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Hossein Karimi, Majid Bazrgar Bajestani, Seyyed Abbas Mousavi, Rasoul Mokhtari Garakani



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Polyamide membrane surface and bulk modification using humid environment as a new heat curing medium

Hossein Karimi*, Majid Bazrgar Bajestani, Seyyed Abbas Mousavi*, Rasoul Mokhtari Garakani

Department of Chemical and Petroleum Engineering, Sharif University of Technology, P.O. Box 11155-9465, Tehran, Iran.

karimi_h@alum.sharif.edu

musavi@sharif.edu

*Corresponding authors. (H. Karimi), (S. A. Musavi)Tel.: +98 21 66166427; fax: +98 21 66022853.

ABSTRACT

Heat curing was devised in temperature-controlled steam and water environments to synthesize reverse osmosis (RO) polyamide (PA) membrane. The effect of new curing media on the physicochemical properties and RO performance of the synthesized polyamides was fully investigated using X-ray photoelectron spectroscopy (XPS), attenuated total reflection infrared (ATR-IR), scanning electron microscopy (SEM), atomic force microscopy (AFM), and water

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