# AIChE Process Development Division Fall Newsletter 2020







For more information, visit <a href="http://www.aiche.org/community/sites/divisions/process-development">http://www.aiche.org/community/sites/divisions/process-development</a>

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## Message from the Chair

Welcome to our Fall 2020 newsletter! Please read through to see information on the upcoming virtual Annual meeting and the planning for the Spring 2021 meeting. Early planning is also in progress for the next Process Development Symposium planned for early summer 2021.

For those attending the Annual meeting, I encourage you join our virtual cocktail hour on Tuesday evening for some networking and fun activities. Please see the details following. Thanks again for being a member of the Division, and your support. Please consider becoming more active in the division through our programming areas. Our division contact information is at the end of the newsletter, don't hesitate to reach out to anyone on that list for more information.

All my regards and stay safe.

Best regards,

**Tony Cartolano** 

**Process Development Division Chair** 

#### 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.

**Chartered: 2000, Dues: \$10** 

# **Process Development Division (PDD) 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

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

## Congratulations to the 2020 PDD award winners!

**Process Development Practice Award Award Sponsor: Zeton Inc.** 

## **Michael Telgenhoff**

Principle Process Research Scientist, Dow Performance Silicones



**Excellence in Process Development** 

**Research Award** 

**Award Sponsor: Pfizer Inc.** 

## Prof. Y.A. Liu

Alumni Distinguished Professor, Frank C. Vilbrandt Endowed Professor Department of Chemical Engineering, Virginia Tech



Process Development Division Student

**Paper Award** 

**Award Sponsors: Linde Group** 

**Niket Sharma** 

Department of Chemical Engineering, Virginia Tech



## 2020 Annual Meeting – What you need to know



## **Process Development Division (PDD) Meetings at Annual Meeting**

Although we will not be meeting in person at the Fall meeting this year, PDD will host its regular list of meetings on the vFairs Virtual Platform.

The **PDD General meeting** is planned to take place on Monday, November 16, 2020 at 11:30 am PST.

The **PDD Programming meeting** is planned on Tuesday, November 17, 2020 at 11:30 am PST.

In place of the much-anticipated regular Tuesday evening dinner, PDD will host a one-hour virtual event on vFairs called "PDD Networking and Trivia Night". It will take place at 3 pm PST (6 pm ET) on Tuesday November 17, 2020. Although it is a no-cost event, please register for it as a ticketed event. Registrants will have a chance to introduce themselves to the group and participate in a fun trivia contest.

Also, please join in on all the PDD division virtual sessions to learn more on PDD topics and feel free to reach out to the PDD leadership team (pages 15 and 16 of this newsletter) to get more involved in the division.

## 2020 Annual Meeting – What you need to know

# **Annual Meeting Featured Events and Speakers**

#### Featured Speakers & Events



Frances H. Arnold Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry, California Institute of Technology



Michael Doherty

Duncan & Suzanne Mellichamp
Chair in Process Systems
Engineering, University of
California Santa Barbara



Alice P. Gast President, Imperial College London

Cato Laurencin

Speakers Events & Sessions



Christine S. Grant
Professor & Associate Dean,
North Carolina State University,
Program Director, Broadening
Participation in Engineering,
National Science Foundation



Arturo Hernández-Maldonado

Professor of Chemical
Engineering, University of
Puerto Rico at Mayagüez



University Professor and Van Dusen Distinguished Endowed Professor, Chief Executive Officer, Connecticut Convergence Institute for Translation in Regenerative Engineering, The University of Connecticut



Jennifer Lopez-Reed Chief Operating Officer, Diabetes Business Unit and Senior Leader, Connected Care and Insulins Product Development, Eli Lilly and Company



Gary May Chancellor, University of California, Davis



Massimo Morbidelli Professor and Decano, Dipartimento di Chimica, Materiali e Ingegneria Chimica del Politecnico di Milano



Lori Ryerkerk Chief Executive Officer, Celanese Corporation



Michael Strano
Carbon P. Dubbs Professor of
Chemical Engineering,
Massachusetts Institute of
Technology



NOVEMBER 18, 2020

Presidential Lecture

NOVEMBER 16, 2020

2020 Danckwerts Lecture

Speakers Events & Sessions

NOVEMBER 16, 2020

Meet the Leaders: Engineering for Inclusion

NOVEMBER 17, 2020

SBE's James E. Bailey Award Lecture NOVEMBER 18, 2020

John M. Prausnitz AIChE Institute Lecture NOVEMBER 17, 2020

2020 Andreas Acrivos Award for Professional Progress in Chemical Engineering Lecture

Refer to Meeting Guide at this link

Refer to this **link** for all annual meeting events

## **PDD Annual Meeting 2020 Programming**



Carbon Dioxide Capture Technologies and Their Use II
PreRecorded+, Environmental Division (09), PDD Co-Sponsored
8:00 AM - 9:00 AM
Nov 16, 2020

## Cybersecurity

PreRecorded+, Next-Gen Manufacturing (T6), PDD Co-Sponsored 8:00 AM - 9:00 AM Nov 16, 2020

Design, Construction and Operation of Unit Operations Labs and Pilot Plants
PreRecorded+, Process Development Division (12)
8:00 AM - 9:00 AM

Nov 16, 2020

Enabling Integrated Synthesis, Design and Operations Through Simulations PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 16, 2020



Physical Properties for Chemical Product and Process Design PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 16, 2020

Predictive Scale-Up/Scale-Down for Production of Pharmaceuticals and Biopharmaceuticals I
PreRecorded+, Pharmaceutical Discovery, Development and Manufacturing Forum (26), PDD Co-Sponsored
8:00 AM - 9:00 AM
Nov 16, 2020

Tools and Techniques for Product Design
PreRecorded+, Process Development Division (12)
8:00 AM - 9:00 AM
Nov 16, 2020

Cybersecurity Keynote Presentations (Invited Talks)
vFairs Auditorium, Next-Gen Manufacturing (T6), PDD Co-Sponsored
9:00 AM - 10:00 AM
Nov 16, 2020

Meet the Leaders: Engineering for Inclusion (Invited Talks)
vFairs Auditorium, Featured & Specialty Programming (18), PDD Co-Sponsored
12:30 PM - 1:30 PM
Nov 16, 2020



#### **Integrated Product and Process Design**

PreRecorded+, Computing and Systems Technology Division (10), PDD Co-Sponsored 8:00 AM - 9:00 AM

Nov 17, 2020

**Poster Session: Process Development** 

Poster Gallery, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 17, 2020

Nov 17, 2020

Predictive Scale-Up/Scale-Down for Production of Pharmaceuticals and Biopharmaceuticals II

PreRecorded+, Pharmaceutical Discovery, Development and Manufacturing Forum (26), PDD Co-Sponsored

8:00 AM - 9:00 AM

Tools and Strategies for Successful Technical Project Leadership PreRecorded+, Management Division (05), PDD Co-Sponsored 8:00 AM - 9:00 AM Nov 17, 2020

3D Printing in Catalysts, Reaction, and Energy Industry
PreRecorded+, Next-Gen Manufacturing (T6), PDD Co-Sponsored
8:00 AM - 9:00 AM
Nov 18, 2020

Big Data, Artificial Intelligence, and Machine Learning Examples for Process Research PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 18, 2020



**Challenges and Best Practices in Technology Commercialization** 

PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 18, 2020

**Future of Manufacturing and Emerging Technologies** 

PreRecorded+, Next-Gen Manufacturing (T6), PDD Co-Sponsored

8:00 AM - 9:00 AM

Nov 18, 2020

Modular Processes for Coal and/or Biomass Conversion

PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 18, 2020

**Novel Reactors** 

PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 18, 2020

**Process Intensification in Biorefineries** 

PreRecorded+, Forest and Plant Bioproducts Division (17), PDD Co-Sponsored

8:00 AM - 9:00 AM

Nov 18, 2020

**Risk Reduction in Process Development and Operation** 

PreRecorded+, Process Development Division (12), PDD Co-Sponsored

8:00 AM - 9:00 AM

Nov 18, 2020

Plenary Session: Waste Plastics (Invited Talks)

vFairs Auditorium, Waste Plastics (TJ), PDD Co-Sponsored

10:30 AM - 11:30 AM

Nov 18, 2020



Crystallization Process Development
PreRecorded+, Process Development Division (12)
8:00 AM - 9:00 AM
Nov 19, 2020

Integrated Process Engineering and Economic Analysis
PreRecorded+, Next-Gen Manufacturing (T6), PDD Co-Sponsored
8:00 AM - 9:00 AM
Nov 19, 2020

Manufacturing Process Improvements for Chemical/Petrochemical Industries PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 19, 2020

Novel and Reactive Separations

PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 19, 2020

Novel Processes and Concepts

PreRecorded+, Process Development Division (12)
8:00 AM - 9:00 AM

Nov 19, 2020

Renewable Polymers and Intermediates Technology PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 19, 2020



Environmentally Friendly Product and Process Development for Sustainability PreRecorded+, Process Development Division (12)

8:00 AM - 9:00 AM

Nov 20, 2020

Materials and Processes for Water Purification and Desalination PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 20, 2020

Particle Technology in Product Design
PreRecorded+, Particle Technology Forum (03), PDD Co-Sponsored
8:00 AM - 9:00 AM
Nov 20, 2020

Process Research for Improved Throughput & Efficiency, and Reduced Cost PreRecorded+, Process Development Division (12) 8:00 AM - 9:00 AM Nov 20, 2020

Industry 4.0 and Digital Transformation
vFairs Auditorium, Next-Gen Manufacturing (T6), PDD Co-Sponsored
9:00 AM - 10:00 AM
Nov 20, 2020

Panel Discussion: Chemical Process and Product Design Careers in Industry & Academia (Invited Talks)

vFairs Auditorium, Process Development Division (12)

10:30 AM - 11:30 AM

Nov 20, 2020

#### **CALL FOR ABSTRACTS: AICHE SPRING MEETING 2021**



## The call for abstracts deadline is November 20th! Submit your abstract here.

We need your expertise to develop programming to address industry challenges and opportunities as they relate to new technologies, management practices, as well as the latest tools and techniques relevant to the following areas:

#### **FEATURED TOPICALS**

- 7th Topical Conference on Big Data Analytics
- 9th International Conference on Upstream Engineering and Flow Assurance
- 21st Topical Conference on Gas Utilization
- 24th Topical Conference on Refinery Processing
- Hydrogen Safety
- Kister Distillation Symposium
- The 33rd Ethylene Producers' Conference
- Process Intensification
- Emerging Technologies in Clean Energy
- Leadership Development Professional Skills to Catalyze your Career
- Waste Plastics

#### **DIVISIONS, FORUMS & COMMUNITIES**

- Chemical Engineering & the Law
- Computing and Systems Technology
- Energy & Transport Processes
- Engineering for Inclusion
- Environmental Division
- Industry 4.0
- Management
- Meet the Industry Candidates
- Process Development Division
- Separations Division

## **AICHE SPRING MEETING 2021: TENTATIVE PDD SESSIONS**



## The call for abstracts deadline is November 20th! Submit your abstract here.

#### Process Research and Innovation(12A)

- o 12A00 Biomass Conversion to valuable products Oral Session
- o 12A00 Modeling Tools and Techniques for Process R&D Oral Session
- 12A00 Advances in Process Design and Development Oral Session]
- 12A00 Process Development and Chemical Engg under Global Warming Reality (Sustainability and Circularity) - Oral Session

#### Pilot Plant(12B)

- o 12B00 Pilot Plant Success Stories Oral Session
- o 12B00 Pilot Plant Separations Oral Session
- o 12B00 Pilot Plant and Laboratory Safety Oral Session
- o 12B00 Challenges in Process Scale-up Oral Session

#### **Tech Transfer and Manufacturing(12C)**

- o 12C00 Chemical process Maintenance and Risk Reduction Oral Session
- o 12C00 Cost-effective commercialization of new processes or products Oral Session
- 12C00 Applications of Big Data Analytics for Manufacturing Process Improvements Oral Session Process

#### **Intensification and Microprocess Engineering(12E)**

- o 12E00 Process Intensification Opportunities Oral Session
- o 12E00 Advances in Process Intensification Oral Session



Planning for Process Development Symposium (PDS 2021) is ongoing to confirm exact venue and dates.

Organizing team is on-track to finalize the venue for:

Philadelphia, June 15-17, 2021!

More details in the Spring 2021 Newsletter, stay tuned!

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

# **Process Development Division Area Leadership**



	Chair	Chair Elect	Area Coordinator
12A Process Research & Innovation	James Marek James.marek@abbvie.com	Ray Jian rjian@sabic.com	Ben Yang xiaochuan.yang@fda.hhs.gov
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12G Product Design	Kishori Deshpande Dow Chemical Company kdeshpande@dow.com	Mu Wang wang.m.13@pg.com	Shaibal Roy Shaibal.fmc@fmc.com

**Process Development Symposium Liaison:** 

Kevin G. Joback (kevin@molecularknowledge.com)

# **Process Development Division Leadership (2020-2021)**

**Chair Elect** 

Chair



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