MINUTES

Separations Division Planning Meeting
American Institute of Chemical Engineers
2019 AIChE Annual Meeting, Orlando, FL

Sunday, November 10, 2019 - 1 pm to 5:00 pm
Regency Ballroom O (Hyatt Regency Orlando)

Approval of Minutes from the May 13, 2019 Online Meeting (Atanas Serbezov)
A motion to approve the minutes as distributed by e-mail was seconded and passed by acclamation.

Election Results and Introduction of New Officers (Marcus Mello)
Alice Z. He - 2nd Vice Chair
Steve Thiel – Director
Stefano Brandani - Director
Tarun Poddar - Treasurer
Atanas Serbezov – Secretary

Leadership Roles (Marcus Mello)
See slides in the Appendix for details.

Alice He was elected as 2nd vice chair. She still has one year remaining of her Director’s term. **Motion:** Appoint Dan Summers as a Director for one year to replace Alice He. The motion was seconded and passed unanimously.

Anand Vennavelli, current 2nd vice chair and former awards director, had to step in to replace Seyi Odueyungbo and ensure that all awards were ready in time to be presented at the awards dinner. It was pointed out that awards administration is of utmost importance to the Division, and moving forward, it would be prudent to have a two-person awards team. **Motion:** Appoint Haiqing Lin (lead position) and Dan Summers as award directors team. The motion was seconded and passed unanimously.

The awards team (**Haiqing Lin and Dan Summers**) will also assume responsibilities for awards promotion, advertising, and fundraising.

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**Attendance:**

<table>
<thead>
<tr>
<th>Marcus Dutra e Mello</th>
<th>Ranil Wickramasinghe</th>
<th>Anand Vennavelli</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atanas Serbezov</td>
<td>Roger Whitley</td>
<td>Alice Z. He (via Skype)</td>
</tr>
<tr>
<td>Christopher Burcham</td>
<td>Megan Donaldson</td>
<td>Marina Tisano</td>
</tr>
<tr>
<td>Seyi Odueyungbo</td>
<td>Andrew Sloley</td>
<td>Dan Summers</td>
</tr>
<tr>
<td>Haiqing Lin</td>
<td>Thomas Vetter</td>
<td>Stefano Brandani</td>
</tr>
<tr>
<td>Peter Ravikovich</td>
<td>Caryn Heldt</td>
<td>Joshua Thompson</td>
</tr>
<tr>
<td>Steve Thiel</td>
<td>James Berthold</td>
<td>Masoud Lashaki</td>
</tr>
</tbody>
</table>

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**Directors**

Megan Donaldson
Dow
medonaldson@dow.com

Christopher Burcham
Lilly
cburcham@lilly.com

Lauren Greenlee
University of Arkansas
greenlee@uark.edu

Alice Z. He
Chevron
azhe@chevron.com

Marina Tisano
University at Buffalo
mtisano@buffalo.edu

Isaac K. Gamwo
NETL/DOE
gamwo@netl.doe.gov

Paul Scovazzo
University of Mississippi
scovazzo@olemiss.edu

Seyi Odueyungbo
seyiodu@hotmail.com

Haiqing Lin
University at Buffalo
haiqingl@buffalo.edu

Angela Lueking
Missouri University of Sci. and Tech.
luekinga@mst.edu

**Area Chairs**

Andrew Sloley
Distillation & Absorption (2a)
andrew@sloley.net

Seth Huggins
Crystallization & Evaporation (2b)
shuggins@amgen.com

George Goff
Extraction (2c)
georgeg@lanl.gov

Haiqing Lin
Membrane-Based Separations (2d)
haqingl@buffalo.edu

Stefano Brandani
Adsorption & Ion Exchange (2e)
S.Brandani@ed.ac.uk

Seyi Odueyungbo
Fluid-Particle Separations (2f)
seyiodu@hotmail.com

Nick Merchant
Bioprocesses (2g)
nmerchant@pfizer.com

Josh Thompson
General Topics & Other Methods (2h)
joshua.thompson@chevron.com

**CTOC Liaison**

Ranil Wickramasinghe
swickram@uark.edu

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Separations Division Planning Meeting - Fall 2019
November 10, 2019
Ranil Wickramasinghe will continue as CTOC liaison.
Alice He will continue to keep the records on people recognized by individual areas.
Steve Thiel will assume webmaster responsibilities.
Marina Tsianou will continue as newsletter editor.
Paul Scovazzo will continue to lead the Engage and other communication platforms.
Mark Pilling will continue to lead the advisory council.
Isaac Gamwo will continue to engage industry leaders.
Angela Lueking will continue as topical conference liaison.

The following director-level positions are open and in need of volunteers:
• Membership growth initiatives;
• Diversity planning coordinator;
• Liaison with other organizations.

Review of Actions Items and Activities (Marcus Mello)
See slides in the Appendix for details.

CTOC Update (Marcus Mello)
See slides in the Appendix for details.

AIChE is asking divisions to develop value propositions. AIChE staff will assist with this task.

Action Item: Marcus Mello to organize a conference call with AIChE staff and the Division leadership to brainstorm a value proposition statement.

Treasurer’s Report (Marcus Mello)
See slides in the Appendix for details.

Neither Neil, nor Tarun were able to attend the planning meeting. A balance sheet was sent out by Tarun ahead of the meeting. The financial health of the Division is good. For a number of years income and expenses are fairly balanced with the year-end balances between $70,000 and $80,000.

Action Item: Before the end of 2019 the Division leadership needs to decide on Division funds allocation for 2020.

Action Item: The Division leadership needs to discuss the authorizations on the Division’s credit card.

Separations Division Membership Data Update (Darlene Schuster)
See slides in the Appendix for details.

AIChE has launched a “Community Counts” program using “big data” to help Divisions better connect with their members and increase membership. The program pilot has been very successful for the CAST and Fuels and Petrochemicals divisions. AIChE staff can work with up to four divisions per year.

Action Item: Marcus Mello to organize a conference call with AIChE staff and the Division leadership to discuss possible participation in the 2020 “Community Counts” program.

Awards (Anand Vennavelli)
See the slides in the Appendix.

On-Line Community “Engage-Separations” (Paul Scovazzo)
See the slides in the Appendix.

“Engage-Separations” will replace LinkedIn for content delivery.
**Poster Competition (Ranil Wickramasinghe)**
See the slides in the Appendix.

**Plenary Session on Major Separations Challenges (Isaac Gamwo)**
See the slides in the Appendix.

**Area Reports (Area Chairs)**
See the slides in the Appendix.

**2019 Programming (Marcus Mello)**
See the slides in the Appendix.

**New Separations Division Logo (Marcus Mello)**
See the slides in the Appendix.

AIChE has suggested four designs for a new logo for the Division that are compatible with mobile platforms. None of the designs, however, was appealing to the attendees of the planning meeting. An alternative design was proposed as a temporary measure.

**Action Item:** Division leadership to discuss a possible contest for a new permanent logo that has better pictorial representation.

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**APPENDIX**
AIChE Separations Division

2019 Fall Planning Meeting

November 10, 2019
1-5 pm EST

Regency Ballroom O – Hyatt Regency Orlando
## Leadership Roles and Succession

<table>
<thead>
<tr>
<th>Role</th>
<th>Person in Charge (2019)</th>
<th>Succession plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>Alice He</td>
<td>Need to appoint for 2020 (1 year)</td>
</tr>
<tr>
<td>Awards Director</td>
<td>Anand Vennavelli (Interim) replaced Seyi Odueyungbo</td>
<td>Need a volunteer for 2020</td>
</tr>
<tr>
<td>Webmaster</td>
<td>Megan Donaldson (term ends 2019)</td>
<td>Need a volunteer for 2020</td>
</tr>
<tr>
<td>Engage and other Communication Platforms</td>
<td>Paul Scovazzo</td>
<td></td>
</tr>
<tr>
<td>CTOC liaison/Poster Awards</td>
<td>Ranil (1st Vice-Chair)</td>
<td>?</td>
</tr>
<tr>
<td>Advisory Council</td>
<td>Mark Pilling (former Director and Chair)</td>
<td></td>
</tr>
<tr>
<td>Newsletter Editor</td>
<td>Marina Tsianou</td>
<td></td>
</tr>
</tbody>
</table>
### Leadership Roles and Succession

<table>
<thead>
<tr>
<th>Role</th>
<th>Person in Charge</th>
<th>Succession Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity planning coordinator</td>
<td>Megan Donaldson (term ends 2019)</td>
<td>Need a volunteer for 2020</td>
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<tr>
<td>Document people recognized by Areas</td>
<td>Alice He</td>
<td>?</td>
</tr>
<tr>
<td>Industry Thought Leaders/ YP Liaison</td>
<td>Isaac Gamwo</td>
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<tr>
<td>Awards promotion &amp; advertising</td>
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<td></td>
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<tr>
<td>Membership growth initiatives</td>
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<tr>
<td>Fundraising coordinator</td>
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<tr>
<td>Interactions with other organizations</td>
<td>Chris Burcham (term ends 2019)</td>
<td>Need a volunteer for 2020</td>
</tr>
<tr>
<td>Topical Conference Liaison</td>
<td>Angela Lueking</td>
<td></td>
</tr>
</tbody>
</table>
Review of Action Items and Activities in 2019

1- Allocation of the Division’s fund into the AIChE investment portfolio

Poll results amongst the Division’s Leadership (as of Jan 27, 2019): invest 75% in the CD option and 25% in the AIChE Portfolio

Action before year-end: Revisit allocation

2- Division’s Credit Card – The Division has now a credit card.

3- Plenary Session - Invite Innovation Award winners to give a talk in the Division’s plenary session at the 2019 Annual meeting in Orlando, FL.

4- Newsletter - Marina Tsianou will work with Megan Donaldson and the Division chairs to complete and publish on the website the 2018 and 2019 newsletters. Marina to take pictures in 2019.
Review of Action Items and Activities in 2019

5- **Reinstating Poster Awards at Annual Meeting**: Ranil has implemented and will discuss it during the Planning Meeting.

6- **Engage Platform**: The Division is testing the AIChE Engage for its potential use as a platform to communicate with members. In a related context, the Division needs to decide how many communication platforms should be maintained. Paul Scovazzo is leading this effort. Marcus Mello attended the YP Mixer and recruited a volunteer to help.
Review of Action Items and Activities in 2019

• Annual sponsorship of Young Professionals’ Mixer at Spring Meeting – Received a $500 request on March 05
  – Marcus Mello and Annand Vennavelli attended the meeting

Division/Forum Contribution Form

Thank you for your generous contribution to the YPC Mixer at the 2019 Spring Meeting!

We look forward to having your representatives join us on Sunday, March 31st at 8:00 pm

Division/Forum/Committee Name: ________________________________

Name of Person Filling This Out: ________________________________

Contribution Amount: ________________________________

Do you plan to have a representative/s attend this event on behalf of your division/forum?

_________ Yes  ___________ No
CTOC Meeting Update (11/09/2019)

• Create value for the membership: Support D&Fs’ branding through Value Proposition activities. AIChE can facilitate to create a VP for our Division
• Increase membership engagement
• AIChE will recommend all D&Fs to evaluate their By-laws during the next 2 years and the need to update them
• EBPC Plans/Focus:
  o Improve overall Conference quality
  o Continue to focus on reducing number of sessions to avoid overlapping
  o Emphasis on Topicals
  o Formed an Abstract Submission Task Force (similar to what the Topicals Task Force was doing)
CTOC Meeting Update (11/09/2019)

• Foster Diversity & Inclusion Opportunities within D&Fs
• Innovation on the Programming: Implement “Meet the Industry Candidate” Poster Session at the 2020 Annual Meeting
• Suggestions for discussion during the Quarterly CDFO (Council of Division and Forum Officers) Webex Meetings:
  o Confex architecture
  o Hotel choice to host Annual Meeting
• SEP Division’s CTOC Survey was completed and sent out prior to CTOC Meeting
# Treasurer’s Report

- Division fund allocation for 2020. Action item (Tarun Poddar). Deadline: year end

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>July Dues</th>
<th>August Dues</th>
<th>Plaque deposit check cashed</th>
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<tr>
<td>190731</td>
<td>July dues</td>
<td>330.00</td>
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<td>-1400.00</td>
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<td></td>
<td>Registrations</td>
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<td></td>
<td>Corp Sponsorship (Chevron?)</td>
<td>1000.00</td>
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<td></td>
<td>GSRAward Chowdhury</td>
<td>-200.00</td>
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<td>[N/A a/b is $68.739.61(#)][ TDB a/b is $6.565.38***] (#Diffs from Balance Sheet Details by $26.25)</td>
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<td>190831</td>
<td>August dues</td>
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<td>1185.00</td>
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<tr>
<td></td>
<td>Registrations</td>
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<td>470.00</td>
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<tr>
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<td>[N/A a/b is $70.394.61(#)][ TDB a/b is $6.565.38***] (#Diffs from Balance Sheet Details by $26.25)</td>
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<tr>
<td>190930</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>191004</td>
<td>Deposited UOP donation for Gerhold Award</td>
<td></td>
<td>3200.00</td>
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</tr>
<tr>
<td>191024</td>
<td>Plaque deposit check cashed</td>
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<td></td>
<td>-1400.00</td>
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<tr>
<td></td>
<td>[ TDB a/b is $8365.38***]</td>
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<tr>
<td></td>
<td>(**Not included is the $287.84 the SepDiv is holding for Area 2a.)</td>
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</table>

Total: 75304.99

Total: 76959.99
Unique stories for each
What does the next chapter hold?
Large programming at annual—62 sessions (7% of program)
Distillation topical at Spring
Key factors:
Implemented webinar series
Part of Community Counts program in 2019 with curation
Popular Big Data Analytics topical at Spring (2020 will be the 6th one)
SMLC and efforts to support CESMII programming beginning in 2018, but done outside of CAST.
Community Counts Pilot in 2018
Resulted in curated content, new website and free magazine subscription
Most programming at spring – oil and gas (20% of spring)
Division Data – prior to Community Counts Div Pilot (2018)
SEPDIV Awards Report

2019 Fall Meeting
Orlando, FL
Anand Vennavelli
2019 Division Awards

• Gerhold Award
  – Yoram Cohen (UCLA)

• Kunesh Award
  – William Phillip (Notre Dame)

• Innovation Award
  – Richard Braatz (MIT)
2019 Area Recognitions

- Spring Pittsburgh
  - Greg Shinskey (Distillation and Absorption)
  - R.G.H. Prince (Distillation and Absorption)

- Fall Orlando
  - Ruth Baltus (Membrane Based Separations)
  - Nien-Hwa Linda Wang (Adsorption & Ion-Exchange)
  - Celio Loureiro Cavalcante Jr (Adsorption & Ion-Exchange)
2018 Graduate Student Research Awards

- Recipients chosen by Area Chairs: 2 max

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raj Manivannan</td>
<td>Oklahoma State</td>
<td>2a – Distillation and Absorption</td>
</tr>
<tr>
<td>Pranav Madabhushi</td>
<td>McMaster</td>
<td>2a – Distillation and Absorption</td>
</tr>
<tr>
<td>Yao Ma</td>
<td>Georgia Tech</td>
<td>2d – Membranes</td>
</tr>
<tr>
<td>Junyi Liu</td>
<td>Univ. of Buffalo</td>
<td>2d – Membranes</td>
</tr>
<tr>
<td>Ratul Chowdhury</td>
<td>Penn State</td>
<td>2d – DB Membranes</td>
</tr>
</tbody>
</table>
On-Line Community
Engage-Separations

Paul Scovazzo
Executive Summary

• Application for “Engage-Separations” Approved
• Launch Window: January 2020
• Similar environment to AIChE wide “Engage” but with Separation-Division Focus
  – Discussion and Resource Library environs
  – Weekly Summary sent to Division Membership
  – Future Transition of Site Leadership/Management easier than other alternatives (Linked-In etc.)
Start-Up Process

• 6-Month Assessment (> two posts per month)
• 5-hr/week monitoring commitment by Division
• Seed Questions to facilitate the establishment of the community
  – Planted by Division volunteers
  – More than one volunteer better than just the Community Manager planting seeds
Seed Question Examples

Based on number of papers given at the AIChE Annual meeting and journal publications, research into membrane separations dominates over other separation processes:

• Is this a good or bad thing?

What special session topics would you like to see in future AIChE meetings? Further, how can the separations division grow participation in the spring meeting which has typically seen lower attendance?
Many universities, which do not have chemical engineering departments, have programs that involve separations; such as, biomedical and environmental engineering. Sometimes this leads to graduate students “re-inventing the wheel;” such as, mass transfer inside membrane modules:

• What obligation, if any, does the AIChE have to minimize this inefficient use of student researcher work effects?
Initial Support Staff

- Monica Mellinger – AIChE Engage Manager (contact for set-up and IT-Management)
- Paul Scovazzo – Community Manager (5-hr/wk.)
- Rasika Nimkar
- Seed Question planters: Alex Lopez and Lucy Mar-Camacho

- Need 5 or 6 more volunteers during start-up phase
- Send Seed Question Ideas to scovazzo@olemiss.edu
Poster Competition

Coordinated by Marcus Mello, Mahmood Jebur and Solomon Isu

Tuesday 3.30-5.00 pm

Hyatt Regency, Regency Ballroom R/S
<table>
<thead>
<tr>
<th>Session</th>
<th>Student posters</th>
<th>Chairs</th>
<th>Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>381 Bioseparations</td>
<td>5</td>
<td>Heather Chenette, Pratik Joshi</td>
<td>1</td>
</tr>
<tr>
<td>381 Separations Division</td>
<td>25</td>
<td>Marcus Mellow, Roger Whitley</td>
<td>3</td>
</tr>
<tr>
<td>381 General Topics</td>
<td>11</td>
<td>Joshua Thompson Steve Ritchie</td>
<td>2</td>
</tr>
<tr>
<td>381 Adsorption and Ion Exchange</td>
<td>10</td>
<td>Aaron Moran</td>
<td>2 certificates</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
<td></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>
Details

• Need 2 judges per poster
• Maximum 10 posters per judge need 10 judges
• Preferred 5 posters per judge, 20 judges
• All scoring via Google Forms which will
• Result tabulated and certificates give out by 5.00 pm
## Details

- **Judge**
- **Student**
- **Poster Number**
- **Scientific Content (35%)**
  - 1 = no significant content/data, no hypothesis; 2 = substantial gaps in the data, weak hypothesis;
  - 3 = average content with solid results; 4 = very good content and analysis emphasizing hypothesis driven research;
  - 5 = superior content, high risk and/or truly exciting results
  - 1 2 3 4 5
  - Poor ( ) ( ) ( ) ( ) ( ) Excellent

- **Significance to Field (15%)**
  - 1 = not relevant or novel, it has been done before 2 = only modestly important, incremental work
  - 3 = average significance, a solid graduate student project with relevance
  - 4 = interesting work with high impact results and a strong future
  - 5 = game changing work or technology with field altering ramifications
  - 1 2 3 4 5
  - Poor ( ) ( ) ( ) ( ) ( ) Excellent

- **Quality of Explanation (25%)**
  - 1 = poor presence, no confidence, poor communication skills, unable to answer any questions, rude to the judge
  - 2 = a modest ability to communicate clearly and effectively use poster, difficulty answering questions
  - 3 = an average communicator, some areas of knowledge are strong, others are weaker
  - 4 = a strong communicator with broad knowledge in the field. Ability to field questions
  - 5 = remarkable communication skills, superior knowledge of the field, excellent use of poster during discussion
  - 1 2 3 4 5
  - Poor ( ) ( ) ( ) ( ) ( ) Excellent

- **Quality of Poster (25%)**
  - 1 = poor quality poster, hard to read, poor aesthetics, obvious grammatical mistakes 2 = uninspiring poster, some aesthetic quality, data is presented, but maybe not in the best way, some mistakes visible
  - 3 = an average poster, clearly marked sections and easy to read and follow, few mistakes
  - 4 = a well assembled poster that is pleasing to read and easy to follow. 5 = an impeccable poster. A true work of art and a testament to the field that is being presented. A joy to read.
  - 1 2 3 4 5
  - Poor ( ) ( ) ( ) ( ) ( ) Excellent
AIChe 2019 Annual Meeting
Transforming the Future through Chemical Engineering

Separations Division Student Poster Award

10-15 November 2019
Hyatt Regency, Orlando, FL, USA

to

for poster titled

Separations Division Chair
Marcus Dutra e Mello
Wickramasinghe

Separations Division First Vice-Chair
Ranil Wickramasinghe
Director reports – Isaac Gamwo

- Second Division Plenary Session on Major Separations Challenges (Invited Talks)
  Monday November 11, 12:30-3:00 PM
  Session 132 – HRO-Manatee Spring II

_planned:_ 3 invited speakers to cover the topic from the academic, industry, and consultant perspectives

**Actual** 3 speakers to cover National academies, industry, and academia perspectives on Challenges and Opportunities in Separations

1. Dr. Joan F. Brennecke – Chair National Academies Committee will share the results of the study on “Research Agenda for Transforming Separation Science” with the AIChE Separations Community. (45mn)

2. Dr. Greg DiCosola– (Industry-Process Engr-Seattle, WA)  Challenges and Advancements in Extraction Processes...

3. Dr. Sankar Nair, Academia-Georgia Tech Biorefinery Separations Challenge-New Materials and Processes (35 mn)

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- 2020 AIChE Fall Meeting in San Francisco - Nov. 10-15; Hilton San Francisco Union Square
  Third Plenary Session on Major Separations Challenges in Industry
  Speakers needed
  Contact: gamwo@netl.doe.gov
### Summary of Area Succession Plans

<table>
<thead>
<tr>
<th>Area</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a Distillation &amp; Absorption</td>
<td>Andrew Sloley</td>
<td>Clint Aichele</td>
</tr>
<tr>
<td>2b Crystallization &amp; Evaporation</td>
<td>Seth Huggins</td>
<td>Thomas Vetter</td>
</tr>
<tr>
<td>2c Extraction</td>
<td>George Goff</td>
<td>TBD</td>
</tr>
<tr>
<td>2d Membrane-Based Separations</td>
<td>Haiqing Lin</td>
<td>Mahdi Malmali</td>
</tr>
<tr>
<td>2e Adsorption &amp; Ion Exchange</td>
<td>Stefano Brandani</td>
<td>Peter Ravikovich</td>
</tr>
<tr>
<td>2f Fluid Particle Separation</td>
<td>Isaac Gamwo</td>
<td>TBD</td>
</tr>
<tr>
<td>2g Bioseparations</td>
<td>Nick Merchant</td>
<td>Caryn Heldt</td>
</tr>
<tr>
<td>2h General Topics &amp; Other Methods</td>
<td>Josh Thompson</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Area 2B – Crystallization and Evaporation

AIChE Area 2B Report – November 2019

Area Chair: Seth Huggins, Amgen Inc.
Area Vice Chair: Thomas Vetter, University of Manchester
2020 Sessions

Spring 2020 (Houston) - **No sessions planned for Spring 2020**
- Number of Oral Sessions (No titles necessary): 0
- Number of Poster Sessions (No titles necessary): 0
- Number of Co-Sponsored Sessions (list the co-sponsor areas): 0
- Number of Special Sessions, e.g. Topicals (list the Topical title): 0

Fall 2020 (San Francisco) - **Final number will be determined at the area planning meeting**
- Number of Oral Sessions (No titles necessary): 10
- Number of Poster Sessions (No titles necessary): 0
- Number of Co-Sponsored Sessions (list the co-sponsor areas): 6
  - Areas: 01A; 03; 03A; 10B; 12A; 15B; 26
- Number of Special Sessions, e.g. Topicals (list the Topical title): 
  - **Area 2B Crystallization and Evaporation Plenary Session: Invited Speakers**
2021 Sessions

Spring 2021 () - **No sessions planned for Spring 2020**
- Number of Oral Sessions (No titles necessary): **0**
- Number of Poster Sessions (No titles necessary): **0**
- Number of Co-Sponsored Sessions (list the co-sponsor areas): **0**
- Number of Special Sessions, e.g. Topicals (list the Topical title): **0**

Fall 2021 (Boston) - **Final number will be determined at the area planning meeting**
- Number of Oral Sessions (No titles necessary): **10**
- Number of Poster Sessions (No titles necessary): **0**
- Number of Co-Sponsored Sessions (list the co-sponsor areas): **6**
  - Areas: 01A; 03; 03A; 10B; 12A; 15B; 26
- Number of Special Sessions, e.g. Topicals (list the Topical title):
  - Area 2B Crystallization and Evaporation Plenary Session: Invited Speakers
Succession Plan

When does the current Chair’s term expire?
• Seth Huggins, Amgen Inc.; term expires in November 2019.

Who will succeed the current Chair?
• Dr. Thomas Vetter, University of Manchester, the current area vice-chair, will take over as chair in November 2019. Elections for a new vice-chair will occur at AIChE 2019 Fall planning meeting of Area 2B.
Area 2D Membrane-based Separations

Chair: Haiqing Lin
Vice-Chair: Mahdi Malmali

November 10, 2019
<table>
<thead>
<tr>
<th>Sessions</th>
<th># Submissions</th>
<th># rejected</th>
<th>% Accept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honorary Session for Ruth Baltus I</td>
<td>6</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Honorary Session for Ruth Baltus II</td>
<td>6</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Advanced Inorganic Membranes for Gas Separation</td>
<td>13</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Advanced Polymeric Membranes for Gas Separation</td>
<td>12</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Mixed matrix membranes for gas separation</td>
<td>11</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Membranes for CO2 capture</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Water Treatment, Desalination, and Reuse 1</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Water Treatment, Desalination, and Reuse 2</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
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<tr>
<td>Water Treatment, Desalination, and Reuse 3</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Antifouling Membranes for Water Purification</td>
<td>7</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Charged Polymers for Membrane Based Water and Energy</td>
<td>12</td>
<td>42%</td>
<td>58%</td>
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<tr>
<td>Surface Engineered and Responsive Membranes</td>
<td>7</td>
<td>0%</td>
<td>100%</td>
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<tr>
<td>Bioinspired and Biomimetic Membranes</td>
<td>8</td>
<td>13%</td>
<td>88%</td>
</tr>
<tr>
<td>Membrane based organic solvent separations I</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Membrane based organic solvent separations II</td>
<td>10</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Highly selective separations with membranes I</td>
<td>7</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Highly selective separations with membranes II</td>
<td>7</td>
<td>0%</td>
<td>100%</td>
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<tr>
<td>Industry Perspectives on Membrane Separations</td>
<td>6</td>
<td>0%</td>
<td>100%</td>
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<tr>
<td>Membrane Formation</td>
<td>14</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Modeling and Simulation I</td>
<td>20</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Modeling and Simulation II</td>
<td>6</td>
<td>30%</td>
<td>70%</td>
</tr>
</tbody>
</table>
Acceptance rate is lower than wanted

• 21 sessions: 18 allocated originally and three more requested and granted
• 144 Talks (primary)
  – 24 “Invited”
• 196 total abstracts
  – 172 “Contributed”
• 70% acceptance rate for contributed abstracts
Concern for Area 2D: Session numbers are declining
### Pittsburgh Meeting Programming

Summary for Area 2D

<table>
<thead>
<tr>
<th>Sponsorship</th>
<th>Number of sessions</th>
<th>Number of presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary only, no co-sponsorship</td>
<td>21</td>
<td>144</td>
</tr>
<tr>
<td>Co-sponsoring with other areas</td>
<td>2</td>
<td>14</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>158</strong></td>
</tr>
</tbody>
</table>

**Program features:**

- **144 talks in primary sessions**
- **2 honorary sessions (primary)**
- **2 invited sessions**
- **Separations Division Poster Session**
### 2D Sponsored and Co-sponsored Sessions by Day

<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>8.00-10.30</td>
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<td>1</td>
<td>2*</td>
<td>2</td>
<td>2</td>
<td>7</td>
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<tr>
<td>12.30-15.00</td>
<td>0</td>
<td>1**</td>
<td>1</td>
<td>2*</td>
<td>3</td>
<td>0</td>
<td>7</td>
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<tr>
<td>15.30-18.00</td>
<td>2</td>
<td>1**</td>
<td>0</td>
<td>2</td>
<td>4</td>
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<td><strong>Total</strong></td>
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<td>2</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td>23</td>
</tr>
</tbody>
</table>

* Includes co-sponsored session

** In Honor of Ruth Baltus sessions
## Area 2G - Bioseparations

<table>
<thead>
<tr>
<th>Abstracts Received</th>
<th>Sessions</th>
<th>Abstracts Accepted</th>
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</thead>
<tbody>
<tr>
<td>Oral</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Poster</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Abstracts Received: 26
Area 2h – General Topics

• **Fall 2019**
  • Oral Sessions: 1 scheduled
  • Hybrid Separation Processes (Joshua Thompson)
  • Poster Session: 1 scheduled
  • Poster Session: General Topics on Separations (Steve Ritchie and Alice He)

• **Spring 2020**
  • No sessions planned for 2h

• **Fall 2020**
  • Oral Sessions: 1 scheduled
  • Hybrid Separations Processes (Joshua Thompson)
  • Poster Session: 1 scheduled
  • Poster Session: General Topics on Separations (Steve Ritchie, Josh Thompson, and Alice He)
Area 2h – General Topics

• **Spring 2020**
  • No sessions planned for 2h

• **Succession Plan**
  • Steve Ritchie is current Vice Chair, will start as Chair for 2020.
  • Need to identify Vice Chair for 2020
# 2019 Annual Meeting Programming

<table>
<thead>
<tr>
<th>Area</th>
<th>Oral</th>
<th>Poster</th>
<th>Co-Sponsored</th>
<th>2018 Oral</th>
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</thead>
<tbody>
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<td>Area 2</td>
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<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Area 2A</td>
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<td>Area 2B</td>
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<td>1</td>
<td>9</td>
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<tr>
<td>Area 2C</td>
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<td>0</td>
<td>0</td>
<td>3</td>
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<td>Area 2D</td>
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<td>0</td>
<td>2</td>
<td>18</td>
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<td>16</td>
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<td>Area 2F</td>
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<td>0</td>
<td>5</td>
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<tr>
<td>Area 2G</td>
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<td>2</td>
<td>4</td>
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<td>Area 2H</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
<td><strong>4</strong></td>
<td><strong>11</strong></td>
<td><strong>61</strong></td>
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</tbody>
</table>

- Stayed within session allocation proposed by AIChE: 59
- 63 sessions (59 + 4 extra) initially requested but some sessions were oversubscribed and some were undersubscribed. Shuffling amongst areas was enough to meet a total of 59 sessions for the whole Division.
2020 Programming Deadlines

2020 AIChE Annual Meeting
Program Theme: “The Increasing Diversity of Chemical Engineering”
San Francisco, CA
When: November 15 - 20, 2020

<table>
<thead>
<tr>
<th>Monday, December 16, 2019</th>
<th>Sessions &amp; Session Chairs Due &amp; In Confex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, January 10, 2020</td>
<td>Call for Abstracts Opens</td>
</tr>
<tr>
<td>Friday, April 8, 2020</td>
<td>Call for Abstracts Closes</td>
</tr>
</tbody>
</table>
Future Programming Venues

2020 Annual Meeting: San Francisco, November 10-15

2021 Annual Meeting: Boston, November 7-12

2022 Annual Meeting: Phoenix, November 13-18

2023 Annual Meeting: Orlando, November 5-10

2024 Annual Meeting: San Diego, October 27-01 November
New Business

• **Improving Engagement with Annual Programming**
  – Marcus Mello and Anand attended the Programming Retreat at the Spring Meeting (Mar 31) and the Fall Meeting (Nov 10)
  – Ranil and Marcus are on the distribution list for the 2020 Annual Programming Committee Meetings

• **ExxonMobil's Corporate Strategic Research group organized two sessions in honor of their Corporate Strategic Research (CRS)'s 50th anniversary at the 2019 AIChE Annual Meeting**
  – Celebrate past and future ExxonMobil through forward-looking topics and technical talks highlighting the rigor of ExxonMobil’s fundamental research portfolio in the areas of separations and catalysis and reaction engineering. All invited talks.
  – AIChE has agreed to give Separations and Reaction Engineering Divisions the two oral sessions.

• **Value Proposition for the Division**
  – Proposal: Work with AIChE to facilitate a session with our Ex Comm.
New Business – New Primary Logo

Deadline for choice: Nov 20
Proposal: Take a vote during Planning Meeting