



Department of Civil & Environmental Engineering
Missouri Water Center (MWC)
University of Missouri

Environmental Engineering Seminar

Location: E2511 Lafferre Hall Time: 2:00-3:00pm, Friday March 6, 2026

<https://umsystem.zoom.us/j/98190565408?pwd=uddmk87g70ko6aI5jQCP8Xro3lqph4.1&from=addon>

Meeting ID: 981 9056 5408 Meeting Passcode: 906712

Membranes for gas separations: Fundamentals and applications

University of Missouri, March 6th 2026



Alyson Beldon, PhD
Manufacturing Risk Manager

Alyson S. Beldon, PhD is a Manufacturing Risk Manager at Air Products Membrane Solutions. She has worked at Air Products for over 16 years, starting in Product Development and recently transitioning to the Manufacturing Risk role. She received her PhD in Chemical Engineering from The University of Texas at Austin and her BS in Chemical Engineering from Virginia Tech.

Air Products Membrane Solutions develops, manufactures, and sells polymeric hollow fiber membranes for gas separations. PRISM membranes were first commercialized for hydrogen separations in the late 1970s, and since then have expanded into a variety of markets including nitrogen generation, dehydration, and biogas upgrading. PRISM modules contain hollow fibers which have an asymmetric structure, featuring a thin, selective skin. Gas transport through the membrane occurs via the solution-diffusion mechanism. Gas transport fundamentals, an overview of membrane production, and examples of membrane applications will be discussed in the presentation.



Frances Sullivan-González
Sr. Process Engineer

Frances Sullivan-González is a Senior Process Engineer at Air Products Membrane Solutions working for 5 years in Applications Engineering supporting OEM customers. She received her MS in Environmental Engineering from The University of Texas at Austin, and her BS in Chemical Engineering and BA in Mathematics from the University of Mississippi.



Leo Nemetz
Applications Engineer

Leo Nemetz is an Applications Engineer at Air Products Membrane Solutions for 3 years supporting OEM customers in the biogas upgrading space. He received his MS in Chemical Engineering from The University of Toledo, and his BS in Chemical Engineering from The Ohio State University.