

AIChE Process Development Division Spring Newsletter 2022



**SPRING22
+18TH GCPS**
A Joint AIChE and CCPS Meeting

**April 10 – 14, 2022
San Antonio, Texas**

For more information, visit

<http://www.aiche.org/community/sites/divisions/process-development>

In this issue

Message from the Chair	2
2022 Spring Meeting	3 - 7
Division Meetings	
PDD Dinner	
Programming	
Annual Meeting 2022 / Call for Abstracts	8
Process Development Symposium (PDS) 2022	9
PDD Practice Award Recipient 2022	10
A Retrospective on Inclusion in the Process Development Division	11 - 12
PDD Leadership	13
PDD Area Leadership	P. 23

Please Join: Process Development Division (PDD)

The PD Division promotes networking and communication among engineers and scientists interested in process development through meetings, seminars, courses, and publications. This division also organizes AIChE activities in the field, and materials with other related societies. In addition, the PD Division provides a forum for the engineer and educator to exchange information and ideas. Please join or encourage your colleagues to join if they are not members.

Chartered: 2000, Dues: \$10

Message from the Chair

Dear PDD Members:

Warmest greetings! We are glad that you have received our 2022 Spring Newsletter.

With this opportunity, we are proud to announce that the recipient of 2022 AIChE Process Development Practice Award is Mr. Mike DePierro, who is currently the Senior Process Research Scientist and ORGSI ICM and Process IP Leader of Dow Performance Silicones. A short biography of Mike is enclosed in this newsletter for your reference. Please join us in congratulating Mike on winning this prestigious award.

Also in this newsletter, you will be debriefed about the PDD meetings, presentation sessions, and dinner event scheduled during the coming 2022 AIChE Spring meeting in San Antonio, Texas. Meanwhile, the most updated information for the 2022 Process Development Symposium scheduled in the June 7-9 in Philadelphia, Pennsylvania will also be provided. As always, your attention, participation and support for those activities are greatly appreciated.

You might have known that AIChE has recently unveiled its commitment to IDEAL: I (Inclusion) D (Diversity) E (Equity) A (Anti-Racism) L (Learning). To follow this commitment, in this newsletter we are glad to invite our PDD long-term member, AIChE Fellow, and the former AIChE President: Dr. Cheryl Teich, to share her D&I experiences as a woman chemical engineer.

There are still other exciting activities associated with our PDD. We wish you would enjoy reading this newsletter and feedback your thoughts.

Best regards,

Qiang Xu

PDD Chair

Professor

University Professor & Scholar

Distinguished Faculty Research Fellow

Dan F. Smith Department of Chemical & Biomolecular Engineering

Lamar University, Beaumont, TX 77710

Tel: (409) 880-7818; Email: Qiang.xu@lamar.edu





2022 Spring Meeting Programming



Process Development Division (PDD) Meetings

The following PDD Meetings are scheduled at the Spring Meeting. Please plan to attend and become involved in the division if you are not already.

The **PDD Leadership Meeting** will take place on Sunday, April 10 from 5:00 – 6:00 PM in the Chula Vista Boardroom of the Hyatt Regency.

The **PDD Programming / General Meeting** is planned for Monday, April 11 from 5:00 – 6:00 PM in Room 207A of the Henry B. Gonzalez Convention Center. In this meeting, you will learn more about tentative technical sessions for future meetings and have the opportunity to volunteer to become involved in the division as a session chair.

The **PDD Dinner** is a ticketed event planned for Tuesday, April 12 at 7:00 PM at the Saltgrass Steakhouse. See the next page for more information on this event. You can purchase a ticket online or at the registration desk.

The division meetings are great places to get involved in PDD activities. Please attend or reach out to the PDD leadership team listed at the end of this newsletter to get more involved in the division.



Process Development Dinner

Saltgrass Steak House



225 River Walk
San Antonio, Texas

7:00 PM Tuesday, April 12, 2022

Please plan to join us for the PDD Dinner in the Upstairs Dining Room at Saltgrass Steak House on the River Walk. The PDD dinner is a place to meet other PDD members, to socialize and network, and to just relax and get to know one another. It's a great event at a venue along the famous River Walk near the convention center.

The dinner is a ticketed event. Tickets may be purchased online prior to your trip or at the registration desk in San Antonio. Please come and invite those who may be interested in the PDD to join us as well.



Photo Credits: Saltgrass Steak House



2022 Spring Meeting Programming Featured Events and Speakers

Featured Speakers & Events

Speakers Events & Sessions



Lori Ryerkerk

Chief Executive Officer,
Celanese Corporation



Jennifer Wilcox

Principal Deputy Assistant
Secretary (Acting Assistant
Secretary), Office of Fossil
Energy and Carbon
Management at DOE



**Robert (Bob)
Johnston**

Senior Vice President,
ExxonMobil Chemical
Company



Erika M. Peterman

Senior Vice President Chemical
Intermediates North America,
BASF



Gavin Towler

Vice President and Chief
Technology Officer, Honeywell
Performance Materials
Technologies

<https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2022>

Featured Speakers & Events

Speakers Events & Sessions

APRIL 11, 2022

**2022 AGILE Award Keynote
Address**

APRIL 11, 2022

**18th GCPS Welcome Plenary
Keynote**

APRIL 11, 2022

**2022 Spring & GCPS Monday
Luncheon**

APRIL 12, 2022

**2022 Spring & GCPS Tuesday
Luncheon**

APRIL 13, 2022

**2022 Spring & GCPS
Wednesday Luncheon**

<https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2022>



2022 Spring Meeting PDD Technical Programming

The following are PDD sponsored technical sessions. Be sure to check the schedule on the AIChE Event App for any last-minute changes.



Monday, April 11

Mon, 2:30 – 4:00 PM

Cost-Effective Commercialization of New Processes or Products I

Process Development Division (12C – Technology Transfer and Manufacturing)

Mon, 4:30 – 6:00 PM

Cost-Effective Commercialization of New Processes or Products II

Process Development Division (12C – Technology Transfer and Manufacturing)

Mon, 6:00 – 8:00 PM

Process Development Division Poster Session

Process Development Division

Tuesday, April 12

Tue, 9:00 – 10:30 AM

Modeling Tools and Techniques for Process R&D

Process Development Division (12A – Process Research and Innovation)

Tue, 11:15 AM – 12:45 PM

Advances in Process Design and Development

Process Development Division (12A – Process Research and Innovation)



Tuesday, April 12 - Continued

Tue, 2:30 – 4:00 PM

Advanced Carbon Reduction Technologies

Process Development Division (12A – Process Research and Innovation)

Tue, 4:30 – 6:00 PM

Pilot Plant and Laboratory Safety

Process Development Division (12B – Pilot Plants)

Wednesday, April 13

Wed, 9:00 – 10:30 AM

Pilot Plants for Process Scale-Up I

Process Development Division (12B – Pilot Plants)

Wed, 11:15 AM – 12:45 PM

Pilot Plants for Process Scale-Up II

Process Development Division (12B – Pilot Plants)

Wed, 2:30 – 4:00 PM

Pilot Plants for Process Scale-Up III

Process Development Division (12B – Pilot Plants)

Wed, 4:30 – 6:00 PM

Overcoming Manufacturing Challenges in a Circular Economy

Process Development Division (12C – Technology Transfer and Manufacturing)

<https://aiche.confex.com/aiche/s22/meetingapp.cgi/Program/3094>

2022 Annual Meeting

November 13 – 18, 2022

**Phoenix Convention Center
Phoenix, AZ**



The call for abstracts for the 2022 Annual Meeting in Phoenix, AZ is open. The deadline to submit abstracts is Monday, April 11.

<https://www.aiche.org/conferences/aiche-annual-meeting/2022>

2022 Process Development Symposium



June 7 – 9, 2022

**Hilton Philadelphia City Avenue
Philadelphia, PA**

The Process Development Symposium (PDS) is a place to exchange wisdom, knowledge, tips, and personal experiences in process development. The PDS provides an opportunity for process development professionals from across the world to discuss their experiences with novel and innovative technologies to trigger radical changes in next-generation processes development and operations. This symposium, planned jointly between AIChE and its Process Development Division, is held annually in June.

Tentative Schedule of Topics

Tuesday, June 7	Networking & Welcome Reception
Wednesday, June 8	Keynote Speaker Driving Innovation in Process Development Designing Sustainable Processes Process Data Collection, Analysis and Modeling for Lab, Pilot and Production Plants Panel / Interactive Session Poster Session & Reception
Thursday, June 9	Advances in Bioprocess Development Emerging Technologies Batch vs Continuous, Scale-Up & Scale-Down, Case Studies Innovations in Process Safety

<https://www.aiche.org/conferences/process-development-symposium/2022>

For more information, contact Cody Hirashima (codyh@aiiche.org)

Photo Credits: American Institute of Chemical Engineers
National Park Service

Process Development Division (PDD) Awards

Process Development Practice Award

Award Sponsor: Zeton Inc.

Congratulations to Dr. Mike DePierro of Dow Chemical for being the recipient of the 2022 Process Development Practice Award Winner. Dr. DePierro will be honored at the Spring PDD Dinner in San Antonio, TX.



Dr. Mike DePierro

Senior Process Research Scientist
ORGSI ICM and Process IP Leader
Dow Performance Silicones

<http://www.aiche.org/community/sites/divisions/process-development/awards>

Interested in nominating yourself or a colleague for the following categories

- Excellence in Process Development Research Award
- Process Development Practice Award
- Process Development Division Student Paper Award

Please fill out the nomination form at the address below and send it to

Jay.F.Miller@gmail.com

<https://www.aiche.org/awards/awards-provisions-eligibility#division-forum-nomination>

A Retrospective on Inclusion within the Process Development Division

Full disclosure: I have not been particularly active in the PDD for a number of years. I offer the following historical perspective on how the Division's original culture of inclusivity led to its success.

Before there was a major cleanout and design of the Process Development Division website, you could find documentation of how I started my AIChE career.

The Division exists because a group of men (Prabir Basu of Searle, Kamlesh Bhatia of DuPont, John Corn of Ashland Chemical, George Liebermann of Xerox, Alan Leviton of Rohm and Haas and Ka Ng of UMass/Amherst) believed that the AIChE should have a home for process development practitioners beyond that covered by the Pilot Plant Committee. The PDD organizing committee, true to their process systems mindset, believed the nascent Division needed to be diverse to thrive. The minutes of one of the organizing committee meetings assigned the following action items: Prabir was to enlist Christine Seymour, and Alan was to recruit me. At the next Annual, Alan told me to come to the PDD organizational meeting: "I'll sit with you, you'll have a cookie, you'll meet some people, and I won't have to look for you afterwards to go to dinner". That meeting was the start of my AIChE leadership career. It was there that I met many people (including Chris!) whose friendship and mentorship I have cherished throughout my AIChE and "day job" careers. (PDD has always recognized the power of food in fostering relationships.)

The actions of the PDD organizing committee epitomize inclusion. To achieve their goals for the Division, they filled the leadership pipeline with people who demonstrated energy about process development and delivered on commitments. The committee fostered an egalitarian culture where all members were encouraged to participate. They were not above volunteering people to fill slots. I was extremely nervous about being tagged as an Area Vice Chair until Kamlesh assured me that he would provide ample on-the-job training. The Division excelled in on-boarding new people. One example: Joe Powell and Jonathan Worstell consistently brought younger Shell engineers to present their work and participate in the Division's activities. The first Process Development Symposium, the brainchild of the late Cawas Cooper (may his memory be a blessing), attracted a pool of people who did not attend Spring and/or Annual meetings and retained their interest and energy for the Division.

The early PDD culture, values, and shared vision resulted in a vibrant community that was diverse because it included everyone who had the technical interest and energy to contribute. Senior members of the Division sought newcomers individually, welcomed them individually, moved them into active involvement, and provided individual coaching on new responsibilities. PDD understood that its continued success depended on the ability to attract talent. I was able to contribute and excel in the Division and the AIChE with fewer restrictions and more latitude than I could in my day job, with the result that I became more effective in all (ok, most!) aspects of my life.

My hope is that we can all recognize the power of inclusion and integrate it seamlessly into our culture to promote individual and institutional success.

Cheryl I. Teich, FAIChE
2015 AIChE President
18 March 2022



Cheryl I. Teich, PhD, FAIChE

Teich Process Development LLC
The Dow Chemical Company (ret.)
2015 AIChE President

Cheryl Teich formed Teich Process Development LLC after retiring from The Dow Chemical Company as the Reaction Engineering Expertise Area Leader within the Company's Operations (Manufacturing and Engineering) organization. Cheryl led a virtual, global group of experts, charged with providing reaction engineering expertise across the corporation over a wide range of development and manufacturing scales. Cheryl joined Dow in 2009 during its acquisition of Rohm and Haas, having joined the latter after earning her PhD. Over the course of her career at Dow/Rohm and Haas, Cheryl demonstrated an ever-increasing breadth, depth, leadership and management in process development, scaleup and improvement of reaction systems across a range of products, processes, and businesses. Her work has encompassed inorganic and organic small molecule chemistry, polymerization technologies, and multiphase reactive and non-reactive systems. She has been an official and unofficial coach and mentor to numerous early career chemical engineers in Operations and R&D roles.

Cheryl holds S.B. and S.M. degrees from MIT, and a PhD from the Stevens Institute of Technology, all in chemical engineering. She has been an adjunct professor of chemical engineering at Stevens, and a member of various NSF proposal review panels, and a member of the United Engineering Foundation Board. Cheryl serves on the Board of the Science History Institute (Philadelphia, PA) and chairs its Audit Committee, is a member of External Advisory Board of the CCNY Chemical Engineering Department. An AIChE Fellow, Cheryl chaired the Institute Awards Committee in 2019 – 2020, and had the honor of being the 2015 President of the Institute.

Process Development Division Leadership Team

	Chair Qiang Xu Lamar University (409) 880-7818 Qiang.xu@lamar.edu		Chair Elect Kishori Deshpande Dow Chemical (979) 238-5868 KDeshpande@dow.com
	Fall Program Chair Vinod Kumar Venkatakrishnan Shell Oil Company (281) 544-7567 v.venkatakrishnan2@shell.com		Spring Program Chair Juben Chheda Shell Oil Company (281) 544-8232 Juben.chheda@shell.com
	Membership Chair Johathan Lekse NETL (412) 386-7312 Jonathan.Lekse@NETL.DOE		Awards Chair Jay Miller Arkema (610) 359-2092 jmiller@gmail.com
	Treasurer Raymond Rooks MATRIC (304) 720-1037 Raymond.Rooks@matricinnovates.com		Webmaster Robert Huss Eastman Chemical Company (423) 229-6425 rhuss@eastman.com
	Past Chair Anthony Cartolano Retired arcartolano@gmail.com		Chair Dr Qiang Xu Lamar University (409) 880-7818 Qiang.xu@lamar.edu

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