**SEMINAR NOTICE**

**INSTITUTE FOR POLYMER RESEARCH**

**Wednesday, October 8, 2014**

**E6 4022, 2:00 p.m.**

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**Facilitated transport composite membranes for olefin/paraffin separation**

Light olefins are important petrochemical feedstocks. The separation of olefins (e.g., ethylene and propylene) from their associated paraffins (i.e., ethane and propane) is one of the most difficult separations in olefin/polyolefin industry. The commercial low-temperature distillation for olefin/paraffin separation is highly capital- and energy-intensive. While membrane technology has become an indispensable unit operation for gas separations, the conventional membranes are unfortunately not permselective enough for practical olefin/paraffin separations.

Over the past few years, we have developed a novel composite membrane with remarkable performance for olefin/paraffin separation based on facilitated transport. The interactions between olefin molecules and a facilitating agent are exploited to facilitate olefin transport in the membrane. In this seminar, the newly developed membranes will be presented, and the performance and characteristics of the membrane will be discussed.

**Refreshments will be served**