



IDAES
Institute for the Design of
Advanced Energy Systems

IDAES Stakeholder Workshop and Tutorial Introductory Comments

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Coordinator, Stakeholder Advisory Board

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**Sandia
National
Laboratories**



West Virginia University

Carnegie Mellon



**UNIVERSITY OF
NOTRE DAME**



**U.S. DEPARTMENT OF
ENERGY**

IDAES Objectives

IDAES is

- Advancing computational and algorithmic approaches to process modeling with...
 - high-fidelity models
 - reduced-order modeling tools,
 - “data to equation tools”,
 - equation-oriented modeling (Pyomo),
 - robust optimization,
 - Improved initialization and convergence approaches
- To...
 - address the optimum operation rebuild and retirement decisions for existing power plants interacting with the grid,
 - Accelerate the design and optimization of next generation power-generation systems while reducing technical risk during development, and
 - create a generalized approach to process modeling that allows for full conceptual design, risk analysis, and optimization of all process systems.

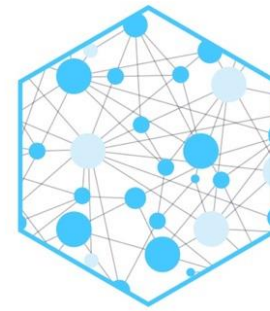
We Want Your Feedback

- Key Areas
 - Technical Focus – Are we approaching the right challenges the right way?
 - Program Progress – Are we advancing appropriately?
 - Implementation Pathway – How can we make the IDAES system more usable for more value-adding applications?
 - See also Stakeholder Feedback Focal Areas document
 - “Early Impressions” feedback collection this afternoon.

Get to Know Our Team

- Top quality professionals, graduate-students, post-docs in all aspects of program
- Workshop designed to maximize opportunities for interaction
 - Intentionally planned with only high-level presentations
 - Poster sessions linked to presentations
 - Allows to explore in greater depth and detail with developers
 - Breaks, lunch, social hour and dinner
 - Friday tutorial – hands on

idaes.org



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The IDAES Technical Team:

- **National Energy Technology Laboratory:** David Miller, Tony Burgard, John Eslick, Andrew Lee, Miguel Zamarripa, Jinliang Ma, Dale Keairns, Jaffer Ghose, Emmanuel Ogbe, Gary Kocis, Ben Omell, Chinedu Okoli, Richard Newby, Grigorios Panagakos, Maojian Wang
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