

## عنوان مقاله:

Alkaline and acidic treatment of PAN ultrafiltration membranes for salt rejection increment

## محل انتشار:

پنجمین کنفرانس آب، پساب و پسماند (سال: 1393)

تعداد صفحات اصل مقاله: 4

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## خلاصه مقاله:

In this research, the surface and structure of polyacrylonitrile (PAN) ultrafiltration membranes were treated by annealing, soaking in alkaline and acidic solutions respectively for achieving to the best permeation properties of Na<sub>2</sub>SO<sub>4</sub>, MgSO<sub>4</sub> and NaCl in the feed solution. Annealing at 70 °C water bath, followed by 30 minutes hydrolysis using 1 molar NaOH and 30 minutes HCl post treatment showed the best post treatment process. The final rejection of 85%, 45% and 49% for Na<sub>2</sub>SO<sub>4</sub>, MgSO<sub>4</sub> and NaCl, which was obtained respectively, proved this approach is a favorite candidate to improve the permeation properties for industrial operation and commercial applications

## کلمات کلیدی:

alkaline solution, acidic treatment, nanofiltration membrane

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/324564>

