

JAMES R. FAIR PROCESS SCIENCE & TECHNOLOGY CENTER
University of Texas at Austin
PSTC Spring Meeting, April 3-4, 2018

Tuesday, April 3, 2018 PRC Commons, Room 1.138

8:30 am

Welcome and Introduction

Bruce Eldridge

SRP Pilot Plant Update

Frank Seibert

SRP Databases and Computer Programs

Frank Seibert

9:15 am Break

9:30 am

Introduction

Bruce Eldridge

Pilot Plant Analysis, Experiments, and Control for the Hybridization of
Transient Solar Heat with Conventional Utilities

Scott Rows

Kinetics and Phase Equilibria of a Reactive Dividing Wall Column

Jeff Weinfeld

Controlling a Dividing Wall Distillation Column

Melissa Donahue

Computational Fluid Dynamics (CFD) Modeling of Simplified Structured
Packing Geometries

Mikey Phan

Mass Transfer in Structured Packing via Computational Fluid Dynamics

Luke Macfarlan

11:45 am Catered Lunch, Room 1.210

12:30 pm

Benny Freeman

Overview of Research Activities Related to Membrane Separations

Josh Moon

Gas Transport Properties of Polybenzimidazoles

Melanie Merrick

Gas Separation Properties of Graphene Oxide-Based Membranes

Heewook Yoon

Olefin/Paraffin Separation with Membranes

Constanza Miguel Sanchez

Resource Recovery (*e.g.*, Lithium from Produced Water)

Alysha Helenic
T. J. Dilenschneider

Surface Modification of Membranes to Improve Fouling Resistance

Alon Kirschner

3:00 pm Break

3:15 pm

Michael Baldea

A systematic framework for the evaluation of the monetary value of process
control for predominantly transient processes

Joseph Costandy

Demand Response Operation of Air Separation Units Utilizing an Efficient
MILP Modeling Framework

Morgan T. Kelley

4:00 pm

Introduction to the Carbon Management Project

Gary Rochelle

Corrosion in Amine Scrubbing

Kent Fischer

Modeling Amine Aerosol

Yue Zhang

5:15 pm Adjourn

8:30 am

Brief Overview of Adsorption Process and Adsorbent Materials Research at USC **James A. Ritter**

More In-Depth Review of Several Ongoing PSA and TSA Projects

James A. Ritter

9:30 am TBA

Mahmoud El-Halwagi

11:00 am Adjourn