

**AMERICAN CHEMICAL SOCIETY  
JOINT BOARD-COUNCIL COMMITTEE ON CHEMICAL SAFETY  
233<sup>rd</sup> ACS National Meeting**

**Chicago, IL**

**Combined Open Meeting and Executive Session  
Monday, March 26, 2007 – 8:30 AM –12:00PM  
Chicago Marriott Downtown  
Purdue/Wisconsin Room**

**CCS Mission Statement: The Committee on Chemical Safety has as its prime responsibility the encouragement of safe practices in chemical activities. The committee serves as a resource to the chemical professional in providing advice and counsel on the handling of chemicals, and seeks to ensure safe facilities, designs, and operations by calling attention to potential hazards and stimulating education in safe chemical practices. The Committee also provides advice to other ACS units on matters related to chemical safety and health.**

**MINUTES OF MEETING**

The following Committee members, associates, consultants, and liaisons attended all or part of the meeting: Dr. Joseph Antonucci, Dr. Patrick Barber, Dr. Lawrence Barton, Dr. W. H. Jack Breazeale, Dr. Lester Bynum, Dr. Mark Cesa, Dr. David Crumrine, Dr. Laurence Doemeny, Dr. Harry Elston, Dr. Kenneth Fivizzani, Ms. Barbara Foster, Mr. Robert Gates, Dr. Scott Goode, Dr. Alan Hazari, Dr. Robert Hill, Ms. Elizabeth Howson, Mr. James Kapin, Mr. David Katz, Mr. George Lechner, Mr. Russell Phifer, Ms. Marsha Phillips, Dr. Patricia Redden, Dr. Robert Rich, Ms. Patricia Schumann, Mr. Erik Talley, Dr. Douglas Walters, and Dr. Wayne Wolsey.

Guests who were present for all or part of the meeting included former CCS member Ms. Jean Delfiner and Mr. John Newquist, Assistant Regional Administrator, OSHA Office of Cooperative and State Programs, Region V .

**1. Minutes of September 11, 2006 Combined Open Meeting and Executive Session**

The minutes of the September 11, 2006 San Francisco, CA, meeting were reviewed and approved, as amended.

**CCS01-2007 - The Committee VOTED unanimously to approve the minutes of the September 11, 2006 San Francisco, CA, meeting.**

**2. Chair's Report – Dr. Al Hazari**

Dr. Hazari welcomed all members and guests. A copy of Dr. Hazari's written report to Board and Council is included in the Agenda Book.

Appointments :

- Ms. Elizabeth Ann Howson, new CCS Associate Member
- Mr. George Lechner, new CCS Associate Member
- Dr. Mark Cesa, new CCS Associate Member
- Mr. David Katz, Member, Resources Subcommittee

- Dr. Bob Hill, new Liaison, Division of Chemical Health and Safety
- Dr. Jack Breazeale, new CCS Consultant

Special thanks for their many contributions to CCS over the years :

- Eileen Segal (former Liaison, Division of Chemical Health and Safety)
- Jean Delfiner (former CCS member).

1. On November 17, 2006, at the annual Tennessee Science Teachers Association (TSTA) meeting, Dr. Hazari presented a talk on "Teaching With Safety." This was in conjunction with the "Celebrate Chemistry @ TSTA" day.

2. In January 2007, Dr. Hazari reviewed and evaluated the IUPAC Project Proposal #2006-051-1 entitled "IUPAC-UNESCO-UNIDO Safety Training Program Workshop, Turin, Italy" and coordinated by Dr. Mark Cesa.

3. CCS was featured in the March 2007 issue of "ACS Committee News."

4. Thanks to all who are volunteering to work the CCS - OSHA booth (#536) at this ACS meeting.

5. Dr. Hazari will present a CCS report to the ACS Council on Wednesday, March 28.

6. Following the ACS Council meeting, Drs. Hazari and Rich will be meeting with Dr. Mamoun Bader to discuss the upcoming Arabic translation of SACL. See related information in the agenda book.

Dr. Walters announced that CHAS is planning a Boston dinner in honor of Eileen Segal. Ms. Segal will be invited to present a talk at the CHAS awards symposium. All CCS members are invited to participate in the CHAS activities to honor Ms. Segal.

### **3. Chemical Reactivity Hazards Management Alliance - Mr. John Newquist, Assistant Regional Administrator, OSHA Office of Cooperative and State Programs, Region V**

ACS has the opportunity to continue with this alliance with OSHA, which ends on December 31, 2007. Mr. Newquist discussed the CSB report, our work in chemical safety, and avoiding runaway reactions. He hopes that ACS chooses to renew this alliance. He reported that the biggest hurdle is the outreach to target audiences, those who are actually performing the hazardous reactions. He cited the NC incident and reported that a leak in a gasket lead to that explosion, which lead to one death and several injuries. In August, OSHA started to look at refineries and will include other chemical plants. He discussed an emphasis program focused on refineries and chemical plants. There are 30 people in the Midwest trained to perform inspections this year. Each refinery inspection takes ~6 months to complete.

It was suggested by a CCS member that we edit the middle paragraph on page 35 of the proposed new alliance agreement to include "non-innovative" solutions.

Members agreed that we wish to continue the alliance.

### **4. Staff Liaison's Report – Dr. Robert Rich**

#### **Online Agenda Book**

As in San Francisco, the agenda book is Web-based. You can access the book online as an archive in the future. Please note that the official version of the agenda book is the online version.

### **Report on Distribution of Committee Publications**

1. Please disregard the inventory and sales report in your agenda books, which is inadvertently from last fall. The correct inventory and sales reports were distributed to committee members as a handout.
2. On the handout, the inventory is listed for each publication as of March 14. In the sales report, quantity sold is the number of books, amount sold is the amount of money received for that title. At the current rate of sales, we have between 1.1 and 33.8 years worth of each publication. Toward the low end are the introductory chemistry brochure and SACL, Volume 1. The committee may want to revise or simply reprint these two before the end of 2007.
3. At the other extreme, the small business manual is selling very slowly. Once the new edition comes out, we'll have about 250 copies of the old edition to distribute.

### **Update on Interim Actions on Behalf of the Committee**

Dr. Rich handled a variety of communications as the point of contact for the committee at ACS. He thanked the committee members for their quick and helpful responses to his emails on issues which arose since our last meeting. In addition to working on many of our other agenda items, Dr. Rich:

- Helped Debbie Decker update her "SafetyNet" Web site with updated information from SACL, 7<sup>th</sup> Edition.
- Denied Barbour CMP permission for reprinting and repurposing of committee publications, on the advice of our copyright office. What was being proposed would provide little distribution or revenue, would violate committee policy on separating out content from our books, and would be a lot of work to administer.
- The committee responded to Michael Henk in Tulsa about his concerns surrounding a Chemical Hygiene Plan. Barbara Foster provided information to him on fire blankets and gloves.
- Announced Spanish SACL through Cut & Paste, FANMail, and other ACS mechanisms.
- Passed on information about the Georgetown University Center for Business and Public Policy Alliance seminar on "Federal and State OSHA Programs: What Have We Learned?"
- Connected Bob Hill and Barbara Foster, who were working on a textbook and looking for an academic co-author with a couple of green chemistry faculty who are interested in getting more involved in safety issues.

## **5. Reports of the Subcommittees and Task Forces**

### **Partnerships – Dr. Ken Fivizzani**

- Wayne Wolsey made a presentation to the Committee on Community Activities (CCA) regarding the OSHA/Research Chemicals Hazards Management Alliance.
- Regarding our request to the Division of Nuclear Chemistry for comments on radiation safety discussions in SACL, Wayne reported that no comments had been received.
- CCS's inquiry about getting publicity for the Spanish version of SACL resulted in Bradley Miller attending the subcommittee meeting. Brad is the ACS Manager of African, Latin American, and Middle Eastern Affairs. He has many positive ideas how we can bring SACL to Spanish speaking countries. He is also the ACS Liaison to the Committee on International Activities (IAC). Brad related that a few years ago, ACS published a new textbook designed for first year college students. The book has a set of interactive workshops. The original publisher, Freeman, sold the

publication rights to a Spanish firm who then translated the book into Spanish. ACS partnered in a series of 3-5 day workshops on interactive, chemistry-based activity in Latin American countries. At many of these workshops, a US-educated teacher was selected to put local cultural and language perspective into the workshop as necessary. Workshops have been conducted in Panama, Mexico, and Guatemala. By the third workshop in a country, the local teachers are presenting the content throughout their country. ACS pays for the international consultants' travel; the local organization pays local costs. To get some publicity for faculty, Brad set up (in 1999) descriptions of research activities in several Spanish-speaking countries. He did this via a "ChemiWikipedia." Also all ACS Spanish resources are now available on one website:

[www.chemistry.org/Quimica.html](http://www.chemistry.org/Quimica.html). Brad mentioned that during the next few years, several key international meetings are either scheduled or being considered for scheduling in Puerto Rico.

Three of the most significant of these are:

- o 2008 Latin American Chemical Congress (FLAQ) – July 27-31.
- o 2009 SERMACS – October 21-24 (Dr. Ingrid Montes, who helped with translating the Spanish SACL is the General Chair of this meeting).
- o Puerto Rico has bid to host the 2011 IUPAC General Assembly and Congress; ACS has provided funding to help Puerto Rico receive that bid. Three-quarters of this funding is for challenge grants to enable ACS divisions to participate in this meeting.

CCS will provide Brad with some of our other publications that might be good candidates for translation. Two obvious candidates would be the *Safety for Introductory Chemistry Students* one-page flyer, and the *Less Is Better* booklet prepared by the Laboratory Environment, Health, & Safety Task Force.

- *Chemical Safety Manual for Small Businesses*, 3<sup>rd</sup> Edition – Dr. Fivizzani reported that he has completed review of a second set of questions and comments from the contract editor. When those responses are incorporated into the draft, the draft may be ready for the booklet designer. He will present a paper on the revision of this manual as part of the Tuesday morning SCHB symposium on safety and health issues at small businesses.
- Dr. Rich presented an update on the Reactive Chemicals Hazards Management Alliance. This alliance is currently scheduled to expire at the end of 2007. CCS will have to decide whether we wish to continue participation in the alliance. ACC and SOCMA have ideas for recommended alliance activity. John Newquist, OSHA Region V, will speak about the alliance with the entire CCS committee on Monday morning. OSHA and the RCHM Alliance will sponsor Booth 536 at the exposition. Several CCS and CHAS members will participate. Several resource materials will be distributed.
- Mr. Talley reported that the American Biological Safety Association is available to review CCS documents.
- Regarding NCW safety issues, the Committee on Community Activities sends scripts to Ms. Delfiner for review; she reviews them and sends her comments back.
- Dr. Bob Hill will replace Eileen Segal as the CHAS liaison to CCS.
- Old Business – Efforts in NY State to promote K-12 science safety are moving forward. The state teachers union passed a resolution asking state government to support science safety in grades K-12.
- Professor Vicki Colvin – Nanotechnology safety is a growing field of interest. These materials are becoming increasingly more significant. Professor Colvin could give a presentation in a symposium or meet with CCS. CCS would like to get members with nanotechnology expertise appointed to the committee.

### Resources – Dr. David Crumrine

- A discussion of MSDS availability brought out several points. First, labs need the MSDS from their supplier. Other suppliers' forms are not acceptable, so the Flinn MSDS provided on a CD are only appropriate, if Flinn is the supplier. The *J. Chem. Ed.* "CLIPs (Chemistry Laboratory Information Profiles)" CD is helpful to both teachers and students, but is not satisfactory to fulfill this requirement. It is also felt by several members that students must learn to read and interpret MSDS, so some sheets must always be available to the students in teaching laboratories. Second, there is no requirement for paper forms, but there is a requirement for availability in an emergency time frame (5-10 min) which could include Fax-on-Demand, Website access, or sheets in a nearby room or NOX-box. High Schools in NJ must have all MSDS in or near the Principal's office. The use of a NOX-box with a Fire Dept accessible key near the main entrance to a building satisfies some Fire Departments such as San Diego. If Websites are the primary source, then there are questions about availability when there is a power failure.
- There was a discussion about the availability of Chemical Inventory lists that have usually been prepared and maintained, on small databases for individual labs. Once the inventories have been created, they are considered to be approximately constant unless a new research group starts to work or a current group takes on a completely new area. These lists are generally kept in some central location in the building housing the lab. Most locales do not permit public posting to avoid possible terrorist or drug threats.
- David Katz then presented the second draft of the PowerPoint video that has been assembled by the Task Force appointed in San Francisco. This could, ultimately, replace the current ACS Video Starting with Safety. It contained about 70 slides that covered a lot of ground in detail. After the ca. 40 min presentation (with committee questions), there was a discussion about local differences and how to provide flexibility in the presentation. Suggestions ranged from a 'locked' presentation that could not be changed, through a 'locked' presentation that could have local slides added, to having an 'open' version that could be tailored to the local milieu. The program needs to be narrated. The presentation will be posted on the CCS website for review and comment. The task force will continue working, and will provide an update at the next meeting.
- Patricia Redden then showed her narrated PowerPoint presentation on eye protection. It was narrated with a good level of detail. There were questions about: risk assessment-since not all general chemistry lab experiments require goggles; about the need to include "consult a physician or licensed medical care provider;" the comments on contact lenses are more conservative than current NIOSH requirements-these were caused by personal problems with contact lenses; and a discussion of bench shields. The presentation will also be placed on the CCS website for review. Jack Breazeale was suggested to narrate the final version.

### Safe Practices – Mr. Russ Phifer

- Initial discussion centered on the usefulness and specificity of the Security Vulnerability Analysis for Academic and Small Chemical Laboratory Facilities. It was noted that much of the questionnaire would be suitable for larger facilities, including those that perform manufacturing processes. The question was asked as to how to get additional feedback on the usefulness of the questionnaire. Some of the questions are worded so that "scoring" might be difficult. The intent of these questions is to raise awareness among these facilities, and the scoring is not as important as dealing with the awareness issue. This checklist will be posted on the web site.
- The second primary discussion was on the list of hazardous chemicals that should not be in K-12 schools. The list needs a formal name, a reference list, an introduction, and some additional revision. The working title is "Suggested Restricted Chemical Substances for K-12 Teachers". Some specific suggestions were made for changes, and Dr. Walters agreed to review the list to make sure that all OSHA carcinogens are included. Dr. Elston agreed to develop an initial draft of the introduction. Mr. Phifer will develop the reference list. In the next draft, all NFPA ratings

will be deleted. Committee members suggested the addition of a disclaimer about state requirements and to change cupric and cuprous to Copper I and II.

**Laboratory Environment, Health & Safety Task Force – Mr. Erik Talley and Mr. Russ Phifer**  
The following documents were included in the agenda book:

EPA Comment Letter on Proposed Rule for Standards Applicable to Generators of Hazardous Waste

EPA Email Response to Task Force

### **Report of the LabEHS Task Force**

Boston Symposium on “RCRA 2007 and Other Regulatory Issues” - Contact Mr. Phifer or Mr. Talley about the symposium.

### **6. Web Site Update – Mr. Erik Talley**

Mr. Talley discussed 2006 and 2007 web statistics.

CCS has a new web address: [www.chemistry.org/committee/safety](http://www.chemistry.org/committee/safety)

Please forward ideas or additional materials to be placed on the CCS Website to Mr. Talley at: ert2002@med.cornell.edu.

### **7. Reports of CCS Liaisons**

- **ACS Division of Chemical Health and Safety – Dr. Robert Hill**

CHAS conducted a Strategic Planning Meeting led by Dale Gaddy and Ena Castro of the ACS Division of Membership & Scientific Advancement with 20 volunteers from CHAS participating in deriving this plan. CHAS developed new Mission and Vision statements. CHAS identified several goals that it will work to accomplish within the next 3 years. The draft of the CHAS Strategic Plan will be forthcoming later next week.

CHAS will provide comments to CPT on their new draft guidelines for Undergraduate Professional Education in Chemistry.

CHAS estimated expenses exceeded estimated income due to Strategic Planning process. CHAS voted to increase dues from \$9 to \$10 and the journal charge from \$27 to \$30 bringing the CHAS membership costs for 2008 to \$40. This increase is necessary due to increases in the cost of the journal and to cover necessary need for CHAS expenses.

Chair-elect Erik Talley is very interested in putting on a video conference on the health and safety aspects of nanotechnology in 2008.

Eileen Segal is retiring from CHAS and CCS. At the Boston ACS National Meeting in August CHAS will present Eileen with the CHAS Lifetime Achievement Award and have a dinner in her honor. Eileen has been asked to give a paper at the CHAS Awards Symposium. CCS members are invited to join us when we honor Ms. Segal. Please send any photos of Eileen to Russ Phifer.

A survey of members has found three principal reasons for resigning: change in direction (#1), financial hardship, and retirement.

Doug Walters and Larry Keith have formed the non-profit Environmental and Chemical Safety Educational Institute (ECSEI) to address safety needs in developing countries.

CHAS will strongly consider thematic programming in the future focusing on the chemical health and safety aspects of the thematic topic. CHAS will be celebrating its 30<sup>th</sup> anniversary in 2010 and this will be a good time to bring attention to CHAS.

CHAS voted to spend up to \$2,500 to advertise CHAS activities and workshops for Boston.

CHAS is providing programming at regional meetings: Northwest, Middle Atlantic, and SERMACS.

CHAS voted to use electronic voting this year. CHAS will propose a change in the by-laws for a 2-year term for Chair. CHAS solicited nominations for Chair-Elect (Harry Elston), Member At-Large (Ken Fivizzani, Pat Ceas), and Counselor (George Wahl).

CHAS supports the continued alliance with OSHA to support involvement in chemical process safety. AIChE and ACS will hold a joint meeting in New Orleans in 2008.

The *Journal of Chemical Health & Safety* is having a pipeline issue in that papers have not been forthcoming. The Board of Editors has been asked for additional papers. CHAS must create a new contract for the Editor of the *Journal* that is scheduled to expire in 2007.

- **Committee on Chemists with Disabilities – Mr. Bob Gates**

Mr. Gates thanked the members for their work on safety and eye protection.

- **Women Chemists Committee – Ms. Marsha Phillips**

The WCC held their executive meeting Saturday, March 24, 2007.

Issues discussed were day care, Hall of Fame for Women Inventors, and financial support for WCC.

Advocacy Subcommittee

They discussed increasing women members.

- 1) Free membership for 6 months.
- 2) Voting members as associate members.

Attracting Subcommittee Scholarships

- 1) Travel Awards
- 2) Post Docs 2007 Overcoming Challenges Award Flyer
- 3) Merck Index Women in Chemistry
- 4) ACS membership to winners – 1 year free membership

Developing Careers of Women Chemists Subcommittee

- 1) Weekend- Sunday Afternoon Workshop 3 hours
- 2) Topics
  - Effective Accomplishment and Skill Presentation
- 3) Leadership Tool Course
- 4) Career Success
- 5) Instruction –Vita
- 6) Resume writing
- 7) Sixty Second Sketch
- 8) Speed Network
- 9) Small group 25 people

Communications Subcommittee (including Programming)

- 1) Standing articles

- 2) Online Newsletters only
- 3) Metrics
  - a. Electronic newsletter
  - b. Programming events static's
- 4) Luncheon Tickets
- 5) Metrics
  - a. Programming total attendance
  - b. Newsletter sent out 2,500
  - c. Counter on the web
- 6) Website
  - a. Updates- monthly
  - b. Quarterly blast
- 7) Pod-cast
- 8) WCC Golf Tournament in Boston
- 9) Diversity Booth in Chicago Monday, Tuesday, and Wednesday
- 10) Poster Session Sunday for Luncheon

#### 8. Old Business

Jean Delfiner reported on work to inform NY teachers on the work of the CCS. She has been active in encouraging the State DOE to set up guidelines, and they have passed the resolution. Ms. Delfiner is now on the Committee on Chemists with Disabilities with Mr. Gates.

#### 9. New Business

Peter Dorhout – Chair, ACS Committee on Committees– The CCS will undergo a 5-year review process in 2008. Please send input to Peter.Dorhout@colostate.edu

Dr. Rich - ACS Strategic Plan - Ideas for Implementation

The ACS President and Board Chair have asked each Society Committee to submit ideas on how they will support this plan in the general area of their charge.

Send all comments to Dr. Hazari by April 20, 2007.

#### Intellectual Property Agreement between ACS and Committee Volunteers

A draft agreement was presented to the committee to codify an understanding about volunteer contributions to committee publications. It was suggested that Dr. Rich work with the ACS attorney to revise this document to allow for authors to continue to use their own contributions. A revised draft will be circulated by email.

#### **San Francisco Council Discussion on Involving Younger Members**

- Message from ACS Past President Ann Nalley - Ensuring Our Future Council Discussion
- Council Data on Engaging Younger Leaders

Dr. Nalley wants the CCS to focus on how to get more young people involved in the safety community, the ACS, and ultimately, the ACS leadership. It was discussed that younger chemists face budget and time constraints which prevent them from joining and actively participating in the ACS. Dr. Rich encouraged everyone to “tell their story” at the booth at the convention center.

#### **Globally Harmonized System (GHS) of Chemical Labeling**

This system will address problems associated with MSDS. There are currently no fixed guidelines on how to classify some materials. CCS comments were submitted and approved by the board as a policy

statement. Next step is a Notice of Proposed Regulation, which will have draft language. CCS should review this document carefully and submit comments.

Jim Kapin will chair a GHS Task Force, with David Crumrine, Lester Bynum, Mark Cesa, and Pat Schumann.

### **EPA Schools Chemical Cleanout Campaign**

There is an EPA campaign to reduce the risk of chemical exposure in K-12 around the country. Many units within ACS are intrigued by the possibility to assist the EPA in their endeavors. The ACS may form a formal alliance with EPA to prevent schools from creating hazardous environments. There are approximately 33,000 middle schools and high schools in the nation that have unnecessary chemicals in their facilities. Suggestions for assistance included:

- A Fall 2007 workshop for teachers.
- Regional meetings this fall.
- Training/education for teachers.
- Could be attached to the HS Chemistry day at the national meeting.
- Could advertise in NSTA publications.

The committee agreed that participation in this alliance should proceed. The Safe Practices subcommittee will follow up with this item of business. Please send specific implementation suggestions/comments to Dr. Rich.

### **Translation of SACL into Arabic – Dr. Hazari**

Dr. Hazari discussed his recent collaborative efforts to translate SACL into Arabic.

### **Petitions request from Constitution & Bylaws**

#### **One petitions for consideration:**

- Petition on Local Section Affiliations

Endorse: 2

Oppose: 10

No opinion: 6

CCS members voted to oppose this petition.

The meeting adjourned at 11:55pm.

### **Next Planned Meeting of the Committee:**

Monday, August 20, 2007 – 8:30 AM to 12:00 Noon in Boston, MA.

**Meeting minutes prepared and submitted by Barbara L. Foster.**

**ACS COMMITTEE ON CHEMICAL SAFETY**  
**233<sup>rd</sup> ACS National Meeting**  
**Chicago, IL**

**March 26, 2007**

**ACTION ITEMS**

<b>ITEM NUMBER</b>	<b>ASSIGNED ACTION</b>	<b>BY WHOM</b>
<b>1</b>	<b>Post “Security Vulnerability Analysis for Academic and Small Chemical Laboratory Facilities” on the CCS Web Site</b>	<b>Erik Talley</b>
<b>2</b>	<b>Forward ideas or additional material to be included on the CCS Web site to Erik Talley at <a href="mailto:ert2002@med.cornell.edu">ert2002@med.cornell.edu</a></b>	<b>All members</b>
<b>3</b>	<b>Please consider submitting a manuscript to the <i>Journal of Chemical Health and Safety</i>. Contact Editor Harry Elston at <a href="mailto:helston@fgi.net">helston@fgi.net</a></b>	<b>All members</b>
<b>4</b>	<b>Send comments on the ACS Strategic Plan to Al Hazari</b>	<b>All members before April 20.</b>
<b>5</b>	<b>Revise the Intellectual Property Agreement document as discussed by members. Circulate by email.</b>	<b>Bob Rich and ACS attorney</b>
<b>6</b>	<b>Serve on a GHS Task Force</b>	<b>Jim Kapin (Chair), David Crumrine, Lester Bynum, Mark Cesa, and Pat Schumann.</b>
<b>7</b>	<b>Send EPA Schools Chemical Cleanout Campaign implementation suggestions/comments to Bob Rich</b>	<b>All members</b>
<b>8</b>	<b>Follow up on EPA Schools Chemical Cleanout Campaign</b>	<b>Safe Practices Subcommittee</b>