



ASEE AMERICAN SOCIETY FOR ENGINEERING EDUCATION CHEMICAL ENGINEERING DIVISION

Business Meeting

Minutes

Wednesday, June 18, 2014 – 12:30 – 2:00

Indianapolis Convention Center, Room 243, Indianapolis, IN

Attendees and affiliations:

Kostas Apostalou	McMaster
Cheryl Bodnar	Pittsburgh
Frank Bowman	North Dakota
Lisa Bullard	North Carolina State
Jacqueline Burgher	Washington State
Matthew Cooper	North Carolina State
David Dixon	South Dakota School of Mines and Technology
Michael Elsass	Dayton
Arthur Felse	Northwestern
Laura Ford	Tulsa
Richard Gilbert	South Florida
Paul Golter	Washington State
Kevin Hadley	South Dakota School of Mines and Technology
David Harding	New Haven
Allen Hersel	Trine
Jason Keith	Mississippi State
Daniel Lepek	Cooper Union
Christi Luks	Tulsa
Danielle Mai	Illinois at Urbana-Champaign
Susan Montgomery	Michigan
Becky Pinkelman	Durmstadt
Michael Prudich	Ohio
Justinus Satrio	Villanova
Mariano Savelski	Rowan
Joe Shaeiwitz	Auburn
David Silverstein	Kentucky
Marylee Southard	Kansas
Mary Staehle	Rowan
Elizabeth Stewart	Michigan
David Tomasko	Ohio State
Bernard Van Wie	Washington State
Don Visco	Akron
Troy Vogel	Illinois at Urbana-Champaign
Richard Zollars	Washington State

1. Greetings and Introductions

Dave Dixon started the meeting. We all introduced ourselves, and transitions were announced: Christi Luks is moving from Tulsa to Missouri S&T. Stephanie Farrell has been promoted to full professor and has been awarded a Fullbright in Ireland. Daniel Lepek has been tenured and promoted to associate professor. The University of Michigan will be celebrating Scott Fogler's 50th year on the faculty this upcoming year. Jason Keith has been named an ASEE Fellow. We held a moment of silence for members who died in the past year: Becky Toghiani from Mississippi State and Richard Bailie from West Virginia.

2. Corrections were made to the minutes from the last Business Meeting (Atlanta, GA, 26 June 2013) in sections 3b (members of our division who are chemists) and 4b (including Don Visco on the Summer School committee). The minutes with those corrections were approved.

3. Agnieszka Miguel from Seattle University gave the PIC I report on behalf of Adrienne Minerick, who had a competing meeting. Agnieszka first gave us information from headquarters and then asked for comments for Adrienne and headquarters.

a. Please incorporate the new ASEE logo in publications. Functionality is being added to the ASEE website to search papers better. ASEE is holding a Year of Action for Diversity, in which we as a division are encouraged to do something regarding diversity (a session, a webinar...). A handout is included as Appendix A. The Safe Zone Training workshops were mentioned, and it was unclear to some that each workshop was stand-alone. ASEE membership rates will go up in October. An online membership (no print *Prism*) is available for a lower rate, and multi-year memberships are available. Online members are currently left out of voting since ballots are sent out with *Prism*, and that is being worked on. Online voting is prohibited by ASEE's bylaws. PIC funds are available for projects that could become part of our division's work; these need a division match. The call for proposals for these \$500 PIC grants will be in October. Please check that our awards are listed on the ASEE website. Adrienne plans to hold a teleconference with division and program chairs a few times a year instead of updates only at the Annual Conference.

b. The wifi available in the convention center is not sufficient, and the online session locator should have been available as an app that did not require the use of the wifi. The big general audience events, such as the awards ceremony, were not easy to find on the online session locator. 7:00 am sessions are hard; could we have more parallel sessions instead? Of course, we have to avoid having too many parallel sessions. Has the board evaluated publish-to-present to see if it is having the desired effect? It works against the things we are trying to do; having to write a paper makes for a higher barrier to getting people to present at the conference. Having the papers is good for graduate students, though, so keeping the paper as an option is good. The deadlines for papers are not good for faculty schedules.

4. Ongoing Business

a. The treasurer's report from Laura Ford is attached in Appendix B.

b. Allen Hersel reported that our membership is stable at 500 paid members with 40 lapsed. We do not get many new assistant professors each year. We have 20 to 30 industrial members, and the number of members who are chemists has dropped. Large research institutions tend to have 1 – 2 members, while schools such as Rowan and Buchnell have nearly all of their faculty as members. The letter that Nick Peppas was going to have John McKetta

write last year did not get done due to McKetta's health problems. David Dixon encouraged us to go back and encourage our colleagues to join.

c. Christi Luks was elected as our new Chair-elect, and Michael Elsass was elected Director.

5. Updates

a. Michael Elsass reported on this year's conference program. We had 5 technical sessions with 22 papers and 2 posters, which is down from last year. Some authors expressed the preference to wait for Seattle. Sessions were well-attended with 25 to 40 at each. The open mic session was discussed: the commentary is good, but we need U-shaped seating. Maybe we could have it later in the conference after we've presented papers, or maybe we could have it back-to-back with the business meeting since the open mic was the best attended. Please include your affiliation when you speak during the open mic session. Kevin Dahm will be the program chair for 2015.

b. Bernard Van Wie reported on awards. The awards banquet program is attached as Appendix C. The lectureship was not awarded this year as the awardee, Ignacio Grossman, was unable to give the lecture at this conference. Chemstations desired for us to give the lectureship to Ignacio in 2015. The board approved the name change for the Lifetime Achievement Award in Chemical Engineering Pedagogy to the Donald R. Woods Lifetime Achievement Award in Chemical Engineering Pedagogy. Bernie recognized the work of his co-chair, Joe Menicucci, and the help of Valerie Young and Jason Keith as former co-awards-chairs. Please send nominations to both Bernie and Joe for next year's awards.

c. David Silverstein recognized the Summer School committee for 2017: himself, Kevin Dahm, Lisa Bullard, Don Visco, and Jason Keith. The summer school will be July 28 – August 4 at NC State. David gave an overview of the program. The \$130,000 in carryover funds have been moved to an account at CACHE as was approved last year.

6. New Business

a. Volunteer Opportunities

i) Local Arrangements (Seattle 2015). Dick Zollars will check into this – he is not committing because he is in phased retirement. Perhaps we could have the division dinner at the Dale Chihuly Garden and Glass near the Space Needle, but that would probably be \$90/person. Since some people didn't come to the banquet this year because of the \$70/person cost, \$90 would be too much. Maybe we could have a buffet without fixed seating to encourage more mingling and have a lower cost? Bernie will check with a family connection about possible catering. Maybe we could offer a reduced rate for graduate students? A concern with appetizers is avoiding food allergies. Maybe we could offer several different price points, with the cost of the banquet clear but people could pay a higher rate with the extra supporting graduate student dinners? Multiple prices could be difficult in implementation. Maybe we could advertise that scholarships are available.

ii) Volunteers are needed for program chair and local arrangements chair for New Orleans (2016) and Columbus (2017).

b. This has been the last year of Chemstations' sponsorship of the Lectureship, so we have more time to find a replacement sponsor. We'll consider companies in the NW and south since the next conferences are in Seattle and New Orleans. It was suggested to look at the

exhibitors. Bernie has already discussed with Armfield, and they were warm to the idea. If a company is interested in a lower-level sponsorship than the \$5000 lectureship, the \$2000 Fahien award is un-sponsored.

c. General Brainstorming

i. We discussed the timing of the approval of the minutes. The draft minutes will be sent out within a couple of weeks of the meeting. After corrections are received within a few weeks and incorporated, a corrected version will be sent out. It is assumed that the corrected version will be approved as mostly a formality at the next business meeting. Approving the minutes via email quickly after the meeting was decided against based on tradition and difficulties in implementation.

ii. A safety session was suggested for the Seattle meeting. Maybe a best practices session, maybe a panel with industry people. Please send suggestions to Kevin Dahm. Maybe we could invite someone from a company that we are seeking sponsorship from. Washington State just hired a safety coordinator, and Bernie will check with him coming.

iii. We discussed how to implement the Year of Action on Diversity. We could include it in the Call for Papers. Many diversities were mentioned: first-generation college students, Spanish-speaking students, English-as-a-second-language students in general, Native Americans. Bridge programs is another idea. Allen will ask for demographics of our division to see how we as a division are doing in diversity. Arthur Felse volunteered to leave the diversity initiative.

6. Dave passed “The Wrench” to Lisa Bullard. Lisa then thanked Dave for his efforts as chair and gave us words of encouragement.

ASEE Year of ACTION on Diversity

MOTION: The ASEE Board authorizes 2014-2015 as the Year of ACTION on Diversity, wherein members will discuss, engage, and highlight individual and collective activities that serve to advance the Society's diversity efforts and inclusivity.

BACKGROUND: Calls for diversifying the engineering and engineering technology workforce have led to divisions within ASEE and numerous professional organizations focused on specific subpopulations to give each a sense of inclusivity and empowerment. **The truth is that diversity is much more**, an idea that was highlighted by William A. Wulf in his annual report to the National Academy of Engineering in the early 2000's. *Diversity is strength in creativity, broadness of new ideas, and embracing new perspectives to arrive at the most truly innovative, resource-smart solutions possible.* As evidenced by negligible growth in the percent and perhaps even number in some cases of diverse undergraduates, we are not achieving diversity in academia (students, staff and professors) or industry as fast as most desire. Moreover, even the acceptance of diversity, as evidenced by the fall *PRISM* discussion related to sexual orientation, is still an issue. We must acknowledge that diversity refers to "gender, race, ethnic background, disability, sexual orientation, age, socio-economic status, nationality and other non-visible differences" such as personality, aspiration, learning style and motivation that Dr. Wulf refers to as individual difference (quotes from the ASEE Definition of Diversity).

A Taskforce on Diversity was created in 2009 with a specific charge to create an action oriented strategic plan to identify activities and systemic policies ASEE can do to ensure that we are not just making a nice statement. The result was the formation of the ASEE Diversity Committee in 2011 with a document summarizing 32 action-oriented recommendations to the ASEE Board of Directors. It is true; ASEE is well positioned nationally and globally to lead engineering education to achieve the diversity needed for future engineering innovations and there is a strategic plan to position the society to increase diversity in the profession. Some of these 32 recommendations have been achieved; however, we can and must do more. Perhaps the most important achievement of ASEE will be to acknowledge the problem and provide members and leaders with the vocabulary to engage in dialog. Based on the model of the previously successful Year of Dialogue on Engineering Education during 2006 – 7, the Diversity Committee recommends an ASEE Year of Action on Diversity for the 2014-2015 year.

Potential activities to achieve a dialogue and action on diversity:

- Promote the use of the Diversity Tool Kits on root causes and general diversity training materials.
- Reach out to diverse groups (both internal and external to ASEE) through contacts with zones, regions, sections, councils and divisions and ask each to do at least one activity focusing on diversity over the Year of Action.
- Promote position papers on particular national issues.
- Promote the use of the Diversity Power Point presentation at meetings.
- Encourage all councils and divisions to add diversity language to their by-laws.

- Create model policies and practices documents that can be shared as promising practices through the diversity website. (This activity would expand on the rapidly growing Diversity Resources portion of our website.)
- Meet with division chairs through each PIC chair meeting to discuss the idea and what they can do to participate with the Diversity Committee and the Year of Action.
- Support the Diversity Booth as the key and central entrance booth at the annual conference to help provide resources and information to members attending the conference.
- Lead the recruitment of ASEE 2015 Annual Conference Keynote Speakers and key sessions focused on diversity.
- Encourage EDI and PPC events of the EDC to have a strong diversity focus.
- Profile ASEE diversity divisions in each issue of *PRISM*.
- Create a ROI statement about the benefit of diversity (beyond compliance to the law).
- Highlight and leverage learnings from academic institutions that have focused on increasing diversity of faculty providing promising practices to others.

What has already been achieved:

- Membership and active participation with the AAES Diversity Coalition
- Website is regularly updated with diversity resources obtained from our members
- The first Diversity Newsletter was published in April 2014
- Workshops on micro-inequities in 2013 and safe-zone workshops in 2014 focusing on ASEE leadership (associate deans attended in 2013 as a part of their official agenda, for example)
- Diversity workshop was presented by the Diversity Committee to participating Deans at the 2013 EDC in NYC and a workshop on micro-inequities was presented at the 2014 EDC in Scottsdale, AZ.
- ASEE Annual Conference Diversity Booth has been a central presence at multiple annual conferences but remains inconsistently funded.

In conclusion, ASEE's role as a leader in engineering education means we need to do all we can to promote the inclusion and education of as many students as possible in this noble and impactful profession that makes the world a better place. ASEE should do all we can to encourage as many individuals as possible into engineering and STEM fields and support their productivity and growth because that is the RIGHT THING TO DO. Quoting William A. Wulf, "We need to stand back and ask ourselves why, in a society that is so dependent on technology, in fact, in some ways is addicted to technological change, and in a society with 50 to 100 percent disparities in salaries, engineering is not an attractive discipline." As leaders in this field, we can't play the game the same way and expect to improve suddenly and become more competitive. We need to play the game differently, which isn't just talking about diversity, it is really doing tangible, real, impactful ACTIONS to improve the climate and make it attractive, fun and enjoyable to every single individual, with different life experiences, that we can. ASEE is in a position to be a leader in this endeavor, but it requires the full backing of the Board, commitment of people on the Board and the committee and resources. Please support a Year of Action on Diversity.

American Society for Engineering Education Chemical Engineering Division
Treasurer's Report – June 2014

BASS Account total (June 17, 2013) \$30,578.00

Credits

Interest (3 rd and 4 th Q 2013, 1 st and 2 nd Q 2014 not posted yet)	\$ 11.84
Dues (April 2013 through March 2014)	\$1,359.00
2013 Awards Dinner	\$4,070.00
<u>Award Sponsorships (2013 Corcoran, 2014 Lect. & CACHE)</u>	<u>\$8,200.00</u>
	\$13,640.84

Debits

Interest correction (Dec. 2012 and March 2013)	\$54.19
2013 Awards Dinner (including 5 comped tickets)	\$3,759.50
2013 Officer Plaques	\$308.08
2013 Chemstations Lectureship travel and Corcoran	\$2,000.00
<u>2014 Awards (CACHE, Corcoran)</u>	<u>\$2,500.00</u>
	\$8,621.77

Total Bass Account (June 12, 2014) \$35,597.07

Operating Account total (June 17, 2013) \$ 0.00

Credits

2014 Fiscal Year Allocation	\$ 587.00
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Debits

2014 Mentoring New Attendee Award and banquet reimbursement	\$ 470.00
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Total Operating Account (June 17, 2013) \$ 117.00

Joseph J. Martin Award

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

Joel J. Versypt (Univ. of Illinois Urbana-Champaign) & Dr. Ashlee N. Ford Versypt (Massachusetts Institute of Technology) are recognized for their paper:

"Mapping Rural Students' STEM Involvement: Case Studies of Chemical Engineering Undergraduate Enrollment in the States of Illinois and Kansas"



CACHE Award

(for contributions to computing in chemical engineering)
Sponsored by the CACHE Corporation

Dr. Jim Henry
University of Tennessee-Chattanooga (Emeritus)



Jim Henry has had a career-long emphasis of teaching and using computer methods in chemical engineering. He is known for his innovation and commitment to developing remotely operated laboratory equipment at the University of Tennessee-Chattanooga. The web-interface has allowed students from schools around the US and the world to operate and collect data from Unit Operations and Control System equipment on demand. He has collaborated with other schools and faculty to encourage the development of this capability.

ASEE Chemical Engineering Division



Award Recipients for 2014

ASEE Annual Conference
Indianapolis, Indiana
June 2014

The ASEE Chemical Engineering Division gratefully acknowledges the sponsors of these awards from:

Eastman Chemical Corporation

CACHE Corporation

Best Poster Award Winner

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

Dr. William M. Clark, Mr. Nicholas J. Medeiros, Donal J. Boyd, Jared Snell, and Lucas J. Brutvan (Worcester Polytechnic Institute)

"A Computer-Controlled Biodiesel Experiment"



William H. Corcoran Award

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

Sponsored by Eastman Chemical Corporation

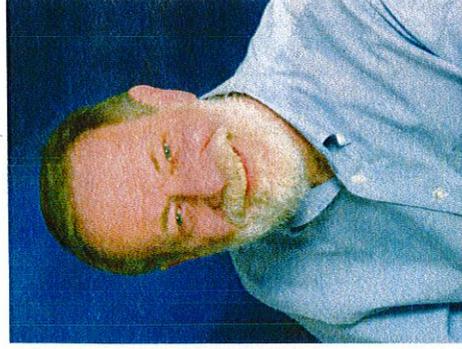
Drs. Michael J. Prince (Bucknell Univ.), Maura J. Borrego (Virginia Tech), Charles R. Henderson (Western Michigan Univ.), Stephanie L. Cutler (Virginia Tech) & Jeffrey E. Floyd (Texas A&M Uni.)

"Use of Research-Based Instructional Strategies in Core Chemical Engineering Courses"



Lifetime Achievement Award in ChE Pedagogy

Dr. Morton Denn, City College of New York



Morton Denn is the Albert Einstein Professor of Science and Engineering and Director of the Benjamin LeVich Institute at the City College of New York. His 50-year career includes 18 years at the University of California, Berkeley, where he was ChE Department Chair and Head of Materials Chemistry at the Lawrence Berkeley National Laboratory, and 17 years at the University of Delaware. Mort is the author of 7 chemical engineering texts and monographs, including the widely used *Process Fluid*

Mechanics and, most recently, *Chemical Engineering: An Introduction*. He edited the *AIChE Journal* from 1985-1991 and the *Journal of Rheology* from 1995-2005. Mort's awards include AIChE's Warren K. Lewis Award for Chemical Engineering Education and the ASEE Chemical Engineering Lectureship, as well as numerous awards for research. He is a member of the National Academy of Engineering and the American Academy of Arts and Sciences.

Mentoring and Travel Grant for New Attendees

(for chemical engineering or chemistry faculty who have not attended an ASEE Annual Conference)

Dr. Joshua Levinson, Lafayette College

Lafayette is an undergraduate-only institution that places a strong emphasis on teaching. Dr. Levinson has a strong interest in educational scholarship, which serves to complement his discipline-specific research efforts and interest in Chemical Engineering pedagogy related to hands-on learning experiences and use of the "flipped" classroom.

