

### CHEMICAL ENGINEERING DIVISION

Executive Committee Meeting Minutes
Tuesday, June 28, 2016 – 2:15 – 3:45 pm
New Orleans Convention Center, Room 252, New Orleans, LA

#### Attendees and Affiliations

Name	Affiliation	<b>Current Position</b>	<b>Upcoming Position</b>
Cheryl Bodnar	Rowan	Secretary/Treasurer	
		Diversity Co-chair	
Lisa Bullard	North Carolina State	Past-Chair	
Matthew Cooper	North Carolina State	Newsletter Editor	Director
Michael Elsass	Dayton	Director	
Arthur Felse	Northwestern	Diversity Co-Chair	
		Program Chair	
Laura Ford	Tulsa	Chair-elect	Chair
Milo Koretsky	Oregon State	Director	Director
Christi Patton Luks	Missouri S & T	Chair	Past-Chair
David Silverstein	Kentucky	Summer School	
		Coordinator	
Bernard VanWie	Washington State	Awards Co-chair	
Anthony Butterfield	University of Utah	Webmaster	
Joe Shaeiwitz	Auburn University	Archives Master	
Troy Vogel (via	Illinois at Urbana-Champaign		Chair-elect
phone)			

- 1. We introduced ourselves as above. Christi welcomed the new officers (Troy Vogel and Matt Cooper) and thanked those rotating out (Lisa Bullard and Michael Elsass).
- 2. Minutes from the last Executive Committee Meeting (November 9, 2015 in Salt Lake City, Utah) were approved as submitted.

#### 3. Ongoing Business

- a. Finances (Cheryl Bodnar) a financial report is attached as Appendix 1. A concern was raised about whether the deposit for the Awards Banquet was ever made. No evidence based on ASEE accounting reports contrary to e-mail documentation from last fall. Cheryl will follow up with Douglas Black (ASEE controller) to determine if the deposit was indeed made and adjust the account ledger accordingly. If no additional sponsors are found within the next 4 years, significant changes will need to be made to allow spending to continue at current rate.
- b. Membership (Christi Luks) We raised dues last year based upon voted increase and we are now down by 40 members. It is unclear whether this change in membership is specific to our division or ASEE overall. Dropping by 40 members over this past year is

significant but more information is needed to determine if this is related to the increase in dues. Overall our membership makes up 5% of the ASEE overall membership.

#### 4. Updates

- a. Program (Arthur Felse) 45 abstracts were submitted with 33 final papers. We had 1 panel discussion, the Chemstations Lectureship, 1 poster session, and 5 podium sessions. 5 Diversity papers were submitted and one of these was nominated for best diversity paper overall. 124 reviewers volunteered this year and weren't able to use all of them. Based on analysis performed the translation rate between abstracts to paper was 74% this year whereas in the past it has been only 64%. Division was involved in co-sponsoring multiple sessions and the panel was co-sponsored by ERM. Last year ASEE survey feedback had members complaining about 7 am sessions which meant that all sessions this year didn't start until 8 am. Unfortunately, this meant that sessions had to run through lunch. Observations were made that Monday is a very busy day for the conference so we need to prioritize what is offered on Monday and what can be moved. Potential changes proposed include moving ChE Division Executive Meeting off-site on Monday morning. Questions were also raised with whether the lectureship, which has in the past been held at ASEE ChE Summer School should continue being held at this event or instead just at the ASEE conference. Mention was made that it is a better fit for the conference than the summer school.
- b. Awards Banquet (Joe Shaeiwitz) The banquet was well done and had good food for a fair price. Joe had worked with his colleagues to determine good restaurants in the area and check them out in advance. It worked out that waiting until Sunday night to get banquet ticket counts allowed for reasonable estimates to be given to the restaurant. A mention was made that beer at the event was more expensive than the beer at the front of the restaurant. It was noted that whatever we plan to do for next year's banquet will be less expensive than the upcoming AIChE dinner planned for San Francisco.
- c. Awards (Bernie VanWie) Bernie recognized the work of his co-chair, Joe Menicucci. It was mentioned that this is Bernie's 3<sup>rd</sup> year of being co-chair of the awards committee. The awardees are given in the brochure attached as Appendix 2. Gave 7 awards this past year but didn't give Lifetime Achievement Award. Fahien Award had a lot of really high quality applicants. Committee wanted to provide two awards but was told to proceed with only one. Lifetime Achievement Award had no complete applications. People were contacted about the award and brochures were given out at AIChE. The one applicant received had no letters from students that were included which is why the committee didn't make the award. Joe Shaeiwitz raised that he doesn't think the awards committee should solicit applications. Perhaps there is some other method of streamlining the application process such as a nomination letter and CV for awards that have no monetary value. Christi will look into whether a vote is needed to change requirements for Lifetime Achievement Award. The possibility of combining the Future Faculty (\$500) and Mentoring Award (\$500) into a Future Faculty Mentor Award (\$900 total) was discussed. The award could be given to a graduate student or 1<sup>st</sup> or 2<sup>nd</sup> year faculty member. Joe Menucci is willing to continue on as co-chair of the awards committee. He

helps with running the committees and putting together the banquet materials. Milo Koretsky and/or Margot Vigeant could be award co-chairs in training to ensure that there is continuity in the committee. It was mentioned that it is important for there to be follow-up with nominators to let them know whether the candidate they brought forward was selected for an award or not. In regards to award funding, Armfield was reached out to two times about the lectureship award but any sponsorship is on hold now that they have been bought by Judges. Ignacio had suggested that the division approach Exxon-Mobil about sponsoring the lectureship award. Bernie provided a proposal and asked for a response but didn't receive one. If they do respond at a later time it is possible for them to potentially sponsor the Corcoran Award since U.S. Didatic would be interested in sponsoring the lectureship. A proposal was provided to them at the start of the ASEE meeting. Michael mentioned he could reach out to a company he knows that is local to Columbus as a sponsor for the Martin award. It will be important moving forward to speak with more individuals about which awards are available for sponsorship. Another suggestion was creating a consortium endowment by getting \$1,000 from the different chemical companies that have booths but it wasn't clear how ASEE would respond. A note was also made that better procedures should be put in place to arrange for the committee judging the poster award especially now that the number of posters has grown significantly. It was proposed that the program chair and moderator for the poster session should be members of the poster award committee and that other members can be added as necessary.

- d. Diversity Committee (Arthur Felse) Five of the papers submitted this year were related to diversity. The division also co-sponsored panels with the diversity committee. The committee is still working on flushing out copyright issues related to using papers from ASEE to allow them to move forward with the special issue on diversity in Chemical Engineering Education. In a review of our membership it was found that we are slightly below the ASEE average of 24.2% of females. Our division only has 23% female membership. This places us behind the biomedical and environmental engineering divisions yet still ahead of other divisions. We are also lagging in terms of minority membership. The ASEE average is 23.3%.
- e. Summer School (David Silverstein) The next Summer School for Chemical Engineering Faculty will be held in July 29 Aug. 4, 2017, in Raleigh, NC. Summer school proposals are now being solicited with a deadline of November. This allows for advertisement of proposal submissions at this year's AIChE. A proposal is being planned to be made to NSF by October 1<sup>st</sup>. Based on conversations with the program director it sounds like it will be possible to receive funding. Dow, DuPont and others have shown interest in providing industry sponsorship. Starting in November the Summer School will open nominations from department chairs for individuals to attend. The Summer School will be a comprehensive professional development event. There will also be an industry day event to give new faculty ideas about how to collaborate with industry. Additional sessions include highlighting the benefits of professional networking, career award preparation. It is felt that marketing this as a teaching event will not get a very strong response. Currently, the southeastern region chairs are aware of the Summer School and know about it. The Summer School organizers will also try to get 5 minutes

- at AIChE to speak to the chairs. For the 1<sup>st</sup> faculty member from any department the chairs only need to cover plane tickets to the event. Any additional faculty can come at a \$500 registration fee. Rich Felder and Rebecca Brent will be doing the session. Phil Wankat will be doing an educational keynote.
- f. Website (Anthony Butterfield) The website has been moved over to Word Press. If anything needs to be changed or added we can let Anthony know. Joe asked about created a password protected area where the archives can be stored.
- g. Past Chair (Lisa Bullard) Nothing to share. Managed to secure officers for upcoming year.
- h. Chair-Elect (Laura Ford) Performed award duties since last meeting.

#### 5. New Business

- a. Upcoming conference in Columbus, OH Program Chair (Dan Burkey) wasn't present. Need to clarify with Dan that Michael Elsass will be handling banquet arrangements.
- b. Volunteer Openings for 2018 meeting in Salt Lake City, Utah Anthony is willing to serve in whatever capacity for the 2018 meeting.
- c. Awards (Lectureship & CAChE) subcommittees (Bernie & Joe M) Need to formalize process for Lectureship & CAChE as well as Martin and PIC I best paper. Arthur and Bernie will work on a proposal that will be circulated. ASEE is seeking official write-ups for each award and its process for selection and how the award is being paid for. It was suggested that we don't use concrete amounts but instead use wording like "up to \$3,000" if we don't have a concrete sponsor in place. Christi mentioned that she didn't believe that we needed a vote affirming the awards process.
- d. PIC Updates (Christi Luks) The "publish to present" discussion from the open mic session was brought up. A discussion was started on whether there could be "Work in Progress" presentations as well as posters. It was mentioned that JEE has changed its policy to allow for Works in Progress to be published in JEE. ChE division seemed interested in the idea of switching to an AIChE model with just abstracts. We would need to make a solid business case for why we would want to switch back. We could potentially look back the history. It was also discussed that ASEE has been trying to legitimize the conference more by linking the proceedings publications to Google Scholar. CEE has also moved to a place where they are indexed more wildly than previously. Switching to a Work in Progress model could be a proposal for the upcoming conference but it would be necessary to include special info in the call for papers. Christi plans to include the Work in Progress topic as part of the special brainstorming session at the end of the business meeting.

## American Society for Engineering Education Chemical Engineering Division Treasurer's Report – June 2016

BASS Account total reported June 17, 2015	\$30,485.37
<u>Credits</u> Missing Interest (based on discrepancy between our Bass account report and that of ASEE)	\$16.34
Interest (posted for FY Oct. 2014 – May. 2016)	\$25.64
2015 Banquet Revenue	\$2,652.00
Sponsorships (CACHE 2016)	\$1,200.00
Dues (February 2015 through February 2016)	\$1,367.00
	\$5,260.98
Debits	1-,
2015 Lectureship Travel	\$500.00
2016 Awards Banquet Deposit	\$562.50
ASEE 2015 Printing	\$10.50
Awards Banquet 2015	\$2,219.42
BASS Admin Fee FY16 (October 2015 – May 2016)	\$136.80
2016 Awards (Lectureship, CACHE, Fahien, Corcoran)	\$7,000.00
Part of 2016 Appreciation Plaques (\$168.00 total)	\$100.00
	\$10,529.22
Total BASS Account (June 19, 2016)	\$25,217.13
Operating Account total reported June 17, 2015	\$0.00
<u>Credits</u> 2015/2016 Allocation	\$568.00
<u>Debits</u> Part of 2016 Appreciation Plaques (\$168.00 total) Future Faculty Grant	\$68.00 \$500.00
	\$568.00
<b>Total Operating Account</b> (June 19, 2016)	\$ 0.00

#### **CACHE Award**

(for contributions to computing in chemical engineering)

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

Dr. Milo Koretsky Oregon State University

Milo Koretsky is a Professor of Chemical Engineering at Oregon State University. He received his B.S. and M.S. degrees from UC San Diego and his Ph.D. from UC Berkeley, all in Chemical Engineering. He currently has research activity in areas related to engineering education and is interested in integrating technology into effective educational practices and in promoting the use of higher-level cognitive and social skills in engineering problem solving. Towards this end, his group has developed innovative tools including the AIChE Concept Warehouse, the Industrially-Situated Virtual



Labs, and the concept-based, Interactive Virtual Labs. His research interests particularly focus on what prevents students from being able to integrate and extend the knowledge developed in specific courses in the core curriculum to the more complex, authentic problems and projects they face as professionals. For more information see <a href="http://research.engr.oregonstate.edu/koretsky/">http://research.engr.oregonstate.edu/koretsky/</a>.

#### Joseph J. Martin Award

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

Jacob J. Elmer, Noelle K. Comolli, William J. Kelly, and Zuyi (Jacky) Huang (Villanova University) are recognized for their paper:

"Preparation of Biology Review and Virtual Experiment/Training Videos to Enhance Learning in Biochemical Engineering Courses".



ASEE Chemical Engineering Division



Award Recipients for 2016

ASEE Annual Conference New Orleans, Louisiana

#### Lectureship Award

Sponsored by the ASEE Chemical Engineering Division

Dr. Mark Prausnitz Georgia Institute of Technology



Mark Prausnitz is a Regents Professor and holds the J. Erskine Love Jr. Chair in Chemical & Biomolecular Engineering at the Georgia Institute of Technology. He earned his BS from Stanford and PhD from MIT, both in chemical engineering. In addition to teaching mass and energy balances to sophomores, Dr. Prausnitz has developed courses on pharmaceutical development for senior undergraduates at Georgia Tech and doctoral students from multiple Atlanta-area universities that emphasize the holistic process of bringing a drug from concept to the market. Dr. Prausnitz and his colleagues carry out research on biophysical methods of drug delivery, which employ physical

mechanisms, including microneedles, lasers, ultrasound, electric fields and heat, to control the transport of drugs and vaccines in the body. Dr. Prausnitz's microneedle technology has been the focus of six human clinical trials and he has co-founded four start-up companies. Dr. Prausnitz supervises a laboratory containing 25 doctoral and postdoctoral researchers, has published more than 225 peer-reviewed articles, has given more than 200 invited talks and has won numerous awards.

#### **Best Poster Award Winner**

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

Christi L. Patton Luks (Missouri University of Science & Technology) & Laura P. Ford (University of Tulsa)

"Analysis of a Small Gamification Addition to Labs"



Ray W. Fahien Award

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

Dr. Matthew E. Cooper (North Carolina State University)



Dr. Matthew Cooper is a Teaching Assistant Professor in the Department of Chemical and Biomolecular Engineering at North Carolina State University where he teaches Material and Energy Balances, Unit Operations, Transport Phenomena and Mathematical/Computational Methods. He is the recipient of the 2014 NCSU Outstanding Teacher Award, 2014 ASEE Southeastern Section Outstanding New Teacher Award, and currently serves as the National ASEE Chemical Engineering Division's newsletter editor. Dr. Cooper's research interests include effective teaching, conceptual and inductive learning, integrating writing and speaking into the curriculum and professional ethics.

#### William H. Corcoran Award

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

Sponsored by the ASEE Chemical Engineering Division

Randy D. Weinstein (Villanova University)

"Improved Performance via the Inverted Classroom"



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

Matthew R. Markovetz (University of Pittsburgh)

