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## DEGRADATION OF GAS-PHASE TRICHLOROETHYLENE OVER THIN-FILM TiO<sub>2</sub> PHOTOCATALYST IN MULTI-MODULES REACTOR

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### Abstract

The present paper examined the photocatalytic degradation (PCD) of gas-phase trichloroethylene (TCE) over thin-film TiO<sub>2</sub>. A large-scale treatment of TCE was carried out using scale-up continuous flow photo-reactor that nine reactors were arranged in parallel and serial. The parallel or serial arrangement is a significant factor to determine the special arrangement of whole reactor module as well as to compact the multi-modules in a continuous flow reactor. The conversion of TCE according to the space time was nearly same for parallel and serial connection of the reactors.

*Keywords:* continuous flow system, degradation, photocatalysis, thin-film, trichloroethylene, TiO<sub>2</sub>

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