Joint Board-Council Committee on Environmental Improvement August 24 – 25, 2019, San Diego, CA

<u>Vision:</u> A sustainable world enabled through the sustainable practice and use of chemistry. <u>Mission:</u> Advance sustainability thinking and practice across ACS and society for the benefit of earth and its people. <u>Website:</u> http://www.acs.org/content/acs/en/about/governance/committees/cei.html <u>Blog:</u> https://communities.acs.org/groups/cei <u>Social Media Links:</u> *Twitter:* @ACS_CEI *LinkedIn group:* ACS CEI *Facebook:* http://www.facebook.com/ACSCEI

UPCOMING MEETINGS

Date	Location	Meeting Theme (Chair)
Spr. 2020, Mar. 21-22	Philadelphia	Macromolecular Chemistry: The Second Century (Tim Lodge and Kris Matyjaszewski)
Fall 2020, Aug. 15-16	San Francisco	Chemistry from Bench to Market (Janet Bryant and Judy Giordan)
Spr. 2021, Mar. 20-21	San Antonio	Bonding through Chemistry
Fall 2021, Aug. 22-26	Atlanta, GA	Resilience of Chemistry
Spr. 2022, Mar. 20-24	San Diego	Evolving Biomolecular Sciences
Fall 2022	Chicago	Sustainability in a Changing World
Spring 2023	Indianapolis	Cross Roads of Chemistry

The full tentative schedule of ACS National Meetings is available at the following website: <u>https://www.acs.org/content/acs/en/meetings/national-meeting/about/future-meetings.html</u>

ATTENDANCE (Group photo at end of minutes)

Members, Associates, Consultants, and Liaisons:

• *In attendance:* Chris Avery (Chair), Ray Garant (Staff Liaison), Carl Maxwell (Asst. Staff Liaison) Kate Aubrecht, Marie Bourgeois, Ed Brush, George Cobb, Jetty Duffy-Matzner (ConC Liaison), Stephanie DeLuca, Harry Elston, Elise Fox, Naomi Gevaerd de Souza, Robert Giraud, Jillian Goldfarb, Carol Henry, Katie Hunt, Keisuke Ikehata, Michael Matthews, Faye McNeill, Cathy Middlecamp, Sherine Obare, Sara Orski, Melissa Pasquinelli, Keith Peterman, Susan Shih (SOCED Liaison), Peter Smith (Secretary), Jane Wissinger

Other ACS Staff: David Constable (GCI), Jennifer MacKellar (GCI)

Guests: Lucas Frye

SATURDAY MEETING

Chris Avery brought the meeting to order at 1:10 pm. He gave a welcome, reviewed the CEI mission and vision, explained the water bottles given to each Committee member, and gave a brief overview of the agenda.

APPROVAL OF INTERIM ACTIONS

As our first order of business, the Committee voted by voice to *approve the minutes of the Spring 2019 meeting of the Committee in Orlando, FL, and approve the appointments of Pete Smith and Jillian Goldfarb to be the Chairs of the Critical Materials and Sustainability in the Chemical Enterprise policy statements, respectively.*

Chris Avery made a motion to congratulate Sherine Obare and Carol Henry on their recognition as ACS Fellows. The motion carried by acclamation.

Public Policy Statements

- Marie Bourgeois led the discussion on the Chemical Risk Assessment and Regulatory Decision Making policy statement.
 - George Cobb gave details on his views on current EPA TSCA regulations. He explained that anything not exclusively used in the industrial process is being excluded from review. Water discharge and air discharge is not being reviewed. This means that risk assessments are not comprehensive. He believes that ACS should speak to this. He asserted that risk assessment should not be piecemeal. It must be holistic, including all routes of exposure.
 - There was general agreement that the policy statement should reflect our concerns about the holes in the assessment processes.
 - The writing team and ACS staff worked diligently to make the requested edits to the policy statement. The edits were accepted by the writing team.
 - The Chemical Risk Assessment and Regulatory Decision Making policy statement was accepted by a voice vote of the Committee.
- Faye McNeill led the discussion on the Climate policy statement
 - Faye explained that the proposed statement is a stronger statement than the current one from 3 years ago. The statement has been reviewed by members of the Committees of Corporation Associates and of Science. Their comments generally called for edits to strengthen the draft statement even more.
 - Carl Maxwell said that he likes how strong the proposed statement is.
 - David Constable noted that the proposed statement appears to be a departure from practice that policy statements must be focused on chemistry and chemists. This statement appears broader in scope than other CEI-owned policy statements.
 - Ray Garant explained that, based on past versions, this statement already has the blessing of the Board to be broad in scope.
- The Climate policy statement was accepted by voice vote by the Committee.
- Pete Smith gave a brief update on the progress on the new Critical Materials policy statement. This statement will be presented to the committee later in the fall for review and acceptance.

Discussion on Ocean Plastics

- Sara Orski gave a presentation on the problems of plastics in the oceans and other waterways. She emphasized that research in this area is very siloed and that the ACS should lead the way in creating an interdisciplinary approach to addressing the problem. She proposed that CEI could create a document that summarizes the broad research that has been done on this issue.
- There was much discussion among the Committee members about what CEI could and should do related to the problem of ocean plastics.
- Chris clarified that the intent of a CEI oceans plastic document would be to bring all of the disparate pieces of the problem together and to provide a standard vocabulary for those interested in the problem.
- The Committee generally agreed that ocean plastics is a problem that CEI should be working on, but that the scope of the Committee's work and involvement still needs to be refined.

Strategic Plan Update

The Committee broke into Goal working groups to discuss progress and updates to the strategic plan.

Goal Lead Readouts from Planning Discussion

Elise Fox led the discussion on Goal 1. The working group made these recommendations for the Goal 1 strategies:

- Strategy 1 is not really a strategy. It should be recast so that the goal focuses on the SDGs.
- Strategy 2 CEI values nominal cosponsorship, but we need to develop a plan for how to more effectively do this. Do we continue to sponsor everything of interest or do we selectively sponsor a few that we support monetarily?
- Strategy 3 is difficult to achieve because supplying content for social media is a continuing issue. Perhaps content for social media should not be a strategy but a requirement for all projects.
- Work on strategy 4 should look at incorporating best practices from industry sustainability policies. Many companies have stronger policies on sustainability that current ACS polcy statement.
- Strategy 5 has been accomplished. The lessons learned should be used to help CEI lead another national meeting theme.
- Mike Matthews commented that I&EC is interested in partnering with CEI on programming (e.g. around the SDGs) and co-sponsoring local section minigrants.

Discussion on Goal 2 was led by Jillian Goldfarb and Marie Bourgeois. The working group made these recommendations for Goal 2 strategies:

- Strategy 1 is ongoing, but work constrained by ACS IT. Brandi Neifert is able to get biannual updates to on the ACS website.
- Strategy 2 is completed with the implantation of Freedcamp. However, Brandi probably needs to give another tutorial on its effective use.
- Strategy 3 has seen no progress. George Cobb will reconnect with the right people to see if the work in the strategy is actually needed.
- Work on Strategy 4 will always be ongoing.
- The working group recommends adding a Strategy 5 to define the goal and scope of ACS involvement in the plastics in water issue by Spring 2021.

Melissa Passquinelli led discussion on Goal 3. The working group made these recommendations for Goal 3 strategies:

- Strategy 1 is not significantly different from G1-S3, G2-S1, G2-S2. This strategy could be eliminated.
- Strategy 2 has been completed. A *JCE* special issue is coming out this fall.
 - Jenny MacKellar told the Committee that CPT is about to revise the requirements for ACS-certified degrees, so we should have a new strategy around that.
 - Jane Wissinger, Kate Aubrecht, and Ed Brush will co-lead developing that new strategy.
- Work on Strategy 3 is ongoing.
 - Sherine Obare has collected papers from past curriculum award symposia and put together an ACS Book. The working group put together proposal on ACS book for sustainability award winners. There are currently 22 authors who have agreed to contribute. This could be multivolume publication. The hope is to have it together for the 10th anniversary of the award, which is 2020. Keith Peterman and Cathy Middlecamp are co-editors.
 - The film competition is occurring this meeting with four finalists. Work is being done to host the finalists on the ACS website. The organizers also are working to post the films to the internet, perhaps on a YouTube channel. The working group recommends contacting AACT about developing lessons plans related to these films. The intention is to have another film competition at the Fall 2020 meeting. It was recommended that we see how it goes on Tuesday before deciding whether this will be a long-term project and whether we will need ongoing budget for it. Due to the large number of international submissions, it was recommend that we should partner with IAC.
- No notable progress has been made on Strategy 4. However, Keisuke, Melissa, Carol, and Mike will come up with a plan by Spring 2020 meeting.
- The working group presented other ideas.
 - The SDGs could be topic for future film competition. Maybe ACS could host the film competition at an IUPAC meeting (e.g., the upcoming one in Montreal). We also could focus the curriculum award around the SDGs.
 - CEI could create an infographics competition based on the SDGs. Jane is writing an article on the ocean plastics challenge for the CCEW newspaper sent to middle schools nationwide.
 - The idea of CEI hosting a workshop to connect and foster collaborations between chemists and filmmakers. Sherine and Melissa will talk with Sue Morrissey from ACS Communications about this idea.

Report from EAC

Carl Maxwell gave the EAC updates.

- The current split Congress means that the House is proposing and passing lots of legislation, but little to none of the bills make it through the Senate.
- The Administration and California are no longer talking about car efficiency standards.
 - Honda, Ford, BMW, and VW have sided with CA.
- An Affordable Clean Energy Rule was introduced by the administration, but will be litigated.
- The climate skeptic panel that was announced by the Trump Administration has been delayed (possibly permanently).
- The EPA has seen recent staffing changes.
- The President has ordered advisory panel reductions across the government.
 - \circ $\;$ ACS submitted a comment on arbitrary nature of the proposed reductions.

- Carl reported on the lobbying activities of the EAC staff.
- Carl reported on budget and appropriations for federal science programs.
- Carl introduced Will Hartwig to the Committee as the new lobbyist in EAC. Will hiring has allowed EAC to shift some of the policy statement responsibilities among the staff.
 - The new responsibilities can be found in the EAC report on Freedcamp.

Report from GCI

Jenny MacKellar and David Constable gave the GCI update.

- Jenny updated the Committee on:
 - the successful 2019 GC&E/GST conference.
 - The 2020 GC&E in will be in Seattle.
 - The 2019 ACS Summer School on Green Chemistry
 - GCI work on integrating systems thinking into chemical education including an upcoming special issue of JCE.
 - GCI worked on green chemistry core competencies and their integration into the ACS Exams Institute's anchoring concepts content maps.
 - $\circ~$ GCI worked on green chemistry and safety including an upcoming special issue of JCE.
- David updated the committee on the Pharma roundtable and Hydraulic Fracturing roundtable.

SUNDAY MEETING

Sustainable Development Goals – Updates and Project Planning

David Constable gave a presentation on the ACS's work on the SDGs (available on Freedcamp).

- Anthony Pitagno gave a presentation of the ACS's new work on Chemical Enterprise Partnerships, which are replacing old MOUs.
 - CEPs are all aligned around the SDGs
- Cathy Middlecamp asked what is the perception of the U.N. by the U.S.
 - David said that he believes that a portion of the U.S. is very strongly anti-U.N., but state and local governments are very engaged in enacting initiatives to combat climate change and create sustainability.
- Mike Matthew asked about the official status of the SDG action plan in agenda book. Can it be posted/disseminated?
 - David said that it can be disseminated. The action plan has generally wide support from the Board. David said that this report is a just a first step. It is meant to be a thought and discussion starter.
 - \circ $\;$ Mike asked if there has been any PR announcement about this action plan.
 - David said that there has not been any announcement. The ACS is still in data-gathering stage. This is a several-year process to get all-stakeholders on board.
 - David commented that the ACS website will have a section organized around the SDGs.
- Chris noted that this discussion was the third time that a better relationship between CEI and IAC was mentioned. He will reach out to the IAC chair to begin the process of collaboration/liaisons.

- David commented that here is a lot of international interest in ACS expertise, but the expectation is that we show up and help. CEI would have to provide those resources, if we agreed to help.
- Ed Brush as who is going to maintain the inventory of all activities related to the SDGs?
 David said that this is currently a void.
- There was a lot of discussion about virtual meetings/symposia/poster sessions and CEI role in them.
- There was discussion about the ACS creating a position of Chief Sustainability Officer for ACS. The Committee generally agreed that this was an interesting idea.
- Carol Henry said that it could be time for the ACS to consider creating a sustainability or sustainable development committee.
 - David told the Committee that the ACS Staff is member- and governance-focused. If members and a governance committees came to the staff with ideas and proposals about sustainability and sustainable meetings, then staff will respond.
- Chris reminded the Committee that green and sustainable meetings is the purview of M&E. CEI can provide input.
- Melissa told the Committee about the RSC doing a virtual poster session on Twitter. She said that we could think creatively about virtual/sustainable meetings to lower costs.
- Katie Hunt asked if CEI could host a webinar on the SDGs.
 - \circ David said that it would be completely possible. It would just have to be created.
- Elise Fox said that creating a meeting-in-a-box could be a great way to disseminate information about SDGs.
- Ed said that we could even just disseminate a PowerPoint with embedded audio to simplify the process even more.
- Elise told the Committee that CEI can have the SDGs national meeting theme being considered for 2022 if we simply provide names for the theme leads.
 - Jillian Goldfarb recommended that CEI partner with a technical divisions on this (i.e. with ENVR).
 - Chris recommended that there should be at least two theme leads to make the work easier.
- Robert Giraud said that the ACS should pursue a CEP with the UN Environmental Group. He volunteered to help get that CEP going.
- George Cobb committed to getting with David and Jenny to get a webinar on the SDGs going, which could possibly be hosted by ENVR.
- Ed Brush said that budget for marketing would be helpful.

Project Work Time

The Committee broke into working groups to make progress on Committee projects.

Grant and Award Approvals

Mike Matthews led the discussion on requests for Local Section Sustainability Grants. The subcommittee brought two applications for Committee consideration

- Binghamton Local Section
 - Katie Hunt asked how busy the library is. Could the local schools be recruited to help publicize?
 - Mike said he will be happy to collect and transmit suggestions to the LS.
 - Chris said that he is strongly in favor of appointing CEI liaisons to grantees.

- Robert Giraud asked if we could discourage the generation of so much paper waste.
 - Mike said that we could encourage a reduction in their planned creation materials that will end up in landfills.
 - Katie said that we could suggest the use of reusable bookmarks instead of flyers/pamphlets.
- Carol recommend that CEI formalize the encouragement of zero waste activities into the grant applications.
- Chris Avery called for a vote by show of hands to approve this LS sustainability grant.

• The motion carried by voice vote.

- Savannah River Local Section
 - There was a lot of discussion about the ambiguity of the proposed activities, especially related to the use of human subjects in research.
 - Mike reminded the Committee that the application form is very brief and that all details cannot be given in the proposal.
 - Many Committee members offered suggestions about how to work with the LS about specifying whether or not human subjects are involved and whether or not the proper guidelines are being followed.
 - Mike said that CEI should not get into the practice of rewriting proposals for local sections. We should just vote the proposal up or down as presented.
 - Elise Fox said that she knows the person who is proposed to do the research and the he does not conduct research on human subjects.
 - \circ Chris called for a vote by show of hands to approve the LS sustainability grant.
 - The motion failed: 4 votes for, 12 votes against. Elise Fox recorded her abstention.
- It was recommended that we add a statement to the LS sustainability grant application about using the SDGs and a guiding framework for all projects.
- Chris made a motion to create a committee of CEI members to consider the nominations for the 2020 Awards for Incorporations of Sustainability into Chemical Education on behalf of CEI.
 - The motion carried by voice vote.
 - Sherine Obare was appointed Chair and she requests volunteers to serve on the committee.

ConC Update

Jetty Duffy-Matzner gave a presentation on the results of the ACS Committee demographics survey (available on Freedcamp).

- Chris asked how this information could be used by the committees.
 - Jetty said that the first two data sets are consistent, so now we can start using the information appropriately.

San Diego Theme Events

Elise Fox gave a presentation on the events relating to the meeting theme (available on Freedcamp).

- Robert Giraud asked if the films that are being shown as part of the competition will be available for viewing after the meeting.
 - Sherine said that they will be available for viewing and that details will be sent at a later date.

- Chris made a motion to commend Elise Fox for her leadership and the members of the committee for their contributions to assembling the meeting theme programming and activities for the Fall 2019 National Meeting.
 - The motion carried by acclamation.

Closing Thoughts

Chris wrapped up the meeting by encouraging the Committee members to keep an eye out for things they want to do. He asked each member to consider how they can their work on the committee more fulfilling.

Faye reminded the committee to send her content for social media throughout the year and for members to engage with posted CEI content.

The meeting adjourned 11:55 am

This document completes the Minutes of the Executive Session of the Joint Board-Council Committee on Environmental Improvement for August 24-25, 2019 in San Diego, CA

Respectfully submitted, Peter M. Smith Secretary