

## عنوان مقاله:

Photocatalytic Degradation of N-methyl diethanolamine and Piperazine in Ammonia Plants Wastewater by TiO<sub>2</sub>  
Photocatalyst

## محل انتشار:

دومین کنفرانس بین المللی افق های نو در علوم مهندسی (سال: 1397)

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## خلاصه مقاله:

In this paper the photocatalytic degradation of N-methyl diethanolamine (MDEA) and piperazine (PZ) as contaminants in ammonia plants wastewater by TiO<sub>2</sub> in photoreactor has been studied. The relationships among operating variables such as: catalyst dosage and reaction time to identify the optimum operating conditions have been investigated. Catalyst dosage is a main factor that improved the MDEA and PZ removal compared to other parameters. The optimum conditions on the degradation and removal of MDEA and PZ are the reaction time (120 min) and TiO<sub>2</sub> concentration (1.0 g/L). In parallel with the work done to determine the extent of removal of MDEA and PZ, the effect of these parameters on COD value has been considered, which has yielded useful results. As well as, in the course of this research, there are other important results that have been mentioned

## کلمات کلیدی:

.N-methyl diethanolamine, piperazine, Photocatalyst, TiO<sub>2</sub>

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/875764>

