

Membrane Gas Separations

Saturday, July 29, 2017

8:00 AM

Lecturers:

Benny Freeman, University of Texas at Austin, freeman@che.utexas.edu

Glenn Lipscomb, The University of Toledo, glenn.lipscomb@utoledo.edu

Tim Merkel, MTR Inc., tim.merkel@mtrinc.com

ABSTRACT

This workshop will cover the entire spectrum of membrane-based gas and vapor separations: from the materials science of gas separation membranes and the fundamentals of membrane transport to the design and economics of industrial gas separation applications. This workshop should be of interest to membrane researchers as well as membrane practitioners.

Outline:

1. Materials: Freeman, 8-10:30 AM
 - Material science of gas separation membranes and transport mechanisms
2. Break: 10:30-10:45 AM
3. Modules: Lipscomb, 10:45-12 and 1-2:15 PM
 - Module Manufacture
 - Module Performance
4. Break: 2:15-2:30 PM
5. Applications: Merkel, 2:30-5 PM
 - Basics of Gas Separation System Design
 - Gas Separation Industry: History and Overview
 - Air Separation
 - Hydrogen Separation
 - Natural Gas Separation
 - VOC Removal/Recovery
 - Emerging Applications