

AIChE Process Development Division Newsletter

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Process Development Website: www.pd-aiche.com

Process Development Programming Areas

Area 12a: Process Research and Innovation

Area 12b: Pilot Plants

Area 12c: Technology Transfer

Area 12d: Manufacturing

Area 12e: Micro process Engineering

Area 12f: Process Intensification

Area 12g: Product Design



**Spring National Meeting
April 22nd-27th, 2007
Houston, TX**

AIChE Process Development Division Newsletter

From the Chair...

Welcome to the Spring 2007 edition of the AIChE Process Development Division (PDD) newsletter! We hope to meet more of our members at upcoming AIChE conferences and look forward to having you become active in our division programming and activities.

Our next event is the Spring National meeting in Houston the week of April 22nd. The PDD will be conducting a topical session entitled “Applications of Micro-reactor Engineering”. This topical contains a dozen sessions. In addition, the division will host about seven other sessions in our various programming areas and other sessions co-sponsored with other divisions.

Our seven programming areas are Process Research and Innovation, Pilot Plants, Technology Transfer, Manufacturing, Micro-processing Engineering, and Process Intensification, and Product Design. Product Design was recently approved as a new programming area (details ahead).

Networking at the division meetings and social events remains one of the best deliverables to PDD members. The division and individual programming areas have meetings at each conference. Please join us for the division meeting on Wed. April 25th in Houston (details ahead). The Spring PDD dinner will be held at Josephine’s Ristorante in Houston on Tues. evening April 24th. The restaurant is only a short walk from the Hilton Americas conference site. Tickets may be purchased when you register for the Spring meeting.

Looking ahead, the Fall 2007 annual meeting and conferences will be held in Salt Lake City the week of Nov. 4th. The call for papers is open until May 14th. The PDD is hoping to have some interactive sessions with ISPE (representing pharmaceutical professionals) during the Salt Lake City conference since the ISPE annual meeting is held the same week in Las Vegas. More details about the Fall meeting will be available in our next newsletter.

Our fourth Process Development Symposium (PDS) is being planned for June 2008 in the Berkshires area of Massachusetts. This biennial event has become a premier venue for process development professionals to meet in small interactive sessions and share their experiences in the field. The theme of the 2008 PDS is “Chemical Product Engineering – The Third Paradigm” and is being spearheaded by our Product Design area.

The PDD steering committee is looking forward to meeting any new folks with an interest in the division in Houston. Also, the division has recently started outreach programs to chemical engineering students, local AIChE sections, and the AIChE YPAB (Young Professionals Advisory Board). As part of the AIChE Ambassadors initiative, the PDD chair visited three universities in Feb/Mar to present the AIChE and the PDD. Hopefully these programs will generate even more interest in the exciting PDD activities!

This newsletter and our website (www.pd-aiche.com) will give you more information about the division. A letter was recently sent to all membership, as well as to other AIChE groups, soliciting volunteers for various open positions in the division. Interested folks will be contacted before the Spring meeting in an attempt to match volunteers with the activities they are most interested in. Please feel free to contact anyone from the leadership team at the end of the newsletter if you have any questions. Thanks!

John Peragine – Process Development Division Chair

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ANNOUNCEMENTS:

Call for Papers

The deadline for the Call for Papers at the Annual Meeting in Salt Lake City is May 14th. Please see www.aiche.org.

Open Positions

There are several open leadership positions, see the end of the newsletter! Please contact a current leader if interested!

Area 12G – Product Design has Been Approved

Process Development Division is pleased to announce that Product Design has been officially approved as a new programming area within the Division, to be known as Area 12G. Product Design has been an area of growing interest cross AIChE, as demonstrated most notably by the large attendance at the Product Design topical conference at last year's AIChE Annual Meeting in San Francisco. This 4-day topical conference included 10 sessions co-sponsored by several other AIChE divisions, and had as a highlight a presentation by Bob Langer of MIT.

Current plans include Product Design programming at upcoming AIChE Annual Meetings, as well as the 2008 Process Development Symposium on the theme, "Chemical Product Engineering -- The Third Paradigm." Having Product Design as a formal area within the Division will not only ensure continued programming at AIChE conferences, but will also afford Division members the opportunity to network with others with similar interests.

Product Design will have its first Area Meeting at the 2007 Annual Meeting in Salt Lake City. Michael Hill has been designated as the Founding Chair, but in harmony with the Division By-Laws, a Co-chair will need to be elected and an Activities Chair will need to be appointed. Anyone interest in being involved with leadership of this area should contact Michael Hill at michael@mhillassoc.com, and should attend the Product Design Area Meeting in Salt Lake City. Anyone with ideas for future programming should also attend the area meeting. Details of this meeting will be announced in due course.

AIChE Ambassador Program

The AIChE Ambassador program is an opportunity for members to tell other members and prospective members about AIChE and how we can help them in their careers. The chair of the PDD recently presented slides titled "Working in the Pharmaceutical Industry and how AIChE can help." Presented were case studies about what a Chem E can do in the pharma industry, info on what students can expect from AIChE and the advantages of active membership, and an introduction to the PDD and advantages to students.

Presentations were at:

- Cooper Union on 2/27
- Univ. of Louisville 3/2
- Rutgers on 3/6

2008 Process Development Division Symposium: Chemical Product Engineering – The Third Paradigm

AIChE's Process Development Division invites you to the 2008 Process Development Symposium to be held in June 2008. Tentative Venue: Berkshires, MA (Specific dates and location to be determined)

As mentioned in our previous newsletter, we are currently planning the 2008 Process Development Symposium. The organizing committee is composed of Michael Hill, Raymond Rooks, Laurence Weatherley, and Kevin Joback.

Today's global marketplace demands an ever-greater rate of product innovation, forcing many companies to re-examine their approaches to new product development. The need for more systematic approaches to chemical product design has led to the emergence of Chemical Product Engineering as a new discipline within chemical engineering, which many recognize as chemical engineering's "third paradigm."

The Symposium will explore various aspects of this new discipline, and will include both oral and poster presentations, as well as opportunities for networking with attendees and vendors.

We are currently looking for volunteers to chair sessions and/or to deliver oral or poster presentations, as well as companies that would like to sponsor the event. If you would like to either volunteer or sponsor, please contact the chairman, Michael Hill at michael@mhillassoc.com.

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PROCESS DEVELOPMENT DIVISION PROGRAMS:

Monday, 23 April 2007

8:00 AM-11:00 AM

#13 - Tools and Best Practices in Pilot Plants - I (12B00)

2:00 PM-5:00 PM

#38 - Tools and Best Practices in Pilot Plants - II (12B01)

Tuesday, 24 April 2007

8:30 AM-11:30 AM

#56 - Process Intensification Topics I (12000)

2:00 PM-5:00 PM

#77 - Process Intensification Topics II (12001)

Wednesday, 25 April 2007

8:30 AM-11:30 AM

#93 - Heat Exchanger Fouling: a Messy Business (12D07)

2:00 PM-5:00 PM

#116 - To Toll or Not to Toll: That Is the Question (12D05)

Thursday, 26 April 2007

8:30 AM-11:30 AM

#123 - Sustainable Optimization and Troubleshooting of Chemical Processes (12D04)

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Topical 1: Applications of Micro-reactor Engineering

Monday, 23 April 2007

8:00 AM-11:00 AM

- #7 - Exergy, Cost and Eco-Efficiency Analysis in Micro-Systems (T1001)
- #8 - Fine Chemicals and Pharmaceuticals Production in Micro-Systems - Part I (T1000)

2:00 PM-5:00 PM

- #32 - Fine Chemicals and Pharmaceuticals Production in Micro-Systems - Part II (T1010)
- #35 - Polymerization in Micro-Reactors (T1002)

Tuesday, 24 April 2007

8:30 AM-11:30 AM

- #49 - Commercialization of Micro Process Technology-Panel Discussion (T1008)

2:00 PM-5:00 PM

- #73 - Fluid Manipulation / Nanofluidics (T1007)
- #74 - Mixing and Heat Exchange in Micro-Reactors (T1004)

Wednesday, 25 April 2007

8:30 AM-11:30 AM

- #89 - Emulsions and Dispersions (T1005)
- #95 - Micro Technology in Catalyzed Reaction Systems - Part I (T1003)

2:00 PM-5:00 PM

- #113 - Micro Technology in Catalyzed Reaction Systems - Part II (T1009)

Thursday, 26 April 2007

8:30 AM-11:30 AM

- #121 - Particles and Beads (T1011)

2:00 PM-5:00 PM

- #129 - Microtechnology and Process Analytics (T1006)

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Other Events During the Spring Meeting

Monday, 23rd of April

Research and New Technology Committee (RANTC) Meeting 1:00 PM 4:00 PM Room 361 A & D (3rd Level)
George R Brown Convention

Tuesday, 24th of April

Process Development & Microreaction Dinner - Off - Site 6:30 PM 10:00 PM Josephine's Italian Restaurant
(1209 Caroline at Dallas)

Wednesday, 25th of April

Process Development Division Meeting 11:30 AM 1:00 PM Room 329 (3rd Level) Hilton America-Houston

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Announcing the 2007 Process Development Division Practice Award

Sponsored by  **Zeton**
THE PILOT PLANT SPECIALISTS

To be presented at the Salt Lake City Annual Meeting



Richard P Palluzi, PE, CSP is a Distinguished Engineering Associate at ExxonMobil Research and Engineering responsible for the design, construction and support of pilot plants and laboratories for ExxonMobil's research site in Clinton, New Jersey and consulting on pilot plant related issues throughout ExxonMobil world wide. He has a Bachelor of Engineering (1974) and Master of Engineering (1976) from Stevens Institute of Technology in chemical engineering. Rich holds numerous licenses and certifications including Professional Engineer's license (NJ), a Certified Safety Professional, EPA accredited Asbestos Inspector, EPA accredited Project Designer, EPA certified Lead Inspector and Risk Assessor, Certified Mold Remediation Specialist and Mobil Crane Inspector.

Rich is acknowledged as an expert in all areas of pilot plant and laboratory safety, design, construction, start up and operations and is the author of 2 books, 35 articles and 40 presentations on all phases of these areas.

He is a past chair of the AIChE Pilot Plant Committee as well ExxonMobil's Clinton Site Safe Operations Team responsible for reviewing and approving all pilot plant and laboratory installations and operations. He currently chairs ExxonMobil's Pilot Plant and Laboratory Safety Standards Committee responsible for development and dissemination of over 100 internal company standards on pilot plant design and construction, many of which Rich personally developed.

Rich teaches four pilot plant training courses for the University of Wisconsin (Pilot Plant Design Construction and Operation, Pilot Plant and Laboratory Safety, Pilot Plant Hardware and Laboratory Design) all of which he developed, as well as one for the ISA (Understanding and Applying Instrumentation in Hazardous Locations). He was an instructor with the AIChE for sixteen years and has taught numerous internal courses for ExxonMobil.

He has consulted for both the Department of Energy and the Department of Defense on research related issues. Rich is a member of the American Institute of Chemical Engineers, the Instrument Society of America, the American Society of Safety Engineers and the National Fire Protection Association where he has recently been elected to the committee on NFPA-45 Fire Protection for Laboratories Using Chemicals.

Rich lives in Basking Ridge, New Jersey with his two children.

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The Award will be presented at the Division Dinner during the Salt Lake City Annual Meeting.

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Process Development Division Leadership

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Leadership of Area 12a: Process Research and Innovation

<http://www.pd-aiiche.com/area12a/>

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Leadership of Area 12b: Pilot Plants

<http://www.pd-aiiche.com/area12b/>

Chair Joe Powell Chief Scientist - Chemical Engineering Shell Global Solutions US Inc. Westhollow Technology Center P.O. Box 1380, Houston, TX 77251-1380 Phone: (281) 544-8976 Fax: (281) 544-7370 Email: Joe.Powell@shell.com	Chair- Elect Dan Pintar, Operation Manager UOP Phone: (708) 442-3703 Email: daniel.pintar@uop.com	Activities Chair Adam Whalley, P.Eng. Zeton Inc. 740 Oval Ct. Burlington, ON, L7L 6A9 tel. 905-632-3123 ext. 235 fax. 905-632-0301 awhalley@zeton.com
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Leadership of Area 12c: Technology Transfer

<http://www.pd-aiiche.com/area12c/>

Chair Osman T. Aboul-Nasr Technical Director/Fluor Fellow Process Technology - Oil, Gas and Chemicals Fluor Daniel 100 Fluor Daniel Drive Greenville, SC 29607-2762 Phone: (864) 281-5167 Fax: (864) 676-7211 Email: osman.aboul- nasr@fluor.com	Chair- Elect Dr. Mitchell Loescher CDtech Chemical Research and Licensing 10100 Bay Area Boulevard Pasadena, TX 77507 Phone: 281-474-0685 Fax: 281-474-0660 Email: mloescher@cd- tech.com	Activities Chair Mike J. Doll Research Engineer HODer Shell Global Solutions 3333 Highway 6 South Houston, TX 77082 Phone: (281) 544-7253 Fax: (281) 544-8687 Email: Mike.Doll@Shell.com
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Leadership of Area 12d: Manufacturing

<http://www.pd-aiiche.com/area12d/>

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Leadership of Area 12e: Microprocessing Engineering

<http://www.pd-aiiche.com/area12e/>

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Leadership of Area 12f: Process Intensification

<http://www.pd-aiiche.com/area12f/>

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