

Process Development Division Area 12A –Process Research and Innovation Steering Committee Meeting

AIChE 2006 Fall Meeting

San Francisco, CA

Wednesday, November 15, 2006

11:00 AM – 12:00 AM

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Attendees

- Karl Krause, DuPont, karl.r.krause@usa.dupont.com
- Mani Ganti, DuPont, mani.p.ganti@usa.dupont.com
- Lionel O'Young, CWB, lionel@cwbttech.com
- Sagar Gadewar, GRT, sagar@gadewar.com
- Paul Collins, Lilly, collinspa@lilly.com
- Jean Tom, BMS, jean.tom@bms.com
- Vivek Julka, CWB, vivek.julka@gmail.com
- Michael Hill, michael@mhillassoc.com
- Kamlesh Bhatia, kamlesh.k.bhatia@usa.dupont.com
- Tony Cartolono, cartolar@airproducts.com
- Ramesh Rameswaran, rrameswaran@americas.sabic.com
- James (Jim) Marek, james.marek@abbott.com
- Lynn Lander, landerlh@optonline.net
- John Peragine, John.Peragine@bms.com
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AGENDA

- Introductions
- Mission Statement Review
- Area Leadership
- Programming Review
- Future Programming Topics
- New Business

Mission Statement

Foster process innovation by applying Chemical Engineering principles to the synthesis of novel operations for new product manufacture and step changes in existing technology. The PR&I area will be a meeting ground for diverse academic and industrial practitioners of Process Innovation. Its programming and activities will explore the components of successful process innovation, and distribute this shared knowledge to the Institute membership.

- Main goal for today is to restore vitality of 12A programming!

Current Area 12A Leadership

- Chair: **Karl Krause**, *DuPont*
- Chair-Elect: **Open**
- Activities Chair: **Jae Lee**, *Georgia Tech*
- Past Chair: **Aaron Sarafinis**, *Rohm and Haas*

Area 12a Leadership Roles

Area 12a Past Chair

The Area 12a Past Chair oversees the handover of action items and responsibilities to the incoming Area 12a Chair, and supports and advises the Area 12a Chair during his/her two year term as necessary.

Area 12a Leadership Roles

Area 12a Chair

The Area 12a Chair leads all Area 12a activities, and has overall responsibility for ensuring all phases of programming for Area 12a.

- Automatically assumes Area Chair position at the **beginning** of the annual (Fall) meeting in odd years after serving as Chair-Elect for two years.
- Is responsible for selection of technical session topics in coordination with the Division Programming chair, and for finding chairs and co-chairs for these sessions.

Area 12a Leadership Roles

Area 12a Chair Cont'd.

- Coordinates and helps session chairs in organizing sessions and meeting deadlines.
- Develops the Area in accordance with the Area Mission Statement.
- Holds Area meetings at least once a year at the Annual or Spring Meeting.
- Holds an Area election at the Steering Committee meeting upon **leaving** office for the next Chair-Elect before handing over responsibilities to the current Chair-Elect.
- Provides leadership and management for the Area.

Area 12a Leadership Roles

Area 12a Chair-Elect

The Area 12a Chair-Elect prepares for the office of Chair by assisting the Area 12a Chair during his/her two year term.

- Deputizes for the Area 12a Chair in the Chair's absence or inability to serve.
- Automatically assumes the position of Area 12a Chair at the beginning of the annual (Fall) meeting in odd years after serving for two years as Area 12a Chair-Elect.
- Formulates long-term plans and strategic activities for the Area in accordance with the Area Mission Statement.

Area 12a Leadership Roles

Area 12a Activities Chair

Need to define the role of the Activities Chair

- Appointed by Area Chair
- Viewed as “chair-elect in training” but not automatically promoted to chair-elect. Still have chair-elect election.

Area 12a Leadership Roles

Hold election for new Chair-Elect

- Starts immediately
- Succeeds chair at 2007 Fall Meeting
- Candidates
 - Sagar Gadewar, *GRT*
- Sagar was nominated, seconded, and selected as chair-elect by voice vote.

Programming....

Spring, 2006

- 4 session mini-topical on sustainability (with Sustainable Engineering Forum)
 - Thanks go to Joe Powell

Programming....

Fall 2006 (San Francisco, CA)

- Nanomaterials Process Development and Commercialization
 - #510, Thursday 8:30, Grand Ballroom A, Karl Krause chair
 - Sponsored by Nanoscale Science and Engineering Forum

- Industrial Innovation in Process Design & Operations
 - #633, Friday 8:30, California Room, Jhuma Sadhukhan and Derrick Rollins co-chairs
 - Sponsored by Systems and Process Design, Computers in Operations and Information Processing

Programming....

Fall 2006 (San Francisco, CA), cont.

- Sustainable Engineering in Process Development
 - #648, Friday 8:00, Union Square 1&2, Yinlun Huang chair
 - Co-sponsored by Sustainable Engineering Forum
- Application of Engineering Fundamentals to API Process Development – PAT Applications
 - #684, Friday 3:15, Yosemite B, Mayur Lodaya and Paul Compton Collins co-chairs
 - Sponsored by Discovery, Development, and Delivery of Medicine and Pharmaceuticals

Programming....

Spring 2007 onward

- Almost no planned 12A programming!!!

Programming....

Spring 2007 (Houston)

- Too late for new sessions

Programming....

Fall 2007 (Salt Lake City)

- New sessions with chairs, co-chairs, and descriptions must be entered by Dec 15. Karl to gather information and work with Annette to enter into Confex

Desired 12A sessions:

- Quality by Design, Christine Seymour, FDA person
- High Throughput Techniques to Accelerate Process Development – Jean Tom chair, Mohammad Sheife (SABIC) co-chair

Possible co-sponsored sessions:

- *Innovations in BioPharma (15 already has in program – cosponsor?)*
- *Innovations in Pharma (15 already has in program – cosponsor? Jean contact)*
- *Both are planned Div 15 sessions. Jean to make contact and inquire about co-chairing. If too late for Fall 07, plan for co-sponsored sessions in the future.*
- *Need to confirm chairs and write session descriptions by 12/15.*

Programming....

Spring 2008 (New Orleans)

- Innovations in Gas to Liquids technology (including alkane activation) (Sagar to find chair)
- Process Innovations for Alternative Energy (Mani Ganti, DuPont chair)

Programming....

Fall 2008 (Philadelphia, PA)

- Session topics to be chosen to coincide with AIChE's centenary celebrations - desire for historical sessions
- Applications of Chemometrics for Process Development (Jim Marek, Jean Tom)
- *Evolution of Computer aided tools and theory for process development (with 10A? Andreas Linnenger, U of I Chicago -) (Vivek Julka(CWB))*
- *Invited session on Conceptual Design (Sagar - need to discuss what you had in mind)*
- *Historical Perspectives on Development of New Processes (each paper covering a specific industry/product) (Kamlesh)*

Programming....

Spring 2009 onward

- Develop programming at next meeting from evergreen list of session ideas

Potential Session Topics...

- Process Innovation as a Route to Competitive Advantage
- Innovations in Nanotechnology Process Development (Fall 06 with Div 22)
- Innovations in Green Chemistry and Sustainable Process Development (Fall 03)
- Selling and Implementing Innovation in the Traditional CPI (Fall, 2003)
- Process Innovation as a Route to Shorter Time to Market (Fall, 2003)
- Innovation through Process Synthesis and Visioning
- Process Innovation Success Stories or Case Studies
- Best Practices for New Technology Development
- Process Development for Sustainable Processes (like Fall 06)
- Development of New Reaction (separation, etc) Processes
- Managing risks in New Technology Development
- Co-sponsor with catalysis and/or reaction engineering

Action Items

- Define role of Activities Chair
- Finalize sessions for Fall 07 by 12/15