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Kinetics of Photocatalytic Degradation of Methylene Blue overTiO<sub>2</sub> Particles in Aqueous Suspensions

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**摘要** The kinetics of photodegradation of methylene blue over UV lightilluminated titania particles in aqueous suspensions has been studied withdifferent initial methylene blue concentrations and TiO<sub>2</sub> particle sizes. The degradationrate increases with the decrease of initial concentration and particlesize. A quasi-experienced model for photodegradation rate is derivedbased mainly on the coinstantaneous effects of different initialconcentrations and particle sizes. The mathematical relationships ofmodel parameters with initial concentration and particle size are given.The model results of the photodegradation rate of methylene blue arecoincident with the experimental data.

**关键词** [kinetics](#) [photocatalytic](#) [titaniaminipage](#)

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**Kinetics of Photocatalytic Degradation of Methylene Blue overTiO<sub>2</sub> Particles in Aqueous Suspensions**

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