

**JAMES R. FAIR PROCESS SCIENCE & TECHNOLOGY CENTER**

**University of Texas at Austin  
PSTC Spring Meeting, March 31, 2026**

**Tuesday, March 31, 2026**

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<b>8:00 am</b>	<b>Baldea Group</b>
Autonomous Process Operations: Why, How, When, Where	Michael Baldea
Electrification and Dynamic Operation of a Dividing-wall Distillation Column	Natalia Cisko
<b>9:00 am</b>	<b>Freeman Group</b>
Mixed-salt sorption in cation exchange membranes: the importance of counterion identity and ionic strength	Aubrey Quigley
CO <sub>2</sub> sorption in moisture swing anion exchange resins for direct air capture Marques	Horacio Lopez
Olefin/paraffin separation using Ag <sup>+</sup> -based polyether thin films enabled by thickness confinement	Gengyi Zhang
Modified siloxanes for light paraffin separations	Isaac Tan
Carbon molecular sieve hollow fiber membranes for O <sub>2</sub> /N <sub>2</sub> separation	Suer Kurklu Kocaoglu
CO <sub>2</sub> and water transport in quaternary ammonium functionalized anion exchange membranes	Winston Wang
Hydrogen-stable thin film composite solid polymer electrolyte silver ion facilitated transport membranes for olefin/paraffin separations	Matt Davenport
Understanding transition metal salt sorption in CR61 cation exchange membranes for critical mineral recovery	Suzana Ivandic
<b>12:30 pm</b> <b>Box lunch in the meeting room</b>	<b>Eldridge Group</b>
SRP Pilot Plant Upgrade / Modifications	Mary Thompson
High Speed Counter-Current Chromatography	Mary McCorkill
<b>1:30 pm</b>	<b>Carsch Group</b>
A Hydrogen-selective Adsorbent	Kurtis Carsch
<b>2:00 pm</b>	<b>Rochelle Group</b>
Mechanisms of Amine oxidation in CO <sub>2</sub> Capture Measured by Oxygen Depletion	James Obute
Process Design Optimization Model for Amine Scrubbing	Jorge Martorell
<b>3:00 pm</b>	<b>Katz Group</b>
Operando Reverse Osmosis Fouling Studies with Complex pH Dependent Waters	Cameron McKay
Beyond Salinity: Health Impacts on Sorghum Grass Irrigated with Produced Water	Marlene Carrillo