the very high oxidative potential of the $OH^{\cdot}$ radicals generated inside the reaction medium by Fe^{2+} catalyst coupled with UV radiations. The influence of the hydrogen peroxide excess, initial solution's pH, Fe^{2+} catalyst concentration, initial concentration of 4-CP and reaction time on the oxidation process are presented.

Keywords: 4-chlorophenol, oxidation, Photo-Fenton process

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