

## Publication Abstracts – Materials & Membrane Development

**I. Pinnau and L. G. Toy, "Solid Polymer Electrolyte Composite Membranes for Olefin/Paraffin Separation," *Journal of Membrane Science* 184, 39-48 (2001).**

The paper describes solid polymer electrolytes, a novel class of facilitated transport membranes for olefin/paraffin separation. Solid polymer electrolyte membranes are based on rubbery, polyether-based polymers containing a dissolved olefin-complexing metal salt. In one example, a composite membrane made from poly(ethylene oxide) loaded with silver tetrafluoroborate showed very high ethylene/ethane selectivity and enhanced ethylene permeance.