

**Joint Board-Council Committee on Environmental Improvement**  
**21 March 2015 – Denver, CO**

## UPCOMING MEETINGS

Date	Location	Meeting Theme
08/15/15	Boston	Innovation from Discovery to Application
03/12/16	San Diego	Computers in Chemistry
08/20/16	Philadelphia	Chemistry of the People, by the People and for the People
04/01/17	San Francisco	Advanced Materials, Technologies, Systems and Processes
08/19/17	Washington	Chemistry's Impact on the Global Economy
03/17/18	New Orleans	Energy Solutions and the Environment
08/18/18	Boston	Chemistry – from Bench to Market
03/30/19	Orlando	Chemistry for New Frontiers

## ATTENDANCE (Group photo in Appendix 1)

### Members, Associates, Consultants, and Liaisons:

- **In attendance:** Laura Pence (Chair), Ray Garant (Staff Liaison), Chris Avery, Bryan Balazs (ConC Liaison), Jerry Bell, George Cobb, Alan Elzerman, Jurgen Exner, Jack Fowle, Elise Fox, Emily Grumbling, Carol Henry, John Jayne, Michael Matthews, Laura McConnell, Faye McNeill, Cathy Middlecamp, Anthony “Tony” Noce, Eileen Nottoli, Sherine Obare, Melissa Pasquinelli (Secretary), Keith Peterman, Robin Rogers, Susan Shih (SOCED Liaison), Bassam Shakhshiri, Jennifer Tanir, Kate Weber
- **Absent:** Timothy McAuley, Martin Mulvihill, Katie Hunt, Barclay Satterfield, Darlene Schuster, James Seiber

ACS Staff: Jenny MacKellar (ACS GCI), Carl Maxwell (ACS OPA by conference call)

Guests: David Constable (ACS GCI), Neal Langerman (Corporation Associates), Bob Rich (ACS Director of the Strategic Planning), Larry Krannich (ACS Board of Directors' Committee on Planning), Darcy Gentleman (Office of Public Affairs), Anne O'Brien (New York Section), Eckhard Hellmuth (Kansas City Section), George Ruger (Mid-Hudson Section)

## APPROVAL OF THE MINUTES OF THE AUGUST 2014 MEETING

As our first order of business, the Committee voted by voice to *certify the interim action (via email) of the approval of minutes from the 9 August 2014 meeting of the Committee in San Francisco, CA.*

## CHAIR'S REPORT

Pence appointed the following individuals to the respective positions, and the Committee voted by voice to *certify these appointments:*

- Officers of the Committee
  - Jurgen Exner as Subcommittee Chair for Public Policy
  - Tony Noce as Subcommittee Chair for Sustainability
  - Melissa Pasquinelli as Secretary
  - Cathy Middlecamp as Program Chair
- Liaisons from CEI
  - Jennifer Tanir to the Multidisciplinary Program Planning Group
  - Alan Elzerman to the Society Committee on Education

- Katie Hunt to the Committee on Corporation Associates
- Liaisons to CEI
  - Susan Shih from the Society Committee on Education
  - Katie Hunt from the Committee on Corporation Associates

Pence announced that the following funds were disbursed, and the Committee voted by voice to *certify these distributions:*

- \$500 to CHED for the Citizens First Symposium (Denver)
- \$5000 to the Sustainability Subcommittee for the ACS-CEI Award for the Incorporation of Sustainability into Chemical Education Symposium (Denver)
- \$4000 to SOCED for the Chemistry and the Environment Film (Denver)
- \$500 to ENVR for the Designing Safer Chemicals Symposium (Boston)
- \$500 to I&EC for the Sustainable Chemistry Symposium (PacifiChem)
- \$3000 to ENVR for the joint project on regional meeting climate programming

Two nominations were received for the Vice-Chair of CEI: Jack Fowle and Laura McConnell. Both individuals gave statements to the Committee regarding their interest in the position. The committee voted by written ballot to *elect Jack Fowle to the Vice-Chair position*; the term begins today and will end at the conclusion of the Spring 2016 meeting of the Committee in San Diego.

Congratulations to Cathy Middlecamp for receiving the ACS Award for Encouraging Disadvantaged Students in Chemistry. A symposium in her honor is being hosted by Chemical Education (CHED) Division on Monday.

Congratulations to former committee member, Joseph Zoeller, who received the E.V. Murphree Award in Industrial & Engineering Chemistry. A symposium in his honor is being hosted by the Catalysis (CATL) Division all day on Tuesday.

## **SUSTAINABILITY SUBCOMMITTEE**

The Sustainability Subcommittee materials may be found behind tab 5 in the agenda materials. Noce (subcommittee chair) provided a brief verbal report of the Subcommittee's activities, and a written report is given in Appendix 2. Specific items that were highlighted include:

The subcommittee was enthusiastic about the quality of applications for the Sustainability Grant awards and also the ChemLuminary Award.

The subcommittee plans to start having conference calls between national meetings to keep the momentum up on initiatives. The first one is planned in about 6 weeks.

### Motions

The Subcommittee on Sustainability moved and the Committee voted by voice to *fund the Local Section Sustainability Activity Grant Proposal from the Cornell Local Section.*

The Subcommittee on Sustainability moved and the Committee voted by voice to *fund the Local Section Sustainability Activity Grant Proposal from the Kalamazoo Local Section.* There was one abstention vote.

The Subcommittee on Sustainability moved and the Committee voted by voice to *fund the Local Section Sustainability Activity Grant Proposal from the Midland Local Section.*

The Subcommittee on Sustainability moved and the Committee voted by voice to ***select the Dallas-Fort Worth, Nashville and North Carolina sections as the finalists for the 2015 ChemLuminary Award for Outstanding Sustainability Activities.*** There was one recorded abstention.

The Subcommittee on Sustainability moved and the Committee voted by voice to ***select the North Carolina section as the winner of the 2015 ChemLuminary Award for Outstanding Sustainability Activities.*** There was one recorded abstention.

## PUBLIC POLICY SUBCOMMITTEE

Public Policy Subcommittee materials may be found behind tab 4 in the agenda materials. Exner (subcommittee chair) provided a verbal summary report, and a written report is given in Appendix 3. Specific items that were highlighted include:

The Water policy statement has been returned to the Committee by the Board. It is being revised and will be shared via email for a final committee vote before the next meeting. .

Three statements expire this year:

- *Inherently Safer Technology*: Barclay Satterfield reported to Jurgen that small changes were expected; they will be sent back and expect to be approved by next meeting
- *Endocrine Disruption*: Requires significant revisions.
- *Energy*: Carol Henry reported on the current status and solicited volunteers for the writing team; she is also soliciting names from other committees to participate.

### Motions

The Subcommittee moved and the Committee voted by voice to ***approve the proposed ACS Statement “The Science and Technology of Hydraulic Fracturing” as revised with minor edits of the front matter language to reflect recent actions by the federal government.*** Emily Grumbling abstained for the record.

The Subcommittee moved and the Committee voted by voice that ***the Committee to impanel a writing team to revise the policy statement “Energy.”*** Chris Avery abstained for the record. Pence appointed Carol Henry to lead the writing team.

The Subcommittee moved and the Committee voted by voice that ***the Committee to impanel a writing team to revise the policy statement “Statement on Testing for Endocrine Disruption.”*** Pence appointed Jack Fowle to lead the writing team.

The Subcommittee moved and the Committee voted by voice that ***the Committee to impanel a writing team to revise the policy statement “Statement on Inherently Safer Technology.”*** Pence appointed Barclay Satterfield to lead the writing team.

## PRESENTATION BY BOARD COMMITTEE ON PLANNING

The presentation on the ACS Strategic Plan and the Environmental Scan may be found behind tab 6 in the agenda materials. Larry Krannich highlighted that the key trends from the environmental scan of interest to CEI include: Environmental concerns and responses (economic), and increasing public opposition to scientific knowledge (political). The Committee discussed these items, and provided some feedback. Krannich asked the Committee whether there are other key issues that have not been identified that could be of interest to CEI.

## GREEN CHEMISTRY INSTITUTE (GCI) REPORT

David Constable provided a report on the highlights of ACS Green Chemistry Institute<sup>®</sup> (ACS GCI) activities since their last report to CEI in August 2014. Please see pages 3.29 to 3.40 of the agenda materials for more details. Specific items that were highlighted include:

Board had a planning retreat that was fruitful regarding future directions of GCI. They are very excited about the GC&E Conference in July, especially since the EPA Presidential Green Chemistry Challenge Awards are planned to occur the night prior to the conference. Green Chemistry Roadmap is still in development. They are starting and fostering partnerships with other initiatives, such as Beyond Benign. They are still hosting roundtables that focus on a variety of relevant topics.

## **REPORT ON CEI MEMBER UPDATES ON ISSUES (WHAT'S HAPPENING IN WASHINGTON D.C.)**

Please refer to the staff reports given in tab 3 in the agenda book. Other items of note are given below; all comments were provided as individuals and are not necessarily representing the views of that individual's employer.

Chris Avery highlighted issues and policies on energy. There is a continuing focus on the technology side: how power gets to people, for example.

Kate Weber discussed international environmental issues, including the upcoming UNFCCC COP in Paris, the Our Ocean Conference in Chile, and the revised sustainable development agenda. Other areas of activity include air quality, e-waste, and the Strategic Approach to International Chemicals Management.

Emily Grumbling discussed topics related to the environmental impact of computing, including e-waste and proposed energy efficiency regulations in California; a recent NRC report on climate intervention technologies; and the concept of "resilience" in facing societal challenges such as climate change.

Jack Fowle provided a report on TSCA reform: focus on high-throughput testing and computational models.

Carol Henry provided a brief synopsis of a recent report from The National Research Council's Committee on the Design and Evaluation of Safer Chemical Substitutions. A link to the report, entitled A Framework to Guide Selection of Chemical Alternatives, may be found at <http://dels.nas.edu/Report/Framework-Guide-Selection/18872>.

## **NEW BUSINESS**

Darcy Gentleman presented about ChemChamps, the Chemistry Champions competition that ACS is hosting. Last year, they received 28 applications, and the semi-finalists were flown to the San Francisco meeting, where they went through training and competitions for communicating science to the public. Last year's competition was only open to students, postdocs, and pre-tenure faculty; this year, anyone under age 35 is eligible. There will also be four rounds of competition this year. Round one's deadline is April 1; website is [www.acs.org/chemchamps](http://www.acs.org/chemchamps). He requests that we disseminate this information to eligible people.

## **ADJOURNMENT**

The meeting adjourned at 5:54 pm.

This document completes the Minutes of the Joint Board-Council Committee on Environmental Improvement for 21 March 2015 in Denver, CO.

Respectfully submitted,

Melissa A. Pasquinelli

Secretary

**Appendix 1—Attendee Group Photo** (submitted by Laura McConnell)



## **Appendix 2—Sustainability Subcommittee Notes** (submitted by Tony Noce, Chair)

### **Subcommittee on Sustainability, Committee on Environmental Improvement**

Meeting Notes—Spring 2015

Saturday, March 21, 2015

**Attendees:** Robin Rogers, Mike Matthews, Keith Peterman, Eileen Nottoli, Kate Weber, Alan Elzerman, Sherine Obare, Laura McConnell, Cathy Middlecamp, Jen Tanir, Bassam Shakhshiri, Jerry Bell, Susan Shih, Melissa Pasquinelli, Bryan Balazs, David Constable  
Tony Noce, Chair—Jenny MacKellar, Staff Liaison

### **Local Section Sustainability Grants**

- Going forward, looking for a mentor for each local section mini-grant winner. Good to encourage local sections to put on high quality programming at the regional meetings. Which application has the strongest impact? What does the follow-up look like? This is where the mentors are important. Encourage the local section to think about expanding the impact.
- Should we change the application to be more specific and ask out impacts? Two are to enhance regional meetings, and the subcommittee is trying to support the regional meeting
  - **Action:** Update application (*Kate, Jennifer, and Melissa*)
- Voted to recommend funding for all three grant applications – Cornell, Kalamazoo, Midland
- Mentors/liaison – committee should provide some questions for the mentor to help guide the local section and the programs to maximize impact and what to include in the report. Who tells the local section that they get the money? Need to put a process in place.
  - **Action:** Establish formal process for notifying local sections, transferring funds, and follow up template (*Tony, Kate, Jennifer, and Melissa*)
  - **Action:** Melissa named as liaison for the Cornell Local Section
  - **Action:** Sherine named as liaison for the Kalamazoo Local Section
  - **Action:** Alan named as liaison for the Midland Local Section

### **ChemLuminary Award**

- Voted for the selection of three finalists: Nashville, North Carolina and Dallas
- Voted to recommend the selection of North Carolina as the winner of the award
- Suggest we use the submissions of the three finalists as examples for future award applicants

### **Programming**

- Chemistry and the Environment Film series
  - Laura and Sherine are interested in pursuing this, if it is identified as a priority for the Committee
  - Ean Warren has graciously agreed to moderate the discussion of the film here in Denver and to mentor Laura and Sherine going forward
- Cathy (Program Chair) provided a report on CEI programming
- Policy programming – the Policy Subcommittee will take care of the content for the Policy Hot Topics, while the Sustainability Subcommittee will handle logistics
- ACS-CEI Award Symposium on Sustainability in Education (CHED)
  - Really great applications this year.
  - Best practices included better advertising at the right time and resulted in higher quality applications.

- Need to more clearly define the focus of the award. Do we want to continue this? It's \$5000 out of our budget. Suggestions included lower number of winners and to invite past winners to participate in the symposium to report on what they've built on since winning the award.
  - Anecdotal evidence that the award is a nice credential for the winners.
  - AGRO has award winners record their talks (sometimes in expanded form) as webinars and puts them on their website. Could also post the presentations on YouTube. Suggestion to create webinars of the winners and create resources that were suggested by CPT to support the inclusion of sustainability in the chemistry curriculum. Could partner with a technical division and apply for an Innovation grant.
  - **Action:** Update the application to be more explicit about what we're looking for (*Keith, Alan, Cathy*)
  - **Action:** Advertise the award for this year (*Keith*)
- Guidelines for inclusion of sustainability in the chemistry curriculum – Requested that we create materials and tools to help institutions incorporate sustainability into their curriculum. SustainMix – all technical division reps talked about sustainability in their technical divisions. Happened in San Francisco.
  - **Action:** Follow-up on AGRO's concurrent poster session and symposium and provide information to the subcommittee (*Laura*)
- George Cobb joined the subcommittee to report on Regional Meeting programming
  - Joint project with ENVR to push to have climate programming at regional meetings
  - Pushing to get younger chemists to be ambassadors for environmental programming at regional meetings. This would be two-way communication.
  - Could use YCC members to get more information out to the younger stakeholders in this area.
  - Actively wrestling with ways to get content appropriately distributed to the local sections
- Chris Avery joined the subcommittees to report on the “hot topic” programming Boston
  - Climate debate in Boston. Policy statement on climate expires in 2016. Programming will focus on taking on this topic head on. Hash out some of these controversies in a scientific space. Meant to be a debate and want people to try to win, not shy away from these issues that don't have anything to do with science. Will be helpful for writing the policy statement. Envisioning this as a series going forward. Requested Sunday later afternoon. Presidential event (\$2500) from Diane Grob Schmidt. Should not devolve into a panel discussion. The Sustainability Subcommittee is suggesting a name change for the session.

## **Subcommittee Portfolio**

- Budget discussion – Could get students to get involved in discussions about CEI related topics on social media. An example of doing this successfully is the COP students. Need to inspire someone to do this on their own. Seed grants for mini-programs or meetings.
  - COP program – Keith would like to see more money here (\$2000)
  - Better communication with local sections, sharing best practices
  - We need create metrics for our programs to measure success of the current programs
- Create an inventory of programs in the Subcommittee portfolio – the members need to identify those programs in the portfolio they would like to work on, and suggest new ones if they see the opportunity
  - Inventory and collect the output data on our programs, why we do them, what the follow-up is, and have people come to report back to the committee. We need to measure impact. What effect are we trying to have?
- Ways of working – conference calls between meetings, using the ACS Network as a collaboration tool
  - **Action:** Schedule two conference calls before Boston, the first to be in about a month to prioritize the programs of the subcommittee (*Tony*)
  - **Action:** Provide information on joining the ACS Network and using it for collaboration (*Tony*)
  - **Action:** Join the ACS Network (*All*)

## **Appendix 3—Public Policy Subcommittee Notes** (submitted by Jurgen Exner, Chair)

**CEI Policy Subcommittee**

**Denver ACS Meeting**

**March 21, 2015**

Present: Jurgen Exner (Subcommittee Chair), Ray Garant (CEI Staff Liaison), Carl Maxwell (Subcommittee Staff Liaison, by phone), Chris Avery, George Cobb, Jack Fowle, Elise Fox, Emily Grumbling, Carol Henry, John Jayne, Neal Langerman (Liaison from CA), Faye McNeil, Laura Pence, David Constable (visiting)

### **Summary of Discussions**

#### Fracking Policy Statement

We voted on in San Francisco, and CEI was comfortable with the content. Some committees had concerns, and we didn't reach closure in San Francisco. There have been some changes made to the statement, but they are not substantive. Our previous vote in San Francisco still technically holds, but we will re-vote to solidify the

On Friday, the Obama Administration put forth a final Rule for fracking on Federal and Indian lands. Thus our recommendations are still solid, but the front matter will need some changing to reflect the new situation

This statement is in a field of rapid change and will require regular updating over time.

#### Water

A draft statement passed CEI via interim action in October. The statement went to the Board of Directors, who had issues with the statement and referred it back to CEI. In the new draft, the front matter has been reduced significantly, although the recommendations remain largely intact.

The group discussed several issues that the writing team should consider in the revised draft including the protection of existing water resources, monitoring groundwater resources for quality and quantity, and making sure that the statement is internally consistent intellectually. The writing team for the revision will be Marty Mulvahill, Laura Pence, Jurgen Exner, Fay McNeill, and David Sedlak.

Ideally CEI will vote on a revised draft by interim action in April to meet the deadline for the May Board meeting. There is no particular deadline, although with current issues of water in California, Brazil, and other locations, this is obviously a significant current concern. ACS currently has no water statement, and thus cannot opine on this issue at all.

#### Inherently Safer Technologies

CA had some comments. Barclay feels those changes are within the scope of the original statement. Send back to Barclay- ask for a modified version before Boston

#### Endocrine Disruption

It was decided that this should remain a policy statement rather than a fact sheet.

Lead: Jack Fowle. Writing team: George Cobb. Neal Langerman from CA is interested in participating, and he's asked someone from Pfizer to participate as well.

#### Energy

This statement needs a major rewrite. It's a four committee project (CA (corporate perspective), CCPA (economic perspective), ComSci).

Carol: Lead. Writing team: Laura, Elise.

Possibly add in health and environmental impacts

Energy/Water/Food nexus

Make sure your climate and energy statements mesh together. They need to point in the same direction.

Last several energy statements: "All of the above" style. In the last one, the group made a point of being cool to coal without coming out and saying we need to do without it. The new statement MUST address natural gas and how it interacts with all levels of the economy. How much cheap natural gas has transformed the energy landscape.

Carol asks about health vs. energy

Carl sends climate statement to the Hill more than any other. Carl rarely sends the energy statement because it's so broad.

**Next year's statements:**

Climate Change: Preliminary writing team: John Jayne, Faye McNeill, Emily Grumbling

"The Debate" in Boston about Climate Change is being organized by Chris Avery and Laura Pence

Future Programming

Climate Intervention symposium for San Diego: Jurgen and John will explore

Biomonitoring: More of an emerging field than a banner to carry to the Hill. Carl Maxwell hasn't used it much. It's generally been within Chemical Risk Assessment. This document could be turned into a fact sheet. (It's not a legislative topic.)

Chemicals Risk Assessment: New Udall-Vitter TSCA bill has all our stuff about sustainable chemistry in it. (Do we want to strengthen it? CBI? Pre-emption? Speed at which you prioritize testing?)

A possible Genetically Modified Organisms statement: Chris Avery will reach out to some of the Division executive committees: BIOT, AGRO, AGFD. Laura McConnell and Jim Sieber may also be good resources.