IDAES events at PSE 2018

Monday, July 2

Plenary: Next Generation Multi-Scale Process Systems Engineering Framework

10:20—11:20 AM - Plenary 3

David C. Miller, John D. Siirola, Deb Agarwal, Anthony P. Burgard, Andrew Lee, John C. Eslick, Bethany Nicholson, Carl Laird, Lorenz T. Biegler, Debangsu Bhattacharyya, Nikolaos V. Sahinidis, Ignacio E. Grossmann, Chrysanthos E. Gounaris, Dan Gunter

254: A Fluidized Bed Process Model of a Chemical Looping Combustion Fuel Reactor

3:50—4:10 PM - Process/Product 10

Chinedu O. Okoli, Andrew Lee, Anthony P. Burgard, and David C. Miller

289: Expanding the Scope of Electric Power Infrastructure Planning

4:10—5:40 PM - Poster Session A

Cristiana L. Lara, Ben Omell, David Miller, and Ignacio E. Grossmann

265: Pyomo.GDP: Disjunctive Models in Python

6:00—6:20 PM - Optimization/Software 05

Qi Chen, Emma S. Johnson, John D. Siirola, and Ignacio E. Grossmann

69: A General Framework for Sensitivity-Based Optimal Control and State Estimation

6:20—6:40 PM - Dynamics/Control 01

David Thierry, Bethany Nicholson, and Lorenz Biegler

201: A Comparative Study between GDP and NLP Formulations for Conceptual Design of Distillation Columns

6:20—6:40PM - Optimization/ Software 06

Jaffer H. Ghouse, Qi Chen, Miguel A. Zamarripa, Andrew Lee, Anthony P. Burgard, Ignacio E. Grossmann, and David C. Miller

207: A Smooth, Square Flash Formulation for Equation-Oriented Flowsheet Optimization

6:40—7:00 PM - Optimization/ Software 07

Anthony P. Burgard, John P. Eason, John C. Eslick, Jaffer H. Ghouse, Andrew Lee, Lorenz T. Biegler, and David C. Miller

Tuesday, July 3

475: Design of Doped Perovskite Oxygen Carriers Using Mathematical Optimization

11:20—11:40 AM - Molecular/ Materials 03

Christopher L. Hanselman, De Nyago Tafen, Dominic R. Alfonso, Jonathan W. Lekse, Christopher Matranga, David C. Miller, and Chrysanthos E. Gounaris

KEYNOTE 9

1:30—1:50 PM

John Siirola

294: Multi-Objective Optimization of Membrane-based CO2 Capture

3:10—4:50 PM - Poster Session B

Miguel A. Zamarripa, John C. Eslick, Michael S. Matuszewski, and David C. Miller

268: Software for Creating Stochastic Scenarios for Optimization from Data

3:10—4:50 PM - Poster Session B

Andrea Staid and **David L. Woodruf**

324: Simultaneous Parameter Estimation in Reactive-Solvent-Based Processes

3:10—4:50 PM - Poster Session B

John C. Eslick, Paul T. Akula, **Debangsu Bhattacharyya**, and David C. Miller

295: Sequential Design of Experiments to Maximize Learning from Carbon Capture Pilot Plant Testing

6:00—6:20 PM - Process/Product 13

Frits Byron Soepyan, Christine M. Anderson-Cook, Joshua C. Morgan, Charles H. Tong, Debangsu Bhattacharyya, Benjamin P. Omell, Michael S. Matuszewski, K. Sham Bhat, Miguel A. Zamarripa, John C. Eslick, Joel D. Kress, James R. Gattiker, Christopher S. Russell, Brenda Ng, Jeremy C. Ou, and David C. Miller

Wednesday, July 4

399: A Flexible Framework and Model Library for Process Simulation, Optimization and Control

3:30—3:50 PM - Optimization/Software 13

Andrew Lee, Jaffer H. Ghouse, Qi Chen, John C. Eslick, John D. Siirola, Ignacio E. Grossman, and David C. Miller

321: Mathematical Modeling of a Moving-Bed Reactor for Chemical Looping Combustion of Methane

6:00—6:20 PM - Process/Product 15

Anca Ostace, Andrew Lee, Chinedu O. Okoli, Anthony P. Burgard, David C. Miller, and Debangsu Bhattacharyya