

# Pyrite-assisted degradation of trichloroethene (TCE)

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## Abstract

Chemical kinetics of trichloroethene (TCE) degradation by pyrite was investigated at different experimental conditions. The TCE was transformed into  $C_2H_2$ , 1,1-dichloroethene (DCE) and  $C_2H_4$  by a slow process (240 h required to convert TCE by 80%). Thereafter, the degradation rate showed a monotonous increase with the pH. A simple kinetic model was proposed to quantify the TCE degradation by pyrite. © 2000 Published by Elsevier Science Ltd. All rights reserved.

*Keywords:* Pyrite; TCE; Dehalogenation; Kinetic model