

عنوان مقاله:

Using T- shaped microreactor for decolorization of an Azo dye

محل انتشار:

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خلاصه مقاله:

Ozonation of Azo dye Rhodamine B was investigated in a T-shape microreactor. The effects of operating parameters such as liquid and ozone-containing gas volumetric flow rate on decolorization efficiency were studied. An increase of the ozone gas or liquid flow rate could greatly intensify the gas-liquid mass transfer. Decolorization efficiency increased with an increasing ozone-containing gas flow rate, as well as a decreasing liquid flow rate. The results indicated that it is possible to reach an efficiency of 96.4% for dye decolorization in just 0.25 s, as residence time, using this microreactor. This study illustrated the advantage of using microreactors for continuous flow decolorization process in the comparison with conventional use of batch stirred tank reactors

کلمات کلیدی:

Decolorization; Azo dye; Ozonation; Microreactor; Waste water treatment

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