AIChE Process Development Division Spring Newsletter 2025



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Spring Newsletter Outline:



Welcome to the Spring 2025 edition of the Process Development Division Newsletter. As usual, our spring edition centers around activities planned at the Spring Meeting, scheduled for April 06 – 10 in Dallas, TX 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 about other division highlights. We are seeking volunteers to serve on the PDD award committee. We invite you to get further engaged in the division by attending one of the division meetings or getting in touch with PDD leadership team or with area specific leaders. If you are not a member, please consider joining our group.

Have a great spring, and we hope to see you in Dallas or at the Annual meeting in Boston this November.

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 2025! As we kickstart the new year I am excited about all the activities we have in store for you. To begin with, thank you for ratifying the proposed changes in our by-laws. The revised by laws have been approved by Chemical Technology Operating Council (CTOC) and uploaded on the division website. This revision was long overdue since 2002, and I would like to thank you for working with me to update it. Special thanks to Mary T amEnde, Rob Nunley, and Ray Rooks for their constructive feedback to ensure that the document is comprehensive and accurate. Also, thanks to Julie Liu and Reginald Rogers from CTOC for their continued support.

On another note, our second "Meet the Industry Candidate" poster session, in collaboration with Pharmaceutical Discovery, Development and Manufacturing (PD2M) division, at the last Annual Conference in San Diego continued to garner interest and support from students and industry sponsors alike. 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 in Boston. So please stay tuned!

Recently I came across an article on key trends in chemical industry with emphasis on (a) safe and sustainable by design chemicals, (b) carbon reduction and circularity, (c) intelligent R&D and (d) continuous processing for reducing energy and capital footprint. The article also cited the exciting research in these areas which made me realize the pace at which the field is moving ahead and its potential impact on the chemical industry at large. Against this backdrop, I believe the process development division serves as an excellent platform to share latest developments in the field and promote networking and communication among engineers and scientists interested in the field. Our last webinar on March 13th by Prof. Qiang Xu on Cost-Effective Solutions for Emission Reduction in the Chemical Process Industry was aligned with this objective. We hope you enjoyed the insights and will continue to join us for future sessions.

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 wishes,

Kishori Deshpande, Ph.D. Dow Phone: (979) 238-5868 kdeshpande@dow.com





2024 PDD Spring Meeting Events

PDD General Meeting

Sunday, April 06, 5:00 – 6:00 PM Hilton Anatole (Morocco) https://aiche.confex.com/aiche/s25/meetingapp.cgi/Session/56973

PDD Programming Meeting

Monday, April 07, 5:00 – 6:00 PM Hilton Anatole (Morocco) https://aiche.confex.com/aiche/s25/meetingapp.cgi/Session/56974

PDD Dinner (Ticketed Event)

Tuesday, April 08 Perry's Steakhouse & Grille (Prime Room) – https://perryssteakhouse.com/locations/tx/dallas/park-district/#rooms

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



Perry's Steakhouse (Prime Dining Room) 2100 Olive St Suite #100 Dallas, TX 75201



Photo Credits: perryssteakhouse.com

Tuesday, April 08 Dinner 7:30 PM: Ticketed Event: \$85 Free Reception for PDD Members 6:30 – 7:30 PM

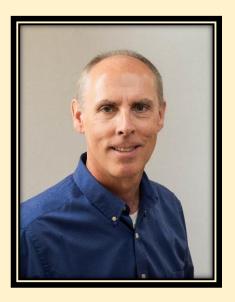
Please join us for an evening of dining and conversation within walking distance of the Convention Center. The dinner is always a PDD highlight of the AIChE meetings and is a great time to meet fellow members. This is a ticketed event. Tickets can be purchased through AIChE up until the event or at the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



Process Development Division Awards

Process Development Practice Award Sponsored by Zeton





Dr. Thomas W Karjala

Principal Research Scientist Packaging & Specialty Plastics and Hydrocarbons R&D Dow Inc

Congratulations to Dr. Thomas Karjala for being the recipient of the 2025 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 Dallas.

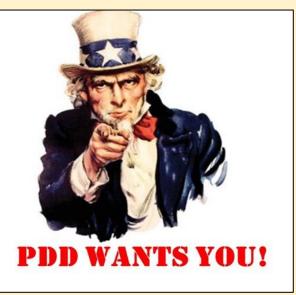
Dr. Karjala has made significant contributions to the

process development and commercialization of many polyolefin products in various markets including NORDEL[™] EPDM, INDEX[™] styrene interpolymers, VERSIFY[™] polypropylene elastomers, INFUSE[™] and INTUNE[™] olefin block copolymers, and ENGAGE[™] PV polyolefin elastomers. In particular he has applied polymer reaction engineering principles to scale up new catalysts and products from small scale batch reactors to pilot plants and to full commercial plants of up to 600 kt/y in size. He is one of the pioneers in commercializing polyolefin chain shuttling technology for which Dow won the 2015 Kirkpatrick Chemical Engineering Achievement Award. Dr Karjala received a MS and PhD in Chemical Engineering from the University of Texas at Austin and a bachelor's degree in chemical engineering from Michigan Technological University. During his career Thomas has authored over 218 internal reports, 77 patent disclosures, 24 patent applications, and 12 unique granted patents. He has also presented at major conferences and published 17 journal articles and several conference papers.



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 April 15, 2025.

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 <u>Jay.F.Miller@gmail.com</u>

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





Process Development Division

2025 Spring Meeting Technical Programming / Sessions

https://aiche.confex.com/aiche/s25/meetingapp.cgi/Program/3507



Photo Credits: hilton.com

All times are Dallas local time.

Monday, April 07

<u>Digital Procedures – Next Generation Procedures: Best Practices,</u> <u>Mobility, and AI</u> 9:30 – 11:00 AM: Coral (Tower, Hilton Anatole) <u>Process Development Division Plenary</u>

1:30 – 3:00 PM: Morocco (Tower, Hilton Anatole)

Low Carbon Industrial Technologies 3:30 – 5:00 PM: Morocco (Tower, Hilton Anatole)

Poster Session: Process Development Division 5:00 – 7:00 PM: Trinity Exhibit Hall (Trinity Complex, Hilton Anatole)





Tuesday, April 08

Process Intensification and Scale-up Challenges 8:00 – 09:30 AM: Morocco (Tower, Hilton Anatole)

Engineering around Uncertainty in 2025 and Beyond 8:00 – 09:30 AM: Coral (Tower, Hilton Anatole)

Process Intensification and Scale-up Challenges II 10:15 – 11:45 AM: Morocco (Tower, Hilton Anatole)

Modeling Tools and Techniques for Process R&D I 1:30 – 3:00 PM: Morocco (Tower, Hilton Anatole)

Modeling Tools and Techniques for Process R&D II 3:30 – 5:00 PM: Morocco (Tower, Hilton Anatole)

Wednesday, April 09

Advances in Process Design and Development 8:00 – 09:30 AM: Morocco (Tower, Hilton Anatole)

Overcoming Manufacturing Challenges in Future Economy 10:15 – 11:45 AM: Morocco (Tower, Hilton Anatole)

<u>Cost-Effective Commercialization of New Processes or Products I</u> 1:30 – 3:00 PM: Morocco (Tower, Hilton Anatole)

<u>Cost-Effective Commercialization of New Processes or Products II</u> 3:30 – 5:00 PM: Morocco (Tower, Hilton Anatole)



2025 Annual Meeting

November 02 – 06, 2025 John B. Hynes Veterans Memorial Convention Center, Marriott Copley Place, Sheraton Boston



Photo Credits: massconvention.com

The upcoming Annual Meeting will be held in Boston, Massachusetts in November 2025. 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 7, 2025. <u>https://www.aiche.org/conferences/aiche-annual-meeting/2025/2025-call-abstracts-information</u>

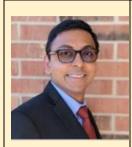
Process Development Division Leadership Team



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2024 PDD Area Leadership

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Mo Jiang	12A Chair Elect	mjiang3@vcu.edu		
Patricia Gillenwater	12A Area Coordinator	patricia.gillenwater@gmail.com		
Ray Jian	12A Past Chair	rjian@sabic.com		
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Pratik Bhishikar	12B Chair	pbhishikar@zeton.com		
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12C/D Tech Transfer and Commercialization				
Michael Telgenhoff	12C/D Chair	michael.telgenhoff@dow.com		
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12E/F Process Intensification and Microprocess Engineering				
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If you are interested in getting involved in any particular subdivision and want to know more information, please reach out to Vinod Kumar Venkatakrishnan (v.venkatakrishnan2@shell.com).

2024 PDD Liaisons

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