

AIChE Process Development Division Spring Newsletter 2024



For more information, visit

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

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Spring Newsletter Outline:



Welcome to the Spring 2024 edition of the Process Development Division Newsletter. As usual, our spring edition centers around activities planned at the Spring Meeting, scheduled for March 24 – 28 in New Orleans, LA this year. You will find information on division specific activities as well as some general programming information. We hope you are planning to attend and that we'll see you there at the PDD events.

You will also find information on the upcoming 2024 Process Development Symposium and other division highlights. We are seeking volunteers to serve on the PDD award committee. We also have several area coordinator roles open and invite you to get further engaged in the division. Please consider becoming engaged in these opportunities, and if you are not a member, please consider joining our group.

Have a great spring, and we hope to see you in New Orleans or at the Annual meeting in San Diego this October.

Please Join: Process Development Division (PDD)

The Process Development Division promotes networking and communication amongst engineers and scientists interested in process development. The division sponsors meetings, dinners, seminars, technical programming, and publications. The division provides a forum for the engineer and educator to exchange information and ideas related to process development. Please join or encourage your colleagues to join if they are not already members.

Chartered 2000, Annual Dues: \$10

Message from the Chair

Dear PDD Members:

Welcome to our first Newsletter for 2024! As we kickstart the new year I am excited about all the activities we have in store for you. To begin with, our focus on updating the by-laws continued and we are close to the finish line. In the revised by-laws we are proposing a few organizational changes, which, if agreed by Chemical Technology Operating Council (CTOC), will be shared with you. Depending on how the members vote those changes will be ratified. On another note, our first “Meet the Industry Candidate” poster session, in collaboration with Pharmaceutical Discovery, Development and Manufacturing (PD2M) division, at the last Annual Conference in Orlando was a resounding success. We had over 100 poster entries covering the entire gamut of process development challenges. Given the success, we plan to continue the event this year at the Annual meeting. So please stay tuned! Recently I came across an article on role of artificial intelligence in process development and that made me realize the pace at which the field is moving ahead and its potential impact on the chemical industry at large. If we continue this path, we are not far from using these approaches to make our processes safer, better, intelligent, and above all sustainable! Against this backdrop, I believe the process development division serves as an excellent platform to share latest developments and promote networking and communication among engineers and scientists interested in the field. Our upcoming webinar on April 25th by Aaron Sarafinas on mixing strategies for new process development is aligned with this objective. We hope you can join us. To continue with all these activities, we are always looking for volunteers! Please feel free to reach out to me or anyone in leadership team if you want to get involved or just get connected. Looking forward to our continued dialogue!

Best regards,

Kishori Deshpande

Dow

Senior Research Scientist

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Lake Jackson, TX 77566

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2024 PDD Spring Meeting Events

PDD General Meeting

Sunday, March 24, 5:00 – 6:00 PM

New Orleans Ernest N. Morial Convention Center, Rooms 203-204

<https://aiche.confex.com/aiche/s24/meetingapp.cgi/Session/53122>

PDD Programming Meeting

Monday, March 25, 5:00 – 6:00 PM

New Orleans Ernest N. Morial Convention Center, Rooms 231-232

<https://aiche.confex.com/aiche/s24/meetingapp.cgi/Session/55004>

PDD Dinner (Ticketed Event)

Tuesday, March 26

Tujague's – <https://tujaguesrestaurant.com/>

See more information on the following page

Division meetings are great places to get involved in division activities. Please attend or reach out to PDD leadership listed at the end of this newsletter if you are looking for opportunities to become more involved.

Process Development Division Dinner



Tujague's Restaurant
429 Decatur St
New Orleans, LA 70130



Tuesday, March 26

Dinner 7:00 PM: Ticketed Event: \$75

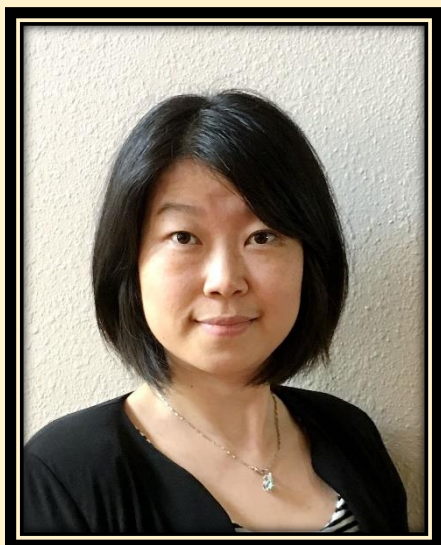
Free Reception for PDD Members 6:00 – 7:00 PM

Please join us for an evening of dining and conversation within walking distance of the Convention Center. The dinner is always a PDD highlight of the AIChE meetings and is a great time to meet fellow members. This is a ticketed event. Tickets can be purchased through AIChE prior to the event or at the registration desk upon arrival. Seating is limited to 30, so get your tickets early.

Photo Credits: tujaguesrestaurant.com

Process Development Division Awards

Process Development Practice Award Sponsored by Zeton



Dr. Ida (Xue) Chen

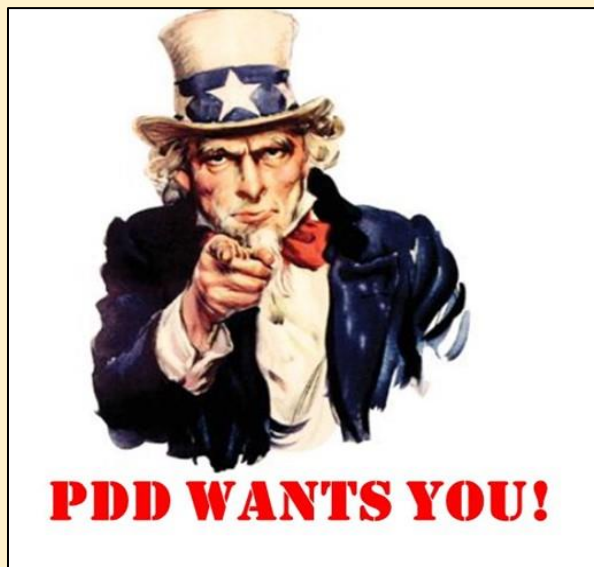
Global R&D/TS&D Fellow
The Dow Chemical Company
Dow Industrial Solutions R&D

Congratulations to Dr. Ida (Xue) Chen for being the recipient of the 2024 Process Development Practice Award. This award recognizes long-term contributions in the field of applied, commercial process development. Dr. Chen will be honored at the Spring PDD Dinner in New Orleans.

Ida has significant contributions in alkoxylation and amination processes development and has commercialized more than 20 innovative products in various markets including electronics, constructions, energy, agriculture, pharmaceutical and food processing. In addition, Ida led the development of an improved reductive amination catalyst, “UCAMTM-F”, which will be implemented commercially in 2024 to produce millions of pounds of ethyleneamines, and one of their applications is for gas treatment and CO₂ capture. Ida received a PhD in Chemical Engineering from University of Michigan, and a Bachelor’s degree in Chemical Engineering from Tianjin University, China. During her career, Ida has published 100+ scientific papers/presentations and currently has more than 90 U.S. patent applications with 23 granted U.S. patents. Ida’s patented technologies on various sustainable processes have won 7 global technology awards, such as R&D 100 Award, Edison Award, Business Intelligence Group Award, etc.

Process Development Division Awards

Call for Volunteers



Have you always wanted to volunteer for the division but did not know how? Here's an excellent opportunity. Process development division is seeking 3-5 volunteers as members of awards committee to help with the process. These awards represent the division's commitment to recognize and celebrate individuals who have made significant technical contributions to the advancement of process development. We are looking for enthusiastic volunteers who can help us in this endeavor. Time commitment is up to 5 hours total during the year. What better way to encourage and cheer fellow practitioners for their distinguished service? Come and be a part of PDD. Please respond to jay.f.miller@gmail.com by March 31, 2024.

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 Division Award 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>

2024 Process Development Symposium



The 2024 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 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 **Chicago, Illinois** on **June 4-6, 2024**.

Theme: Process Development Opportunities for our Changing Industries

Proposed Sessions:

- Designing Robust and Flexible/Sustainable Processes
- Batch vs. Continuous, Scale-Up & Scale-Down
- Innovation & New Technologies
- Modeling, Computation, and Data Analytics in Process Development/Process Analytical Tools
- Bio-Process Development, Pharmaceuticals, Alternative Fuels
- Industrial Process Research Including topics such as: Intellectual Property in Process Technology, Technical Report Writing, Project Management

For More Information: <https://www.aiche.org/conferences/process-development-symposium/2024>



Process Development Division

2024 Spring Meeting Technical Programming / Sessions

<https://aiche.confex.com/aiche/s24/meetingapp.cgi/Program/3369>



Photo Credits: mccno.com

All times are New Orleans local time.

Monday, March 25

Process Development Division Plenary

9:30 – 11:00 AM: Ernest N. Morial Convention Center – 231-232

89 Advances in Process Design and Development

1:30 – 3:00 PM: Ernest N. Morial Convention Center – 231-232

105 Advances in Process Design and Development II

3:30 – 5:00 PM: Ernest N. Morial Convention Center – 231-232



42 Poster Session: Process Development Division

5:00 – 7:00 PM: Ernest N. Morial Convention Center – Hall B-1

Tuesday, March 26

55 Modeling Tools and Techniques for Process R&D I

8:00 – 9:30 AM: Ernest N. Morial Convention Center – 231-232

72 Modeling Tools and Techniques for Process R&D II

10:15 – 11:45 AM: Ernest N. Morial Convention Center – 231-232

118 Advanced Carbon Reduction Technologies

1:30 – 3:00 PM: Ernest N. Morial Convention Center – 231-232

Advanced Carbon Reduction Technologies II

3:30 – 5:00 PM: Ernest N. Morial Convention Center – 231-232

Wednesday, March 27

134 Process Scale Up and Safety

8:00 – 9:30 AM: Ernest N. Morial Convention Center – 231-232

Process Scale Up and Safety II

10:15 – 11:45 AM: Ernest N. Morial Convention Center – 231-232

141 Cost-Effective Commercialization of New Processes or Products

1:30 – 3:30 PM: Ernest N. Morial Convention Center – 231-232

2024 Annual Meeting

October 27 – 31, 2024

**Hilton San Diego BayFront, Omni San Diego, San Diego
Convention Center**



The upcoming Annual Meeting will be held in San Diego, California in October 2024. Mark your calendars and join us for another chance to meet and share ideas.

While you're at it, please consider submitting an abstract to present at one of the technical sessions. New submissions must be entered by Monday, April 8, 2024. <https://www.aiche.org/conferences/aiche-annual-meeting/2024/2024-call-abstracts-information>

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AIChE PDD Webinar Series

PDD is excited to bring to you a series of planned webinars aimed at the common interest of our membership. Be sure to look for announcements regarding future webinars. The next webinar will be -

“Process always comes first” when successfully applying mixing technology

**Thursday, April 25
2:00 – 3:15 PM Central Time Zone**

Aaron Sarafinas



Aaron is the Principal & Mixing Steward at Sarafinas Process & Mixing Consulting LLC. He started his consulting company in 2018 after working for Rohm and Haas / Dow for almost 36 years. Over his career Aaron established himself as an expert in bridging the gap between the R&D lab and commercial production units. He specializes in process development, especially the impact of mixing technology on processes, with decades of industrial experience in both technical and leadership roles. He continues to apply his experience to enable his consulting clients in the chemical and pharmaceutical industries to achieve faster process development, accomplish efficient troubleshooting, and leverage advantaged mixing technology. In addition to his consulting, Aaron

also teaches the course “Applied Mixing Technology for Process Development: Scaling Down to Scale Up” for Scientific Update and had been teaching the course “Scaling and Piloting for the Process Industries” for CfPA.

[Sarafinas Process & Mixing Consulting LLC](#)

Registration is Free:

https://aiche.zoom.us/webinar/register/WN_2OsAj2NNRSankqYMiUFbmA

Process Development Division Leadership Team

	Chair Kishori Deshpande Dow (979) 238-5868 KDeshpande@dow.com		Chair Elect Rob Nunley AVN Corpl (304) 720-6707 Rob.Nunley@avncorp.com
	Fall Program Chair Vinod Kumar Venkatakrishnan Shell (281) 544-7567 v.venkatakrishnan2@shell.com		Spring Program Chair Juben Chheda Shell (281) 544-8232 Juben.chheda@shell.com
	Membership Chair Johnathan Lekse NETL (412) 386-7312 Jonathan.Lekse@NETL.DOE		Awards Chair Jay Miller Arkema (610) 359-2092 Jay.f.miller@gmail.com
	Treasurer Ida Chen Dow (979) 238-4634 chen2c7ab2@dow.com		Webmaster Pat Heider Dow (989) 636-1923 plheider@dow.com
	Past Chair Qiang Xu Lamar University (409) 880-7818 Qiang.xu@lamar.edu		Newsletter Editor Pranav Karanjkar Dow (989) 496-1359 Rob.Nunley@avncorp.com

2023 PDD Area Leadership

Name	Position	E-mail Address
12A Process Research and Innovation		
Ben Yang	12A Chair	xyang116@umd.edu
Mo Jiang	12A Chair Elect	mjiang3@vcu.edu
Anup Doraisamy	12A Area Coordinator	anup.doraiswamy@entegris.com
Raymond Jian	12A past chair	rjian@sabic.com
12B Pilot Plants		
Pratik Bhishikar	12B Chair	pbbhishikar@zeton.com
Ida (Xue) Chen	12B Chair Elect	Chen2c7ab2@dow.com
	12B Area Coordinator	
Madhav Ghanta	12B past chair	madhav.ghanta@sabic-hpp.com
12C/D Tech Transfer and Commercialization		
Michael Telgenhoff	12C/D Chair	michael.telgenhoff@dow.com
Mrunmayi Kumbhalkar	12C/D Chair elect	mkumbhalkar@dow.com
	12C/D Area Coordinator	
Ha Dinh	12C/D past chair	Ha.Dinh@honeywell.com
12E/F Process Intensification and Microprocess Engineering		
Patrick Heider	12E/F Chair	pheider@dow.com
Jing Luo	12E/F Chair Elect	jluo2@dow.com
	12E/F Area Coordinator	
Robert Broekhuis	12E/F past chair	rbroekhuis@sabic.com
12G Product Design		
Shaibal Roy	12G Chair	shaibal.roy@fmc.com
Pranav Karanjkar	12G Chair Elect	pranav.karanjkar@dow.com
	12G Area Coordinator	
Mu Wang	12G past chair	wang.m.13@pg.com

We have several area coordinator positions available (highlighted in yellow above). If you are interested in this role and want to know more information, please reach out to Vinod Kumar Venkatakrishnan (v.venkatakrishnan2@shell.com).

2023 PDD Liaisons

Ahmed Youssef	YP Liaison	ahmed.youssef@sabic.com
Rob Broekhuis	PDS Liaison	rbroekhuis@sabic.com
Mary T. am Ende	CTOC Liaison	mary.t.amende@nalasengineering.com