

Water Softening Using a Light-Responsive, Spiropyran-Modified Nanofiltration Membrane

Rasel Das,¹ Mathias Kuehnert,¹ Asieh Sadatkazemi,² Yaser Abdi,² and Agnes Schulze^{1,*}

¹ Leibniz Institute of Surface Engineering (IOM), Permoserstr. 15, 04318 Leipzig, Germany

² Nanophysics Research Laboratory, Department of Physics, University of Tehran

* Correspondence: agnes.schulze@iom-leipzig.de; Tel.: +49-341-235-2400



Figure S1. Clamping of PES using two stainless steel frames for controlling the interfacial polymerization on the top side of the PES support membrane.

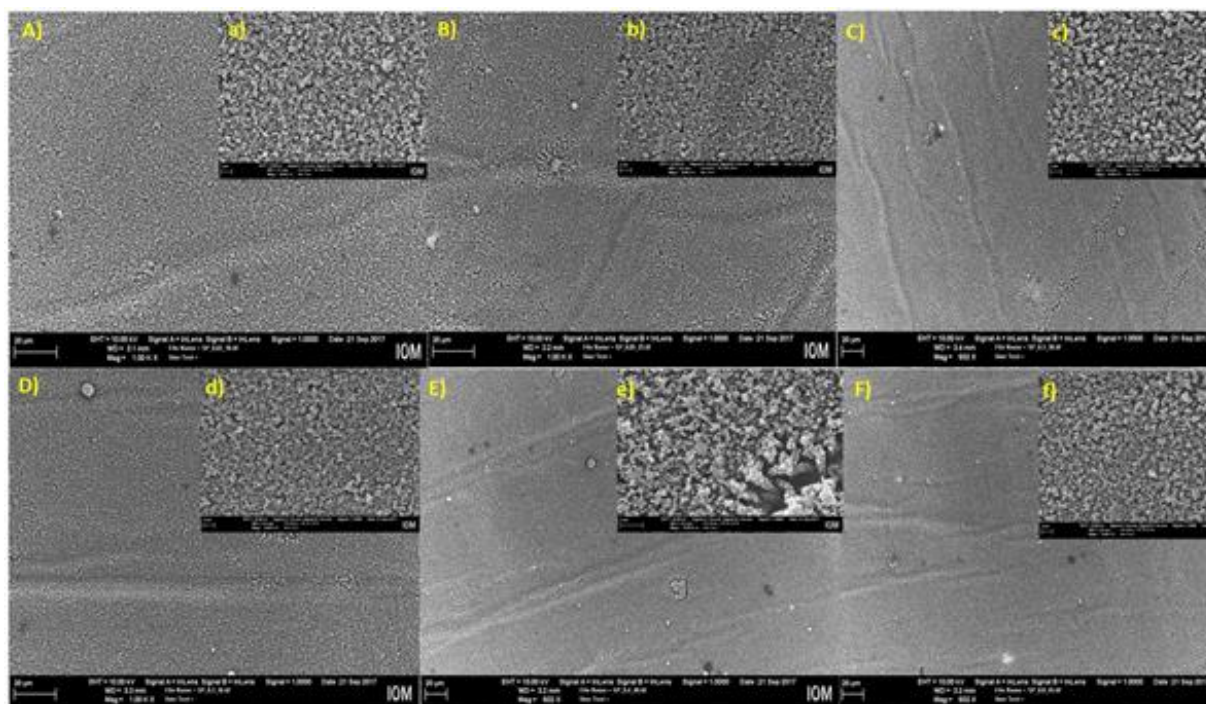


Figure S2. Low-resolution SEM images of PES/PA-TFC-SP membranes treated with 0.02 (A), 0.05 (B), 0.10 (C), 0.20 (D), 0.40 (E), and 0.80 wt % SP (F) with their corresponding high-resolution images (inset).

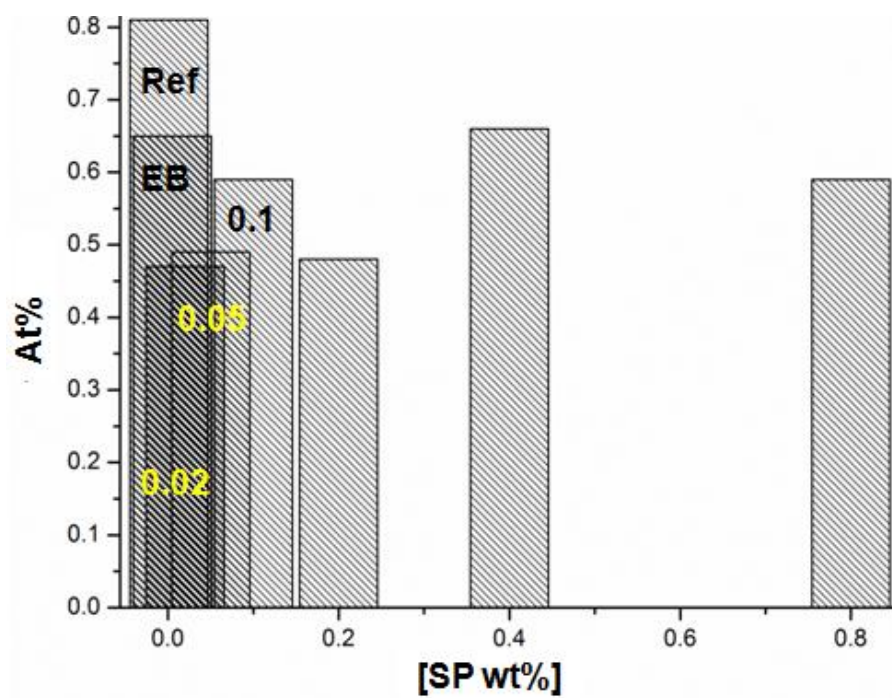


Figure S3. XPS atomic percentage of chlorine in reference PES/PA-TFC, EB-treated, and PES/PA-TFC-SP membranes.