



MIT ChemE

Spring 2025 Seminars

Ion Solubility, Diffusivity, and Transport in Charged Polymer Membranes



Benny Freeman

William J. Murray, Jr. Endowed Chair in
Engineering
University of Texas, Austin

Friday, March 7, 2025 - 3:00pm, 66-110

Benny Freeman is the William J. (Bill) Murray, Jr. Endowed Chair in Engineering at The University of Texas at Austin and is Professorial Fellow at Monash University. He is a professor of Chemical Engineering and has been a faculty member for 35 years. Dr. Freeman's research is in polymer science and engineering and, more specifically, in mass transport of small molecules in solid polymers. He currently directs 17 Ph.D. students and postdoctoral fellows performing fundamental research in gas and liquid separations using polymer and polymer-based membranes. His research group focuses on discovery of structure/property relations for desalination and gas separation membrane materials, new materials for hydrogen separation, natural gas purification, carbon capture, and new materials for improving fouling resistance, permeation, and separation performance in liquid separation membranes. He is Director of the Center for Materials for Water and Energy Systems (M-WET), a Department of Energy EFRC (Energy Frontier Research Center).

kbriana@mit.edu

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