

PDMS membranes containing ZIF-coated mesoporous silica spheres for efficient ethanol recovery via pervaporation

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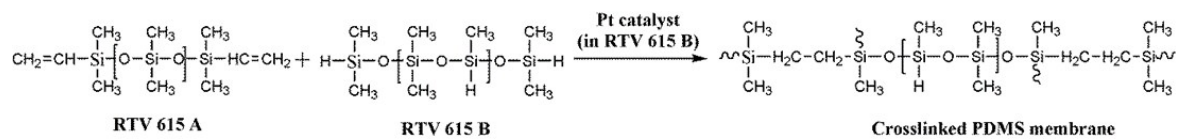
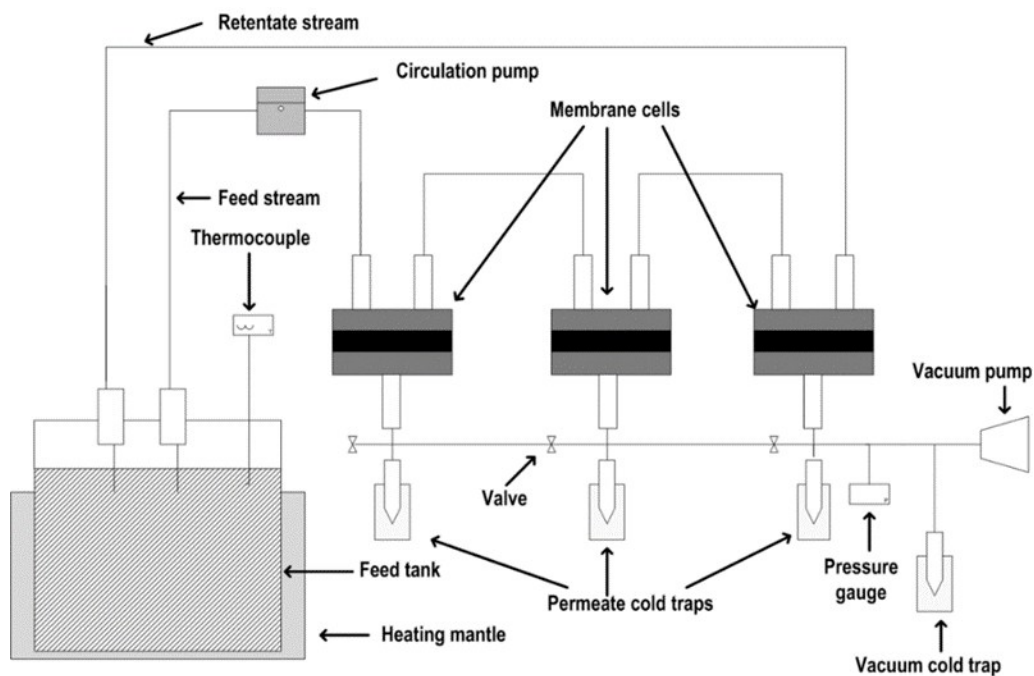


Fig. S1. Preparation of MMMs with assumed chemical composition of the RTV 615



compounds.

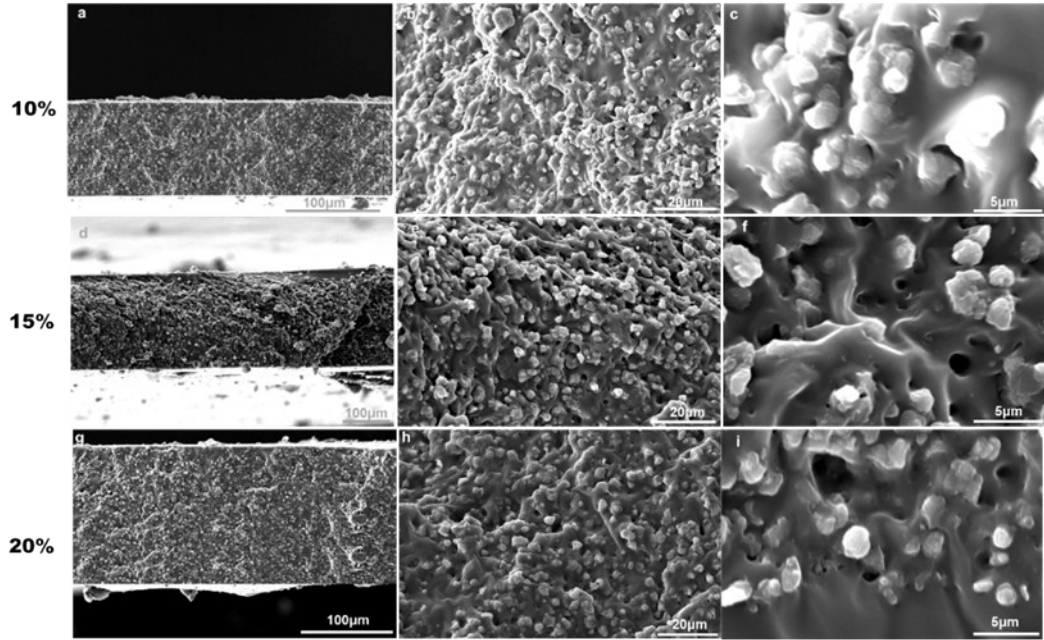


Fig.

S2.

Pervaporation cross-flow set-up with 3 membrane cells in series.

Fig. S3. Cross-sectional SEM micrographs of MMMs filled with MSS-ZIF-8 core-shell sphere. (a-c) 10 wt%, (d-f) 15 wt%, and (g-I) 20 wt% loading viewed at different magnifications.