



**JUNE 13-15, 2023**  
**HYATT REGENCY VANCOUVER**  
**VANCOUVER, CANADA**



## Process Development Opportunities for our Changing Industries

The 2023 Process Development Symposium (PDS) is a place to exchange wisdom, knowledge, tips, and personal experiences in the development and scale-up of chemical and related processes. The PDS provides an opportunity for process development professionals from all across the world to discuss their experiences with novel and innovative technologies to trigger radical changes in next-generation processes development and operations featuring presentations from process development professionals. This symposium, planned jointly between AIChE and its Process Development Division, is held annually in June. This year's symposium will take place in Vancouver, Canada on June 13-15, 2023.

### PROGRAM SCHEDULE\*

#### Tuesday, June 13, 2023

9:30 10:30	Registration Open/Plant Tour Check-In
10:30 16:00	Coanda Plant Tour (Ticketed Event)
17:30 19:30	Welcome Reception

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\*Updated as of June 8, 2023

## Wednesday, June 14, 2023

8:15 9:00	Registration (Open all day) & Breakfast
9:00 9:10	<b>Chairmen's Introduction</b>
9:10 9:55	<b>Day 1 Featured Keynote Presentation: Growing Energy Supply While Lowering Carbon Intensity</b> <b>Chris Jablonski, Chevron</b>
9:55 10:15	Break
10:15 11:45	<b>Session : Scale-Up/Scale-Down and Commercialization</b> <b>Chair: Anastasios Skoulidas, ExxonMobil</b> <b>Co-Chair: Daniel Marple, Dow Performance Silicones</b>
10:15 10:45	<b>Scale-Down and Scale-up of a Slurry Mixing Process</b> Richard Grenville, SPX FLOW INC
10:45 11:15	<b>Never Let a Good Crisis Go to Waste: RAPID RACER AMPD and the Opportunity to Accelerate Process Development – An Update</b> Patricia Gillenwater, RAPID
11:15 11:45	<b>A Novel Zinc-Air battery Technology commercialization for Energy Storage application</b> Altamash Jauhar, e-Zinc
11:45 13:15	Lunch
13:15 14:45	<b>Session: Process Intensification in Industry</b> <b>Chair: Patricia Gillenwater, RAPID</b> <b>Co-Chairs: Yamini Krishnan, Corteva; Simon Leyland, Siemens</b>
13:15 13:45	<b>Batch-to-Continuous Conversion of Substituted Alkyl Phenols</b> Nasser Al Azri, The Lubrizol Corporation
13:45 14:15	<b>Chemical Transformers and the Clean Hydrogen Grid</b> Robert Wegeng, STARS Technology
14:15 14:45	<b>Microwave Assisted Processing for Industrial Scale Material and Chemical Synthesis Applications</b> Robert Weiss, Malachite Technologies
14:45 15:15	Coffee Break
15:15 16:45	<b>Session: Bioprocesses &amp; Automation</b> <b>Chair: Anne Mohan, Merck</b>
15:15 15:45	<b>Assemblytron: Flexible Automation of DNA Assembly with Opentrons OT-2 Lab Robots</b> John Bryant, Virginia Tech
15:45 16:15	Coffee Break
16:15 17:30	<b>Roundtable Discussion: Cutting Edge Technologies</b> <b>Chair: Anastasios Skoulidas, ExxonMobil</b>

## Wednesday, June 14, 2023

17:30 19:00

**Poster Session & Reception**

17:30 18:15

**Poster Presentations**

POSTER

**Demonstration of a Process Intensification Scenario for Producing Ammonia Synthesis Gas without an Air Separation Unit Using Soec Technology**

Kristian Bek Helmig, Aarhus University

POSTER

**Utilizing Cross-functional Collaboration for the Successful Implementation of Commercial Scale-up**

Daniel Marple, Dow

POSTER

**The Development of Predictive Models for the pH Value within Multi-Buffered Systems**

Jivya Lamba, Modern School Vasant Vihar

18:15 19:00

**Reception**

## Thursday, June 15, 2023

8:15 9:00	Registration (Open half day) & Continental Breakfast
9:00 9:10	<b>Chairmen's Summary of Previous Day's Discussions</b>
9:10 9:55	<b>Day 2 Morning Plenary Presentation: Opportunities for Process Development Engineers in Accelerating the Transport Sector Energy Transition</b> <b>Shyamal Bej, Shell</b>
9:55 10:15	Break
10:15 11:45	<b>Session: Innovative Solutions for Designing Sustainable Processes</b> <b>Chair: Gaurav Agrawal, Origin Materials</b> <b>Co-Chair: Santiago Faucher, Insight RND; Yamini Krishnan, Corteva; Rui Shi, Penn State; David Couling, Corteva; Pranav Karanjkar, Dow; Omid Ebrahimpour, e-Zinc</b>
10:15 10:45	<b>From industrial waste to potable water filter media: reimagining our use of wastes.</b> Aurelio Stammitti, Ecomaterials
10:45 11:15	<b>Sustainability in Modular Process Plants</b> David Edwards, Zeton Inc
11:15 11:45	<b>Applying Knowledge from Earlier Transitions for Developing Processes to Produce Sustainable Aviation Fuel</b> Shyamal Bej, Shell
11:45 13:15	Lunch
13:15 14:45	<b>Session: Innovation &amp; New Technologies</b> <b>Chair: Aurelio Stammitti, Insight RND</b> <b>Co-Chair: Stephen Tieri, DuPont; Pranav Karanjkar, Dow</b>
13:15 13:45	<b>Utilizing Azeotropes &amp; Solvent Recycle for Cost Effective Implementation on Batch 1</b> David Couling, Corteva Agriscience
13:45 14:15	<b>Thermochemical Production of Green Hydrogen or Syngas</b> Britt Boughey, University of Colorado Boulder
14:15 15:30	Closing Break & Networking