

عنوان مقاله:

Preparation of membrane nanofilter from PAN nanofiber

محل انتشار:

اولین همایش تخصصی مهندسی محیط زیست (سال: 1385)

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خلاصه مقاله:

Filtration is necessary in many engineering fields. Membrane nanofilters have unique properties for filtration such as high specific surface area, good interconnectivity of pores and the potential to incorporate active chemistry on a nanoscale. The most versatile process for producing membrane nanofilters is electrospinning. In this paper, first The electrospinning of PAN/DMF was processed and morphology of nanofibers were investigated at various concentrations and applied voltages by the scanning electron microscope (SEM). Our results show that uniform PAN nanofibers with average diameter of 200 to 300nm can be obtained from solution with concentration of 12 and 14 wt % regardless of applied voltage. Then a membrane nanofilter prepared from PAN nanofibers with average diameter of .200nm. This research could open up the avenue of exploring the use of nanofibers in the separation technology

کلمات کلیدی:

;Nanotechnology; Membrane nanofilter; Nanofiber; Electrospinning

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