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AIChE Spring Meeting

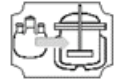


New Orleans, LA

April 25-29, 2004

SPECIAL EVENTS AND SHORT COURSES	PROCESS DEVELOPMENT SESSIONS
<p><u>Tuesday, April 27th</u></p> <ul style="list-style-type: none"> • Process Development Division Meeting (12:00 p.m. – 1:30 p.m.) • PDD Area Meetings (5:00 p.m. – 7:30 p.m./30 minutes each) • Process Development Division Dinner 8 p.m., Pelican Club 	<p><u>Tuesday, April 27th</u></p> <ul style="list-style-type: none"> • Innovation in Fuel Processing Session (8:30 – 11:15 a.m.) • Environmental Challenges in Manufacturing (1:30 – 3:00 p.m.) <p><u>Wednesday, April 28th</u></p> <ul style="list-style-type: none"> • CFD of Multiphase Flows (1:30 – 4:00 p.m.) • Engineering Solutions to Facility Security Challenges (1:30 – 4:00 p.m.) <p><u>Thursday, April 29th</u></p> <ul style="list-style-type: none"> • Case Histories and Lessons Learned (8:30 a.m. – 12:00 p.m.)

Register Online at: <http://www.aiche-mart.org/meetreg.asp>



From the Chair...

Welcome to 2004! The Process Development Division has a very exciting year planned.

In late April, the AIChE Spring Meeting will be in New Orleans. The Process Development sessions are Tuesday through Thursday morning. Please join us for the Process Development Division and Area planning meetings. And don't forget to buy a ticket for the Process Development Dinner when you register for the meeting.

This summer is the Second Process Development Symposium: **Working Right on the Right Thing**. This is a Gordon style conference with many outstanding sessions and table top shows planned. Many thanks to Annette Johnston and the Chicago Section of AIChE for organizing this meeting.

In the Annual AIChE Meeting, Process Development will have a record 15 sessions! Some of the session highlights are:

- Pilot Plant Benchmarking Study Results
- R&D Management Topical (co-sponsored with the management division)
- Tools Topical

More details of these meetings are given in this newsletter.

The Process Development Division Mission is to promote programming and presentations of process development topics at the AIChE Annual and National Meetings and to promote networking and communication among those involved in process development. The Division has four exciting areas:

- * 12a Process Innovation
- * 12b Pilot Plants
- * 12c Technology Transfer
- * 12d Manufacturing

The Division and Area Leadership are listed at the end of the newsletter. Please feel free to contact any of us; we welcome comments, suggestions and especially volunteers!

Chris Seymour - Process Development Division Chair

John Peragine - Process Development Division Chair Elect



AREA UPDATES AND ELECTIONS:

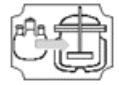
12A – PROCESS RESEARCH AND INNOVATION	12B – PILOT PLANTS
Next Meeting: AIChE Spring Meeting 2004 • Tuesday, 4/27/04, 5:00 - 7:30 pm	Next Meeting: AIChE Spring Meeting 2004 • Tuesday, 4/27/04, 5:00 - 7:30 pm
12C – TECHNOLOGY TRANSFER	12D - MANUFACTURING
Next Meeting: AIChE Spring Meeting 2004 • Tuesday, 4/27/04, 5:00 - 7:30 pm	Next Meeting: AIChE Spring Meeting 2004 • Tuesday, 4/27/04, 5:00 - 7:30 pm

NOTICE FOR AREA 12B: Proposed Pilot Plants Mini-Series in CEP

Following the overwhelming success of Area 12b's first Topical Conference on "The Role of Pilot Plants in Process Development" at the recent AIChE Fall meeting in San Francisco, Area 12b is proposing to publish a mini-series of related Pilot Plants articles in Chemical Engineering Progress. The articles will be expanded versions of the *best* papers from each of the five technical sessions in the Topical, as decided by the Session Chairs/Vice-Chairs and Cynthia Fabian Mascone, Managing Editor of CEP. For more information on the proposed Pilot Plants Mini-Series, e-mail David Edwards at dedwards@zeton.com.

UPCOMING ACTIVITIES:

<input type="checkbox"/> Techniques and Experiences in Scaling Up Chemical Separation Processes Symposium - Held at 227 th American Chemical Society National Meeting http://oasys2.confex.com/acs/227nm/techprogram/S11108.HTM	Anaheim, CA	March 29 th 1:30 – 4:00 p.m.
<input type="checkbox"/> 2004 Spring Meeting and Process Industries Exposition - Keynote Speaker: Jim Gallogly President and CEO of Chevron-Phillips Chemical Company - Seven sessions offered by Process Development Division http://www.aiche.org/conferences/spring/	New Orleans, LA	April 25-29
<input type="checkbox"/> Offshore Technology Conference	Houston, TX	May 3-6
<input type="checkbox"/> 2004 Process Development Symposium “Working Right on the Right Thing” - Co-sponsored with Chicago Section of AIChE	Oak Brook, IL	June 20-23



CHEMICAL PROCESS DEVELOPMENT WEB FORUM:

AIChE Process Development Division 12 is pleased to announce the creation of a new Chemical Process Development web forum. The purpose of the forum is to enable the dynamic interchange of process development information between our members, and to share valuable experience and the proven solutions of your colleagues.

The forum is hosted by Eng-Tips®, the leading web-based forum specialists for engineering professionals with over 220,000 registered members. In addition to Chemical Engineering and Process Development, the Eng-Tips® website hosts forums for many other engineering disciplines.

Please access the Chemical Process Development forum by clicking the Eng-Tips® link on www.pd-aiche.com and register with Eng-Tips® to use the forum.

Included in the *Links* section of the forum is a *Commercial Vendors* section followed a request from one of our members. Companies providing Process Development-related services and products are encouraged to add a link to their website.

For more information on the Chemical Process Development web forum,
e-mail David Edwards at dedwards@zeton.com

$$1+x-y=?...$$

Brain Teasers!



Math Teaser

A man wanted to get into his work building, but he had forgotten his code. However, he did remember five clues. These are what those clues were:

1. The fifth number plus the third number equals fourteen.
2. The fourth number is one more than the second number.
3. The first number is one less than twice the second number.
4. The second number plus the third number equals ten.
5. The sum of all five numbers is 30.

What were the five numbers and in what order?

Answer on last page!

(Brain Teaser located at <http://www.braingle.com/teaser.php?op=2&id=15943&comm=>)



2004 PROCESS DEVELOPMENT SYMPOSIUM

Jointly Sponsored by the Process Development Division and Chicago Section of AIChE

Working Right on the Right Thing

June 20 – 23, 2004

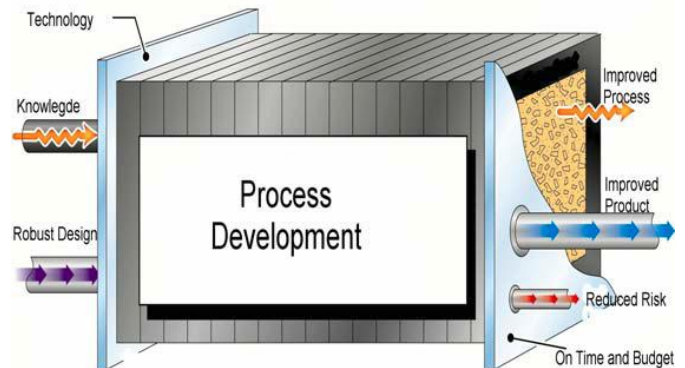
Oak Brook Hills Resort

Oak Brook, IL

<http://www.oakbrookhills-chicago.hotel.com>

Sessions include:

- Technology And Knowledge
- Pilot Plants
- Modeling And Optimization As A Tool For Effective Process Development
- Laboratory Tools For Effective Process Development
- Working Right For The Future



Visit the Table Top Vendor Show – Tools for Modeling and Knowledge Management, Laboratory Equipment, Pilot Plants

- **Afternoons are Free for Fun and Networking**
 - **Build on Your Knowledge of Process Development**
 - **Explore the City of Chicago**

Register at <http://www.aiche.org/conferences/processdev>

Want to help with the symposium?

Volunteers are needed for Table Top Show, Publicity, and Proceedings Committees.

If you are interested, please contact: Annette Johnston
 Abbott Laboratories
 1401 N. Sheridan Road
 North Chicago, IL 60064-6292
 Phone: (847) 935-5120
 E-Mail: Annette.Johnston@abbott.com



2004 PROCESS DEVELOPMENT SYMPOSIUM

Jointly Sponsored by the Process Development Division and Chicago Section of AIChE

Monday, June 21st

8:30 a.m. [Modeling Session](#)

- ❑ Modeling for Process Development and Scale-Up: One Pharmaceutical Company's Experience
- ❑ CFD Modeling of Temperature Sensitive Reactions
- ❑ Physical Property Models for Process and Product Development
- ❑ Role of Optimization and Uncertainty Analysis in Process Development

1:00 p.m. Afternoon Recess – Architectural Tour of Chicago (Optional)

7:00 p.m. [Knowledge Management Session](#)

- ❑ An Automated Stage Gate Process
- ❑ Ideation Software for New Business Growth and Problem Solving Collaboration
- ❑ The Community of Practice

Tuesday, June 22nd

8:30 a.m. [Pilot Plant Session](#)

- ❑ Scaling-up and Scaling-down Fixed-bed Reactors
- ❑ Designing for CIP in the Pharmaceutical Pilot Plant
- ❑ After Chemistry, Before Pilot Plant
- ❑ Design and Project Management Strategies for Fast-Track Pilot Plant Projects

1:00 p.m. Afternoon Recess – Bus Excursion to Navy Pier (Optional)

7:00 p.m. [Lab Tools Session](#)

- ❑ Applications of Analytical Tools in Pharmaceutical Process Development
- ❑ Organic Solvent Nanofiltration in Process Development
- ❑ Minimizing Variability in Chromatography Operation Using Six Sigma Tools
- ❑ An Example of Flow Pattern and Mixing in Bioreactors Using Laboratory Tools

Wednesday, June 23rd

8:30 a.m. [Working Right for the Future Session](#)

- ❑ Use of Knowledge Capture and Representation Tools to Enhance Process Development
- ❑ Using Green Chemistry from the Onset to Improve and Aid Process Development
- ❑ NSF Center for Pharmaceutical Processing Research: PAT in Fluid Bed Granulation
- ❑ Use of Six Sigma Principles in Right First Time Process Development





NOMINATIONS:

Process Development Research Award

Description: Recognizes individuals who have made significant technical contributions to the advancement of process development within research, teaching, or regulatory activities. Accomplishments must be disseminated by means of well-documented materials. Emphasis will be placed on accomplishments and advances made within the last ten years although the award can be given to someone for an outstanding career. Candidate must be an AIChE member.

Deadline: June 15, 2004. The nomination will remain active for three years.

Award: A plaque and \$1,000.

Sponsor:



Process Development Division Student Paper Award

Description: Presented to a full-time graduate or undergraduate student who prepares the best technical paper to describe the results of process development related studies within chemical engineering. Selection criteria include: 1. Papers will be judged primarily on technical merit. The student must demonstrate depth and breadth of knowledge in the subject. 2. The work presented must be carried out while the student is enrolled at a university with an accredited chemical engineering program. 3. The student must be the primary author. 4. The paper must describe original research (experimental, numerical, or theoretical) or design; papers consisting of literature reviews are not permitted. 5. The paper must be suitable for publication in a refereed journal. 6. Candidate must be an AIChE member.

Deadline: July 15, 2004. Nominations may be submitted by the student chapter advisor, the local section chair, or a member of AIChE who is not a student member.

Award: A plaque and \$200.

Sponsor:



Please submit an original and 5 copies of the nomination form and relevant information to the Process Development Division Awards Committee:

Glen Wheeler
Alkermes, Inc.
265 Olinger Circle
Wilmington, OH 45177
Phone: (937) 655-4411
Fax: (937) 382-5949

Glen.Wheeler@Alkermes.com



Process Development Division Leadership

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Program Chair	Ray Rooks The Dow Chemical Company 3200 Kanawha Turnpike Bldg 740, Room 5132 South Charleston, WV 25303 Phone: (304) 747-5826 Fax: (304) 747-4886 E-mail: rerooks@dow.com	Membership Chair	Ramesh M. Rameswaran Lyondell Chemical Co 3801 West Chester Pike Newtown Square, PA 19073 Phone: (610) 359-2409 Fax: (610) 359-6008 E-mail: cnsrmr@lyondell.com
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International Liaison	Kamlesh K. Bhatia Research Fellow Dupont Central Research & Development Experimental Station, E304/A303 P.O. Box 80304 Wilmington, DE 19880-0304 Phone: (302) 695-4766 Fax: (302) 695-4414 E-mail: kamlesh.k.bhatia@usa.dupont.com	Past Chair	John E. Corn, Instructor Department of Chemical Engineering Ohio State University 231A Koffolt Lab 140 W. 19th Ave. Columbus, OH 43210 Phone: (614) 688-8254 Fax: (614) 292-3769 E-mail: corn@che.eng.ohio-state.edu
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Leadership of Area 12a: Process Research and Innovation

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

<p>Chair Prof. Yinlun Huang Professor Director, Graduate Program Director, Laboratory for Computer-Aided Process Systems Science and Engineering Department of Chemical Engineering Wayne State University Detroit, MI 48202 Phone: (313) 577-3771 Fax: (313) 577-3810 E-mail: yhuang@chem1.eng.wayne.edu</p>	<p>Chair-Elect Aaron Sarafinas Rohm and Haas Company 727 Norristown Road PO Box 904 Spring House PA 19477-0904 Phone: (215) 641-7215 Fax: (215) 619-1616 E-mail: ASarafinas@rohmmaas.com</p>	<p>Activities Chair Dr. Lionel O'Young ClearWaterBay Technology, Inc 20311 Valley Blvd., suite C Walnut, CA 91789 Phone: (909) 595 - 8928 Fax: (909) 595 - 6899 E-mail: lionel@cwbttech.com</p>
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Leadership of Area 12b: Pilot Plants

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

<p>Chair David Edwards Project Engineer Zeton Inc. 740 Oval Court Burlington, Ontario Canada, L7L 6A9 Phone: (905) 632-3123 Fax: (905) 632-0301 E-Mail: dedwards@zeton.com</p>	<p>Chair-Elect Joe Powell Sr. Staff Research Scientist Shell Chemical LP Westhollow Technology Center P.O. Box 1380 Houston, TX 77251-1380 Phone: (281) 544-8976 Fax: (281) 544-7370 E-Mail: Joe.Powell@shell.com</p>	<p>Activities Chair Michael VonDeak Pfizer 7000 Portage Road 1592-91-1 Kalamazoo, MI 49001 Phone: (269) 833-3547 Fax: (269) 833-9282 Michael.a.vondeak@pfizer.com</p>
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Leadership of Area 12c: Technology Transfer

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

<p>Chair Annette Johnston Team Leader Abbott Laboratories 1401 N. Sheridan Road North Chicago, IL 60064-6292 Phone: (847) 935-5120 E-Mail: Annette.Johnston@abbott.com</p>	<p>Chair-Elect 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 E-mail: osman.aboul-nasr@fluor.com</p>	<p>Activities Chair Randall Bridgeman Xerox randallb@office.xerox.com</p>
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Leadership of Area 12d: Manufacturing

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

<p>Chair Helen H. Lou, Ph.D. Assistant Professor Department of Chemical Engineering P.O.Box 10053 Lamar University Beaumont, TX77710 Phone: (409) 880-8207 Fax: (409) 880-2197 E-mail: louhh@hal.lamar.edu</p>	<p>Chair-Elect Stephanie Sullivan E-mail: stephanie_sullivan@merck.com</p>	<p>Activities Chair</p>
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Answers to Brain Teaser: 7, 4, 6, 5, 8