

## عنوان مقاله:

(Surface Modification of Nanofiltration Membrane via Chemical Treatment (Grafting-to

## محل انتشار:

دوازدهمین کنگره ملی مهندسی شیمی ایران (سال: 1387)

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## خلاصه مقاله:

Polyethersulfone/ polyimide (PES/PI) were dissolved in DMF/DO (50/50 wt.%) using 2 wt.% polyvinylpyrrolidone as pore former. The membrane modification was started by addition ethylenediamine (EDA) in methanol for opening the imide group ring of PI. PEG-triazine was produced in our laboratory and employed as a communication bridge for connection of membrane to diethanolamine (DA) as a hydrophilic modifier. PEG-triazine can remove chlorine atoms with hydrogen of amine groups and forms a -C-N- bound at different temperatures. For characterization of modified membranes SEM, AFM, FTIR-ATR and contact angle tests were employed. The obtained results indicate a successful modification of PES/PI membrane. The rejection was improved from 75 to 93%.

## کلمات کلیدی:

Nanofiltration, modification, blend membrane preparation

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/58023>

