

## عنوان مقاله:

Flux decline modeling in ultrafiltration of dilute oily wastewater emulsions

## محل انتشار:

نهمین کنگره ملی مهندسی شیمی ایران (سال: 1383)

تعداد صفحات اصل مقاله: 8

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## خلاصه مقاله:

Studies were conducted to investigate membrane fouling in ultrafiltration (UF) of oily wastewaters. Results of the experimental studies on separation of oil from oily wastewaters are presented. The investigation were focused on parameters that affect permeate flux. The following parameters were taken into account: transmembrane pressure and feed concentration. A laboratory scale cross flow membrane filtration setup was fabricated and installed. The feed (oily wastewater) was pumped to a plate and frame UF cell at a cross flow velocity of 1 m/s and a temperature of 25 °C. The results confirm that filtration resistance of the formed layer increases with increasing feed concentration and transmembrane pressure. The flux-time curves were analyzed using a modified cake filtration model. The model .shows an excellent consistency with the experimental data

## کلمات کلیدی:

modeling, ultrafiltration, oily wastewater, membrane

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/29858>

