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Effect of Nanoscale Morphology on Selective Ethanol Transport through Block Copolymer Membranes ASHISH JHA, NITASH BALSARA, UC Berkeley — We have examined the possibility of using A-B block copolymers for selective separation of alcohols from aqueous mixtures. The A block is not soluble in the liquids of interest and serves as the structural block while B serves as the transporting block. The size of the transporting channels has been controlled by varying the molecular weight, and the geometry has been controlled by varying the composition of the copolymer. Experimental results that reveal the dependence of membrane transport on the size and geometry of the transporting domains will be presented.

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