

CHEMICAL ENGINEERING DIVISION

Business Meeting Minutes

Wednesday, June 17, 2015 - 12:30 - 2:00

Washington State Convention Center, Room 211, Seattle, WA

Attendees and Affiliations

Daniel Anastasio Rose-Hulman

Cheryl Bodnar Rowan Kyle Branch Utah

Daina Briedis Michigan State
Lisa Bullard North Carolina State

Daniel Burkey Connecticut

Anthony Butterfield Utah

Heather Chenette Rose-Hulman

Matthew Cooper North Carolina State

Kevin Dahm Rowan
Michael Elsass Dayton

Author Estas

Arthur Felse Northwestern

Laura Ford Tulsa

Richard Gilbert South Florida Paul Golter Washington State Texas A&M **Brian Harding** New Haven David Harding Jason Keith Mississippi State Daniel Lepek Cooper Union Xuegong Li Washington State Arshan Nazempour Washington State Missouri S & T Christi Patton Luks Polly Piergiovanni Lafayette College

Joe Shaeiwitz Auburn
David Silverstein Kentucky
David Tomasko Ohio State

Bernard Van Wie Washington State

Troy Vogel Illinois at Urbana-Champaign Eileen Webb Accreditation Preparation

1. PIC I Chair Report

Agnieszka Miguel reported for Adrienne Minerick, who had a competing meeting. PIC I successes include no more paper fees, wifi being cheaper in the conference rooms, and Monolith being a bit easier. They are working on online voting and the strategic doing session. The Diversity Committee encourages us to comment on diversity and inclusion in ABET's open comment period until July 1, 2015 (the summary of current revisions to criteria 3 and

- 5: https://www.surveymonkey.com/s/Revisions2015). The RFP for special projects will be in October, and the Division and PIC split the cost of the project. Adrienne will help us with proposals. The emphasis for next year may be K-12 year of dialogue. The indirect cost has been changed to 30% on BASS income, with 30% contributed by ASEE to get to the full 60%. The Board is aware that transparency and communication have been issues.
- 2. Greetings and Introductions (Lisa Bullard)
 - a. Introductions (as above in the Attendees and Affiliations)
 - b. New officers: Laura Ford, chair-elect; Cheryl Bodnar, Secretary/Treasurer; Milo Koretsky, Director
 - c. Thanks to retiring officers: Daniel Lepek, Director; David Dixon, Past Chair
 - d. Promotions, new positions and passing of members
 - 1) Dan Anastasio Rose Hulman
 - 2) Cheryl Bodnar Rowan
 - 3) Josh Enzer Delaware
 - 4) Rich Felder final NETI in July 2015
 - 5) Allen Hersel Provost at Trine University
 - 6) Karen High Associate Dean for Academic Affairs, Clemson
 - 7) Jason Keith Dean of Engineering, Mississippi State
 - 8) Daniel Lepek Fulbright
 - 9) Matt Liberatore University of Toledo
 - 10) Adrienne Minerick Associate Dean for Research, Michigan Tech
 - 11) Dick Zollars retired from Washington State
- 3. Minutes from the last Business Meeting (June 18, 2014 in Indianapolis, IN) were approved as submitted.
- 4. Ongoing Business
 - a. Finances (Laura Ford) a financial report is attached as Appendix 1. Jason Keith brought up that ASEE is \$1 million in debt, which is why the indirect cost will be applied. Institutional memberships will be rising from \$1400 to \$3500 with a proposal instead for \$3000 for non-PhD institutions and \$5000 for PhD institutions. Please let your deans know.
 - b. Membership (Lisa Bullard for Allen Hersel) We have 511 active members and 38 grace period members (haven't renewed dues) for a total of 549. Forty are new members since 6/14. The breakdown of membership is
 - 56 assistant professors
 - 84 associate professors
 - 186 full professors
 - 28 no title
 - 26 grad student/post doc
 - 19 lecturers/instructors
 - 150 deans, chairs, industrial, retired, etc.
- 5. Updates
 - a. Report from Program Chair (Kevin Dahm) 49 abstracts were submitted with 32 final papers. We had 3 panel discussions, 1 workshop, the Chemstations Lectureship, 1 poster

- session, and 5 podium sessions. Kevin thanked Adrienne for helping shepherd the panel proposals through the process and the reviewers and moderators for helping make this a great conference. Panel proposals with a proceedings paper are more favorably reviewed than those without, according to Adrienne. Lisa said that the ChED has a higher ratio of proceedings/session than other divisions. Will the 30% surcharge apply to ticketed workshops? Officers will need to find out for future conferences.
- b. Report on Awards (Bernie Van Wie) Bernie recognized the work of his co-chair, Joe Menicucci. The awardees are given in the brochure attached as Appendix 2. There were no applications for the Lifetime Achievement Award or two of the mentoring awards. Officers have developed a list of people to encourage to nominations for the Lifetime Achievement Award. The Awards Committee will consider consolidating the mentoring awards into one that has a large enough monetary value to help someone with conference expenses. The Awards Committee is still seeking sponsorship for the Lectureship from Armfield, and Ignacio Grossman suggested ExxonMobil and Aspen as sponsors. We need a sponsor for the Corcoran Award, too. In other awards: Daina Briedis, Stephanie Farrell, and Don Visco were all named ASEE Fellows at this conference. Milo Koretsky, Samuel Mihelic, Michael Prince, Margot Vigeant, and Katharyn Nottis have won the PIC I best paper for 2015. Milo also had the best PIC I paper in 2014 with Alec Bowin and Daniel Reid.
- c. Diversity Committee (Arthur Felse and Cheryl Bodnar) Arthur gave an update on the diversity of chemical engineers and our division. One of our sessions was a panel discussion on chemical engineering diversity, and the committee is working on a diversity issue for *Chemical Engineering Education*. They will be connecting with AIChE's diversity committee and are considering a workshop for the next ASEE conference. A travel award for women or under-represented minorities is another possibility, if sponsorship can be found.
- d. Summer School (David Silverstein) The next Summer School for Chemical Engineering Faculty will be held in July 29 Aug. 4, 2017, in Raleigh, NC. A major planning meeting will be held in August 2015. Expect for workshop proposals to be in mid-2016 and registration to be in late 2016. They have had positive feedback from NSF, and the total funding need is \$200,000 to \$250,000.

6. New Business

- a. Indirect Cost ASEE will begin charging a 30% indirect cost on all income to BASS accounts as of October 1, 2015. Banquet income will run through the Operating account instead, but membership dues and awards will all be charged the 30% IDC. Christi Patton Luks proposed that we increase our annual division dues to \$7. This will bring us more in line with other divisions in our PIC, cover the IDC on the dues, and offset some of the IDC on awards. Some potential sponsors are likely to balk at a 30% IDC rate. Joe Shaeiwitz proposed that we run the awards funds through CACHE instead, and Richard Gilbert proposed that we raise the dues to \$8 to cover all of the IDC for awards. Discussion followed. A motion to increase the annual division dues to \$8 was made and passed by voice vote with 1 no. It was unclear if we would need a bylaws revision, as the dues rate is mentioned in the bylaws. Christi will follow up.
- b. ChE Body of Knowledge Joe Shaeiwitz brought up a project that Ruth (?) is working on called the chemical engineering body of knowledge. AIChE has a document in the

final stages of review that is a body of knowledge for ChE from 5 years after graduation to retirement, but most bodies of knowledge are for just after graduation. David Silverstein will talk with Ruth about this project.

- c. Volunteer Opportunities
 - i) New Orleans 2016 Arthur Felse, Program Chair; Joe Shaeiwitz, Local Arrangements [volunteered after the meeting]
 - ii) Columbus, OH 2017 Daniel Burkey, Program Chair; Mike Elsass, Local Arrangements
- d. General Brainstorming about ASEE ChED was done using the KoolAID (Keep, Add, Improve, Drop) method. Notes are included in Appendix 3.
- 7. Passing of "The Golden Wrench" to incoming chair Christi Patton Luks. Christi then thanked Lisa for her work as Division Chair, Kevin for his work as Program Chair, and Laura for her service as Secretary/Treasurer.

Appendix 1 American Society for Engineering Education Chemical Engineering Division Treasurer's Report – June 2015

BASS Account total reported June 12, 2014	\$35,597.07
Credits	
Interest (none posted for Oct. 2013 to date)	\$
Dues (April 2014 through January 2015)	\$1,314.00
Sponsorships (Eastman Corcoran, 2014; CACHE 2015)	\$3,200.00
2014 Banquet Revenue	\$3,190.00
	\$7,704.00
<u>Debits</u>	,
Part of 2014 Plaques (\$1,337.30 total)	\$1,220.30
2014 Awards Banquet	\$3,302.40
2015 Awards (CACHE, Lectureship, Corcoran, Fahien)	\$7,000.00
Part of 2015 Plaques (\$1,303 total)	\$1,237.00
* * *	\$12,759.70
[What the debits would be with the 60% indirect costs	\$20,415.52]
Total BASS Account (June 17, 2015)	\$30,541.37
Operating Account total reported June 12, 2014	\$ 117.00
<u>Credits</u> 2014/2015 Allocation	\$566.00
<u>Debits</u>	
Part of 2014 Plaques (\$1,337.30 total)	\$117.00
2015 Future Faculty Award	\$500.00
Part of 2015 Plaques (\$1,303 total)	\$66.00
- · · · · · · · · · · · · · · · · · · ·	\$683.00
Total Operating Account (June 17, 2015)	\$ 0.00

Joseph J. Martin Award

(for the best paper in the ChE Division at the previous ASEE meeting that also appears in the proceedings)

Alec S. Bowen, Daniel R. Reid, and Dr. Milo Koretsky (Oregon State University) are recognized for their paper:

"Development of Interactive Virtual Laboratories to Help Students Learn Difficult Concepts in Thermodynamics".



CACHE Award

(for contributions to computing in chemical engineering)

<u>Sponsored by the CACHE Corporation</u>

Dr. George Stephanopoulos Massachusetts Institute of Technology

George Stephanopoulos is the Arthur D. Little Professor of Chemical Engineering at the Massachusetts Institute of Technology. He was awarded the CACHE Award for Excellence in Computing in Chemical Engineering Education for the development of computer aids in chemical engineering education, through the generation of software packages and the writing and editing of associated learning materials and books in computer-aided chemical engineering education.



ASEE Chemical Engineering Division

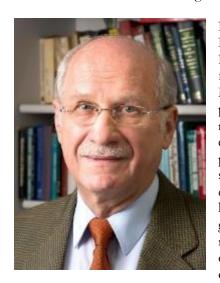


Award Recipients for 2015

ASEE Annual Conference Seattle, Washington

Chemstations Lectureship Award Sponsored by Chemstations, Inc.

Dr. Ignacio E. Grossmann



Professor Ignacio E. Grossmann, the Rudolph R. and Florence Dean University Professor of Chemical Engineering and former Department Head at Carnegie Mellon University, has made significant, pioneering contributions to systematic methods in process synthesis, optimal decision-making under uncertainty and process logistics including planning and scheduling across the chemical processing enterprise. His outstanding contributions have had significant impacts in power generation, energy management systems, resource conservation and the optimization of batch and continuous processes for chemical, food and pharmaceutical

production. They have also opened up new research vistas and made tremendous impact in engineering practice. His contributions to education include mentoring 48 PhDs, with a quarter of them in academia, a groundbreaking textbook, and far-reaching web-based educational materials and software.

Best Poster Award Winner

(for the best poster in the ChE Division at the previous ASEE meeting)

Dr. Cheryl A. Bodnar, Dr. Eric J. Beckman, Dr. Joseph J. McCarthy, and Dr. Steven R. Little (University of Pittsburgh)

'Work in Progress: A Vision for the First "Product Innovation Sequence" for Chemical Engineers'



Ray W. Fahien Award

(for outstanding teaching effectiveness and educational scholarship for faculty members in their first 10 years)

Dr. Daniel H. Lepek (The Cooper Union)



Daniel Lepek, Associate Professor of Chemical Engineering at The Cooper Union, is a leader in chemical engineering education and a major proponent of leveraging technology to improve student learning. Since joining The Cooper Union, he has taught 10 different courses and has been very active in the ASEE Chemical Engineering Division, having

served as Program Chair for the 2013 Annual Conference and Division Director from 2013-2015. Since receiving the 2011 "Engineering Education" Mentoring Grant, he has published two peer-reviewed conference proceedings and currently has a chemical engineering textbook under contract. His current educational research is focused on peer instruction, technology-enhanced active learning, and electronic textbooks.

William H. Corcoran Award

(for the best paper published in the previous calendar year in *Chemical Engineering Education*)

Sponsored by Eastman Chemical Corporation

David D. Shaw and Dr. Leonard F. Pease III (University of Utah) "Efficient Grading"



ChE Division Graduate Student Future Faculty Grant (for chemical engineering graduate students who have not presented at an ASEE Annual Conference)

Kenneth P. Mineart (North Carolina State University)

In the large Unit Operations laboratory course at North Carolina State University, graduate student Kenneth Mineart demonstrated an uncommon drive to help students learn, and received positive reviews from students during the student course evaluation process. As Kenneth has progressed through his graduate career, he has demonstrated a genuine interest in teaching. He is enrolled in NCSU's "Preparing the Professoriate" program, which intends to groom the next generation of engineering educators for excellence in the classroom. He is co-



author of *Improving Student Technical Communication via Self Reflection*, a paper in the 2015 ASEE Annual Meeting.

Appendix 3 Input from General Brainstorming

Communication

- Keep
 - Keep web site up to date
 - o Responsible and transparent leadership
- Add
 - Speed networking event so old guys like me get to meet the newer faces more easily
 - o Put a colored sticker or division pin on badge to identify other division members
 - Go out together after the Division Mixer on Sunday night (and publicize it in advance so folks can plan) – perhaps this could target "new" or "first time" attenders/members

• Improve

- Mobile app for ASEE conference
- o Opportunities for people to share ideas informally
- o Adopt ERM-style monthly digest email
- Communicate award opportunities to grad students and faculty advisors well in advance
- Communication about awards
- Accessibility to new members during the business meetings (explain all the acronyms)
- Change the business meeting time to Monday or Tuesday since some people leave on Wednesday
- o Integrate the divisions and committees so they are not separate (and people feel like they have to "choose" where to get involved). There are not enough staff and volunteers to do everything.

Drop

 Executive committee teleconference meeting – replace with more frequent email or newsletter

Program

- Keep
 - The number of sessions was about the right number this year. There were no parallel sessions competing for attendance, and there were spaces to attend talks in other divisions. (2)
 - Poster session had good "overflow" and allowed more participation from papers that might not have made the regular session.
 - o Bookmark in a bright color! Used it all week long.

Program (continued)

- Add
 - o Have a panel composed of or intended for graduate students.
 - o Panel on industry perspectives.
 - Tuesday dinner (not ticketed, just informal, but add to schedule, newsletter, and bookmark)
 - o Bring Your Own Experiment session
 - o Open mic session (2)

Improve

- Talks should be more rigorous and grounded in education/pedagogy theory.
 Consider using poster session for "anecdotal" papers that do not have rigorous pedagogy.
- o Have the business meeting at 7AM as in other divisions.
- Drop
 - o Eliminate 7AM sessions can we start at 8AM instead?

Banquet

- Keep
 - o Proximity to the conference venue walking distance is ideal
 - o Duration is about right
- Add
 - Mixing time
 - Means to socialize and get people talking to others, especially new people (3)
 - Novel banquet programming based on the city e.g. river cruise (Portland), brewing tour (Pittsburgh), live music (Salt Lake City)

Improve

- o More choices, perhaps a buffet
- o Consideration of dietary restrictions (e.g. there was no alternative dessert)
- Lower cost would be better, or subsidize for students
- Have free flow seating, like a buffet, where people could move around and interact with others
- o Consider heavy hors-d'oeuvres with high top tables and relaxed seating areas
- o Consider spaces that allow for more interaction and mixing
- O Does the banquet need to be ticketed? Could we just order off the menu and pay ourselves? Seems like it would be much cheaper. (This may make it difficult to get our own room, though).
- Drop
 - o 3 hours seems too long for the banquet drop to 2 hours

Awards

- Keep
 - Proximity
- Add
 - Require a multi-year commitment to awards from sponsors, like the Lectureship, to avoid having to come up with new sponsors frequently
 - Allow award applicants to automatically be considered a second time (2), especially Lectureship and Lifetime Achievement
 - o Best Diversity-Related Paper
 - Generate and maintain a list of prospective nominees for Lectureship and Lifetime Achievement to ensure that they are awarded each year

Improve

O Visibility of awards and communication to the division about what awards are available and their deadlines/requirements (2)

Drop

 Eliminate some of the award restrictions that may prevent potential applicants from consideration, e.g. Faculty Mentoring Grant.