

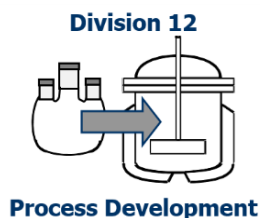
AIChE Process Development Division Fall Newsletter 2019



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

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Message from the Chair

Hello Process Development Division (PDD) members!

Welcome to our Fall 2019 newsletter. You'll find information about the upcoming Annual meeting in Orlando, and the Spring 2020 meeting. Early planning is also in progress for the next Process Development Symposium early summer 2020.

My term as Division Chair is ending this year. Thanks to past chair Bill Hollar, for helping me get up to speed, and thanks to all the division leadership for their volunteer efforts for this division. Tony Cartolano will be taking over as Division Chair for 2020-2021. Thanks Tony for your work as Chair Elect, and we look forward to the next two years!

We are currently holding elections for Chair Elect and Treasurer – you should have received an email with a link to the ballot recently. We'll also be transitioning all Area Chairs to Past Chair, and the current Area Chair Elects to Area Chairs. We'll hold in-person votes for the new Chairs Elect of each area at the programming meeting in Orlando.

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.

Thanks for reading,

-Bob Huss

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

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>

2019 Process Development Division Award Winners

Excellence in Process Development Research Award Award Sponsors: Pfizer Inc.



Fengqi You is the Roxanne E. and Michael J. Zak Professor at Cornell University, and is affiliated with the Graduate Fields of Chemical Engineering, Electrical and Computer Engineering, Operations Research and Information Engineering, Systems Engineering, Mechanical Engineering, Civil and Environmental Engineering, and Applied Mathematics. He also serves as Chair of Cornell Systems Engineering PhD Studies and Associate Director of Cornell Energy Systems Institute. Fengqi earned a B.Eng. from Tsinghua University and received his Ph.D. from Carnegie Mellon University. He was on the faculty of Northwestern University from 2011 to 2016, and worked at Argonne National Laboratory as an Argonne Scholar from 2009 to 2011. He has published more than 120 peer-reviewed journal articles and has an *h*-index of 53. Some of his research results have been editorially highlighted in *Science* and *Nature*, featured on journal covers (e.g. *Energy & Environmental Science*, *ACS Sustainable Chemistry & Engineering*, and *Industrial & Engineering Chemistry Research*), and covered by major media outlets (e.g. *The New York Times*, *BBC*, *BusinessWeek*, and *National Geographic*). He is currently an Editor of *Computers & Chemical Engineering*, a Consulting Editor of *AIChE Journal*, and an editorial board member of several leading journals (e.g. *ACS Sustainable Chemistry & Engineering* and *Industrial & Engineering Chemistry Research*). His research focuses on novel computational models, optimization algorithms, statistical machine learning methods, and multi-scale systems analytics tools for smart manufacturing, digital agriculture, energy systems, and sustainability. For more information about his research group: www.peese.org

Process Development Division Student Paper Award Award Sponsors: Linde Group



Min Chen is a Research Assistant at Lamar University working with Professor Qiang Xu. He received his B.S. from Tsinghua University in 1996, two M.S. from Fundan University in 1999 and Missouri University of Science & Technology in 2004 respectively, and Ph.D. from Lamar University in 2018. He also has worked for Shanghai General Motors and Ineos USA.



Planning for Process Development Symposium (PDS 2020) is ongoing to confirm exact venue and dates.

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

Philadelphia, 1st week of June 2020!

More details in the Spring 2020 Newsletter, stay tuned!

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

ANNOUNCEMENT - PROCESS DEVELOPMENT DIVISION SURVEY



AMERICAN INSTITUTE OF
CHEMICAL ENGINEERS

120 WALL STREET
NEW YORK, NY 10005

TEL 646.495.1300
www.aiche.org

Process Development Division Members,

Thank you for your past and/or present involvement with AIChE's Process Development (PD) Division. We value your opinion and want to prioritize our member services efforts, based upon **your needs**.

If you haven't already, we invite you to take part in [this 2 question survey](https://www.aiche.org/community/sites/divisions/process-development/announcements/we-need-your-input), as we want our members to have valuable experiences within our community. The survey should take no more than 2 minutes to complete and responses will remain anonymous. Please start the survey by clicking the following link:

<https://www.aiche.org/community/sites/divisions/process-development/announcements/we-need-your-input>

NOTE: IF YOU HAVE ALREADY COMPLETED THE SURVEY, PLEASE DO NOT COMPLETE THE SURVEY AGAIN"

SURVEY REMAINS OPEN UNTIL END OF 2019 ANNUAL MEETING

2019 Fall Meeting – What you need to know

Process Development Division (PDD) Dinner

The Process Development Division Dinner provides an excellent opportunity for networking. Plan to attend and become more engaged in the Division!

When: Tuesday, Nov 12 2019

Time: 6:30 – 7:30 PM (FREE Reception
for PDD members) Patio - Half
07:30 PM - 10:00 PM (Ticketed Dinner) Saratoga Room

Where: Cuba Libre

Address: 9101 International Dr, Orlando, FL 32819

Phone: +1 (407) 226 1600

Cost: \$75 per person



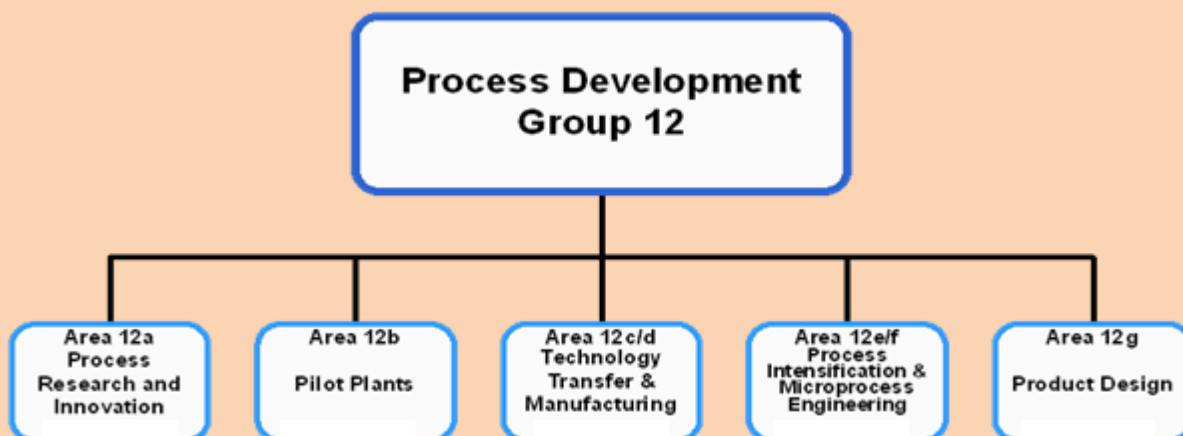
Fall Meeting Highlights

- Applications of Data Science to Molecules and Materials
- Advanced Fossil Energy Utilization R&D
- Ammonia Energy
- Chemical Engineers in Medicine
- Concentrated Solar Energy for Power Generation and Chemical Processing
- Entrepreneurship in Chemical Engineering - Sponsored by CIEE
- Food Innovation and Engineering
- Innovations of Green Process Engineering for Sustainable Energy and Environment
- Microbes at Biomedical Interfaces
- Next-Gen Manufacturing
- Sensors
- Synthetic and Renewable Fuels
- Workshops:
 - W2: Computational Catalysis Workshop
 - W3: Managing and Leading Teams
 - W5: CoMSEF Workshop: Hands-On with Molecular Simulation
 - W6: RAPID Process Intensification Train-the-Trainer Workshop

Process Development Division Meetings

- Process Development Leadership Meeting
5:30 PM- 6:30 PM, Sunday Nov 10
Location: Hyatt Regency Orlando - Bayhill 18
- Process Development Division General Meeting
11:00 AM - 12:15 PM, Monday, Nov 11
Location: Hyatt Regency Orlando – Bayhill 17
- Process Development Division Programming Meeting
06:00 PM - 07:15 PM, Monday, Nov 11
Location: Hyatt Regency Orlando – Bayhill 17

PDD Fall Meeting 2019 Programming



Sunday, November 10, 2019

3:30 PM - 6:00 PM:

3D Printing Applications in Catalysts, Reactions, and Energy Industry, Hyatt Regency Orlando - Bayhill 28

Panel Discussion: Chemical Process and Product Design Careers in Industry & Academia (Invited Talks), Hyatt Regency Orlando - Bayhill 17

Monday, November 11, 2019

8:00 AM - 10:30 AM

Big Data and Data Analytics (Invited Talks), Hyatt Regency Orlando - Bayhill 27

Industrial Applications of Integrated Synthesis, Design and Operations Through Modeling and Optimization, Hyatt Regency Orlando - Bayhill 17

12:30 PM - 3:00 PM

Digital Twin (Invited Talks), Hyatt Regency Orlando - Bayhill 28

Industrial Internet of Things (IIoT) in Process Manufacturing and Beyond, Hyatt Regency Orlando - Bayhill 27

Process Innovations on Renewable Polymers and Biobased Intermediates, Hyatt Regency Orlando - Bayhill 17

The Path Less Traveled: Professional Development for Non-Tenure Track Faculty, Hyatt Regency Orlando - Bayhill 22

3:30 PM - 6:00 PM

Sustainable and Green Product Design, Hyatt Regency Orlando - Bayhill 17

PDD Fall Meeting 2019 Programming Continued

Tuesday, November 12, 2019

8:00 AM - 10:30 AM

Applications in Sensors: Biomedical, Hyatt Regency Orlando - Celebration 10

Development of Pharmaceutical Process Control Strategies for Drug Product Manufacture, Hyatt Regency Orlando - Celebration 8

Industry 4.0 and Digital Transformation (Invited Talks), Hyatt Regency Orlando - Bayhill 27

Tools and Techniques for Product Design, Hyatt Regency Orlando - Bayhill 17

12:30 PM - 3:00 PM

Experiences in Teaching Process Safety I, Hyatt Regency Orlando - Bayhill 17

3:30 PM - 6:00 PM

Artificial Intelligence and Advanced Computation, Hyatt Regency Orlando - Bayhill 27

Experiences in Teaching Process Safety II, Hyatt Regency Orlando - Bayhill 17

Innovations and Emerging Technologies: Drug Substance and Drug Product Development, Hyatt Regency Orlando - Celebration 8

Process Research for Improved Throughput & Efficiency, and Reduced Cost, Hyatt Regency Orlando - Bayhill 18

Wednesday, November 13, 2019

8:00 AM - 10:30 AM

Advances in Process Intensification, Hyatt Regency Orlando - Bayhill 17

Cybersecurity, Hyatt Regency Orlando - Bayhill 27

Environmentally Friendly Product and Process Development for Sustainability, Hyatt Regency Orlando - Bayhill 18

Sensor Development Platforms, Hyatt Regency Orlando - Celebration 10

12:30 PM - 3:00 PM

Challenges and Best Practices in Technology Commercialization, Hyatt Regency Orlando - Bayhill 18

Process Intensification By Enhanced Heat and Mass Transfer, Hyatt Regency Orlando - Bayhill 17

PDD Fall Meeting 2019 Programming Continued

Wednesday, November 13, 2019

3:30 PM - 5:00 PM

Poster Session: Process Development, Hyatt Regency Orlando - Regency Ballroom R/S

3:30 PM - 6:00 PM

3D Printing Fundamental and Applications, Hyatt Regency Orlando - Bayhill 28

Development of Pharmaceutical Process Control Strategies for Drug Substance Manufacture, Hyatt Regency Orlando - Celebration 8

Integrated Process Engineering and Economic Analysis, Hyatt Regency Orlando - Regency Ballroom Q

Thursday, November 14, 2019

8:00 AM - 10:30 AM

In-Silico Tools for Accelerating Pharmaceutical Process Development, Hyatt Regency Orlando - Celebration 7

Manufacturing Process Improvements for Chemical/Petrochemical Industries, Hyatt Regency Orlando - Bayhill 18

Process Intensification by Process Integration, Hyatt Regency Orlando - Bayhill 17

12:30 PM - 3:00 PM

Case Studies in Technology: Design, Risk Reduction and Implementation, Hyatt Regency Orlando - Bayhill 18


Development of Pharmaceutical Process Control Strategies for Production of Biologics, Hyatt Regency Orlando - Celebration 6

Process Intensification through the Application of Microreactors, Multiphase Reactors, and Membrane Reactors, Hyatt Regency Orlando - Bayhill 17


2020 Spring Meeting

March 29 - April 2, 2020

Hilton Americas and George R. Brown Convention Center, Houston, TX




CALL FOR ABSTRACTS NOW OPEN!



20AIChE
Spring Meeting
HOUSTON • 2020

16TH
GLOBAL
CONGRESS
ON PROCESS
SAFETY



March 29 - April 2, 2020 • Houston, TX

PRACTICING CHEMICAL ENGINEERS & PROCESS SAFETY EXPERTS, SHARE YOUR KNOWLEDGE IN THESE AREAS

You're invited to present your research and lessons learned at the year's key technical conference.

TOPICAL CONFERENCES

- Leadership Development – Professional Skills to Catalyze your Career
- Process Intensification
- Industry 4.0, including the 6th Big Data Analytics Topical Conference
- Heat Exchangers
- The 32nd Ethylene Producers Conference
- Emerging Technologies in Clean Energy
- The 20th Topical Conference on Gas Utilization
- The 23rd Topical Conference on Refinery Processing
- Distillation Symposium
- The 8th International Conference on Upstream Engineering and Flow Assurance

DIVISION & FORUM PROGRAMS

- Chemical Engineering & the Law
- Computing and Systems Technology
- Cybersecurity
- Environmental Issues
- Flow Assurance
- Fuels & Petrochemicals
- Management
- Manufacturing
- Process Development
- Separations
- Smart Manufacturing


16TH GLOBAL CONGRESS ON PROCESS SAFETY FEATURED TRACKS

- Perspectives on Process Safety from Around the World
- 9th Process Safety Management Mentoring (PSMM)
- 22nd Process Plant Safety Symposium (PPSS)
- 35th Center for Chemical Process Safety (CCPS) International Conference
- 54th Annual Loss Prevention Symposium (LPS)

ABSTRACT DEADLINES






2020 AIChE
Spring Meeting
November 22

16th Global Congress
on Process Safety
October 1



Graduate students looking for industry positions are welcome to submit to the Meet the Industry Candidates Poster Session, an excellent opportunity to showcase their research to industrial attendees, talent scouts, and recruiters.

For more information and instructions on how to submit an abstract,
please visit aiche.org/spring or aiche.org/gcps

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2020 Spring Meeting: Proposed Process Development Division Sessions

Process Development Division (12)

05001 - Lessons Learned from the Industrial Practice of the Open Innovation Model for the Development of New Products

T7000 Process Intensification

12000 Process Development Poster Session

Process Research and Innovation (12A)

12A00 Big Data, AI and Machine Learning for Process Research - Oral Session

12A01 Modeling Tools and Techniques for Process R&D - Oral Session

12A02 Advances in Process Design and Development - Oral Session

12A03 Biomass Conversion to Valuable Products - Oral Session

12A04 Process Development and Chemical Engg Under Global Warming Reality - Oral Session

Pilot Plants(12B)

12B00 Pilot Plant and Laboratory Safety - Oral Session

12B01 Pilot Plant Separations - Oral Session

12B02 Pilot Plant Success Stories - Oral Session

Technology Transfer & Manufacturing(12C)

12C00 Cost-Effective Commercialization of New Processes or Products - Oral Session

12C01 Applications of Big Data Analytics for Manufacturing Process Improvements - Oral Session

12C02 Chemical Process Maintenance and Risk Reduction - Oral Session

Process Intensification & Microprocess Engineering(12E)

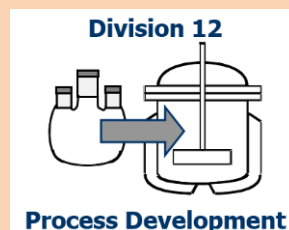
12A01 Modeling Tools and Techniques for Process R&D

12E00 Advances in Process Intensification - Oral Session

12E01 Process Intensification Opportunities - Oral Session

Call for Papers closes November 22, 2019

Process Development Area Leadership



	Chair	Chair Elect	Area Coordinator
12A Process Research & Innovation	Tom Xu DuPont Tom.Xu@dupont.com	James Marek James.marek@abbvie.com	Ray Jian rjian@sabic.com
12B Pilot Plants	Hsiang Yee Lai hsiang.lai@swri.org	Nitin Tople SABIC 412-576-4840 nitin.tople@sabic.com	Mike Trainor mtrainor@zeton.com
12C/D Technology Transfer & Manufacturing	Qiang Xu ChE Dept, Lamar University 409-880-7818 qiang.xu@lamar.edu	Rob Nunley MATRIC rob.nunley@matricinnovates.com	Minghua Ye SABIC mye@sabic.com
12E/F Process Intensification & Microprocess Engineering	Shawn Feist Dow Chemical Company SFeist@dow.com	Matthaeus Siebenhofer m.siebenhofer@tugraz.at	Robert Broekhuis rbroekhuis@sabic.com
12G Product Design	Sitaraman Krishnan Clarkson University skrishna@clarkson.edu	Kishori Deshpande Dow Chemical Company kdeshpande@dow.com	Mu Wang wang.m.13@pg.com

Process Development Symposium Liaison:

Kevin G. Joback (kevin@molecularknowledge.com)

Process Development Division Leadership (2019-2020)

Chair and Webmaster 	Robert Huss Eastman Chemical Company Phone: 423-229-6425 E-mail: rhuss@eastman.com	Chair Elect 	Anthony Cartolano Anellotech Inc. E-mail: arcartolano@gmail.com
Fall Program Chair 	Joseph W. Schroer SABIC Phone: 281.207.5601 Email: jschroer@sabic.com	Membership Chair 	Adam Whalley Zeton Inc. Phone: 905.632.3123 x235 Email: awhalley@zeton.com
Spring Program Chair 	Juben Chheda Shell Oil Company Phone: 281 544 8232 Email: juben.chheda@shell.com	Awards Chair 	Jay Miller Phone: (610) 359-2092 Email: jmiller@gmail.com
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Past Chair 	William Hollar SABIC Phone: 812-831-4751 Email: william.hollar@sabic-ip.com	YP Liaison 	Ahmed Youssef SABIC E-mail: ahmed.youssef@sabic.com