2010 Spring National Meeting
San Francisco, California
SUMMARY AGENDA
Committee on Chemical Safety

Subcommittees will meet in:

Grand Hyatt San Francisco
345 Stockton Street
San Francisco, California, USA 94108
Tel: 415 398 1234
Fax: 415 391 1780
Maps & Directions

Saturday, March 20 – Butron Room

6:00 - 7:00 PM   Committee Dinner
*Please note that the dinner is for official committee members, associate members, consultants, and liaisons only.

7:00 - 9:00 PM   Subcommittees Meetings
*Following the dinner Committee members and affiliates are expected to participate in the subcommittee meetings:

- Resources Subcommittee: San Francisco A
- Safe Practices Subcommittee: San Francisco B
- Partnerships Subcommittee: San Francisco C

Monday, March 22 – Plaza Ballroom West

7:45 – 8:30 AM - Committee Breakfast
8:30 – 11:30 AM - Combined Open Meeting and Executive Session

Welcome and General Information

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- Welcome to members and guests
- Introduction of guests
Subcommittees Meetings Agendas

- Resources
- Partnerships
- Safe Practices

Meeting Agenda

Monday, March 22, 2010

Approval of Minutes (8:30 – 8:35 AM)

1. Minutes of Monday, August 17, 2009, Combined Open Meeting and Executive Session
2. Minutes of the Subcommittees and Task Forces
   - Partnerships
   - Resources
   - Safe Practices

Chair’s Report – Dr. Laurence J. Doemeny (8:35 – 9:00 AM)

1. Chair’s update
   - Chair’s Report
   - Written report to C&ENews
   - Written Report to Board and Council
2. Future meeting dates and times

Staff Liaison’s Report – Dr. Marta Gmurczyk (9:00 – 9:10 AM)

1. Report on distribution of Committee publications
   - Inventory report
   - Sales report for 2009 and January- March 2010
2. Update on interim actions on behalf of the Committee

Reports of the Subcommittees and Task Forces (9:10– 9:30 AM)

1. Partnerships – Dr. Ken Fivizzani
2. Resources – Dr. David Crumrine
3. Safe Practices – Dr. Harry J. Elston
4. Laboratory Chemical and Waste Management Task Force (LCWMT) – Mr. Russ Phifer
   - Task Force on LCWM report
   - Regulation of Laboratory Waste white paper for review and approval
   - Update on “Laboratory Waste Management” book
   - Risk Based Laboratory Chemical Safety discussion

Web Site Update – Dr. Marta Gmurczyk

1. Web URL: www.acs.org/safety
2. Overview of the new website
Reports of CCS Liaisons: (9:30 – 10:00 AM)

1. National Registry of Certified Chemists (NRCC) – Dr. Laurence Doemeny  
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2. Academy of Certified Hazardous Materials Managers (ACHMM) – Dr. James Harless  
3. ACS Division of Chemical Health and Safety – Dr. Robert Hill  
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4. ACS Local Sections Activities Committee – Ms. Carol Jean Bruner  
5. Committee on Community Activities  
6. Committee on Chemists with Disabilities – Dr. Bob Gates  
7. Women Chemists Committee – Dr. John Palmer  
8. Presidential Committee on Ethics – Dr. David J. Chesney .. 39  
9. American Industrial Hygiene Association - Dr. Doug Walters  43

BREAK (10:00 -10:15)

Old Business (10:15 – 10:30 PM)  
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2. Update on the International Year of Chemistry 45  
3. ACS Fellows Program ………………………………………………………………..48
4. Schools Chemical Cleanout Campaign (SC3) –  
5. Alliance with OSHA on “Process Safety” - Dr. Neal R. Langerman 50

New Business (10:30 – 11:15 AM)  
1. Determining the State of Safety Attentiveness in Academic Institutions 50  
2. Arabic Translation of Safety in Academic Chemistry Laboratory  53
3. Revisions to the Eye Protection Presentation
4. Revisions to the Safety for Introductory Chemistry Students Brochure
5. Revisions to the Safety in the Elementary (K-6) Science Classroom  
6. Request from the Journal of Chemical Education 55  
7. Correspondence with C&EN News Editor 56

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Upcoming ACS Meetings:

- 240th ACS National Meeting & Exposition  
  August 22-26, 2010, Boston, Massachusetts  
- 241st ACS National Meeting & Exposition  
  March 27-31, 2011, Anaheim, California
Committee on Chemical Safety
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 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 and members on matters related to chemical safety and health.
2010 COMMITTEE ON CHEMICAL SAFETY ROSTER

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Liaison to the International Activities Committee
2010 Subcommittees

Partnerships

**Purpose**: To help fulfill the Committee mission with respect to providing advice to the ACS units on chemical safety matters.

**Kenneth P. Fivizzani - Chair**
- Joseph M. Antonucci
- Carol Jean Bruner
- Ken Fivizzani
- Robert A. Gates
- James M. Harless
- Robert H. Hill, Jr.
- Neal Langerman
- Todd Nelson
- John Palmer
- Erik Talley

Resources

**Purpose**: To help fulfill the Committee mission with respect to serving as a resource to the chemical professional for handling chemicals, safe facilities, designs, and operations.

**David S. Crumrine – Chair**
- Lawrence Barton
- Lesli W. Bordas
- W. H. (Jack) Breazeale
- David Chesney
- Scott R. Goode
- Elizabeth M. Howson
- Patricia A. Redden
- Patricia A. Schumann
- Betsy Shelton

Safe Practices

**Purpose**: To help fulfill the committee mission with respect to the encouragement of safe practices in chemical activities.

**Harry J. Elston – Chair**
- Lester M. Bynum
- Alan A. Hazari
- David A. Katz
- George J. Lechner
- Edward Movitz
- Russell W. Phifer
- Linda Stroud
- Douglas Walters
Subcommittee Meetings Agenda

Resource Subcommittee  
**Purpose:** To help fulfill the Committee mission with respect to serving as a resource to the chemical professional for handling chemicals, safe facilities, designs, and operations.

**Agenda:**

- Welcome to Members, Associates, and Guests  
  - David

- Review of Minutes from August 15, 2009 meeting in Washington, DC

- Update on Eye Protection  
  - Pat Redden

- Updates on other Starting with Safety Presentations  
  - Pat Redden et al.

- Issues about Safety Trifold redesign  
  - David & Marta

- Discussion of Survey with SocEd and CHAS  
  (Potential recommendation related to UCLA accident)  
  - David

**Old Business**

- Update on plans to publicize Committee Publications  
  - David & Marta

**New Business**

**Future topics:**

**Adjournment**
Partnerships Subcommittee

Purpose: To help fulfill the Committee mission with respect to providing advice to other ACS units on chemical safety matters.

The Partnerships subcommittee looks at existing and potential liaisons with other organizations inside and outside ACS. Examples include the Reactives Chemical Hazards Alliance, the OSHA Process Safety Alliance, and the US Chemical Safety and Hazard Board. This subcommittee also considers how to expand the use of CCS information beyond the traditional limit of Society membership.

Agenda:

1. Welcome to members/associates/guests – Ken
2. *Chemical Safety for Small Businesses* manual, 3rd Edition – We have posted the text of this manual on our website.
3. ACS Ethics Committee – we have been asked to partner with this committee. This committee meets on Sunday from 11:00 AM to 5:00 PM in the San Francisco Marriott Marquis.
4. Projects and directions for Partnerships Subcommittee for the next two to three years: Research Chemicals Hazards Management Alliance; *Developing a Chemical Hygiene Plan* (takeover hardcopy or website publication?); etc.
5. International Year of Chemistry - 2011
6. Active Partnerships – American Biological Safety Association (Erik), Division of Nuclear Chemistry (new contact), Committee on Community Activities (new contact), Center for Disease Control and Prevention (AI), CHAS Division (Bob), and AIHA (Doug).
7. Comments on Texas Tech lab incident.
8. Other Old Business
9. New Business
10. Announcements – CCS Full Committee Meeting on Monday AM. Symposia of Interest (CHAS): Teaching Safety, Sun PM and Wed AM; Safety in the Undergraduate Classroom, Monday PM; Laboratory Design & Operation,
Tues AM; Biofuels-Benefits and Pitfalls, Tuesday PM; Ask Dr. Safety re Reproductive Hazards, Wed AM. All CHAS sessions at the Moscone Center. SCHB: Algae as Feedstock for Energy, Chemistry & Environmental Remediation, Sun PM; Sustainable Energy Sources & Light-Footprint Usage, Tues AM; Sustaining a Work-Life Balance, Wed PM. All SCHB sessions at the Moscone Center. ENVR: Nanoporous Materials for Environmental Applications, Sun PM and Mon AM and PM; Nanotechnology: Sustainable Solutions for Potable Water, Tues AM and PM. ENVR sessions at Parc 55. I&EC: Nanotechnology and the Environment, Sun and Mon, Moscone Center.

10. Adjournment
Subcommittee on Safe Practices

**Purpose:** The partnerships subcommittee helps fulfill the Committee mission with respect to providing advice to other ACS units on chemical safety matters.

**Agenda:**

Welcome

Summary of two projects progress

- Incorporating sustainability into HS curriculum (No progress since last meeting - dropped from further discussion).
- Revisiting and recommending Chemical Safety Levels

Summary of subgroup conference call of 9 February 2010

Defined goal: Develop an interactive web-based tool to assist EH&S professionals to assign Chemical Safety Levels to various spaces in a workplace.

- Define criteria and definitions
- Develop tool

CSLs provide a common language for non-safety professionals to talk about risk associated the workplace.

UVM Assigning CSLs based on ventilation needs of the space (First Cut - based on a Labs21 conference).

- CSL 1: no specific ventilation required
- CSL 2: General ventilation required
- CSL 3: Laboratory Chemical Hood required
- CSL 4: ??

Question was asked - based on ventilation only: Answer: No - just a starting place. Requires a more holistic approach.

Marching order for SF Discussion:

1. Define what you think CSL 1 through 4 should mean, 4 is most severe.
2. Cite 3-4 specific examples of work practices for each level.
Committee on Chemical Safety

238th National American Chemical Society Meeting
Committee on Chemical Safety
Washington DC
Meeting Minutes
Monday, August 17, 2009


Guests: Jean Delfiner, Irene Cresa (Flinn Scientific, Dir. Of Technical Services), Louise Lawter, CEPA, and Dr. Jay Young

Meeting called to order at 8:30 a.m.

ANNOUNCEMENTS:

Jay Young has been selected as an ACS Fellow; he was nominated by CCS and CHAS

Acknowledge Wayne Wolsey for his service to CCS. This is his last meeting.

David Katz has been selected as the recipient of the Helen Free Award.

Approval of Minutes

Minutes of the Salt Lake City Combined Open Meeting and Executive Session on Monday, March 23, 2009, are approved with no comments or corrections.

Chair’s Report – Dr. Laurence J. Doemeny

1. The 5-year review of the Committee by the Committee on Committees has been completed. Larry has received a draft version of the confidential report. This review was very favorable. Larry thanks the former Chairs, consultants, and members for their efforts to which he attributes the favorable review. The only suggestion was for more strategic planning on part of the committee. To address this issue the executive committee thinks we can use material from the administrative manual to create a stand alone document to address this concern. This will be reviewed and updated at CCS meetings.

2. A written report to Board and Council has been prepared and is attached to the agenda. Larry will also make oral report at the Council meeting on Wednesday morning.
Staff Liaison’s Report – Dr. Marta Gmurczyk

1. Report on distribution of Committee publications on page 26 of the 2009 Fall Meeting Agenda Book
   a. Inventory report - need to reprint SA\textit{CL}; volume I and II. Volume I is sold out.
   c. There has been an increase in revenue of nearly 50\% (from \$10K to \$15K); Marta has noticed that academic institutions are contacting ACS more and believes this is because they recognize the value of our resources.
   d. Jean Delfiners inquires as to what percentage of revenue is retained. Marta answers that CCS must return \$20K to ACS; if there is any excess funds after this and the CCS expenses they will be used to reprint CCS materials.

2. Marta will be attending 2 NSTA conferences in the Fall and will distribute CCS information.

Reports of the Subcommittees and Task Forces

Partnerships – Dr. Ken Fivizzani

- Process Safety Alliance - current Alliance will expire in 2010. September meeting will define a new mission statement and then CCS can make recommendation regarding future participation.
- \textbf{Chemical Safety for Small Businesses} manual, 3\textsuperscript{rd} Edition is complete. Joint SCHB symposium on Wednesday afternoon in the Washington Plaza Hotel
- \textbf{Prudent Practices in the Laboratory}- should be complete in 2010. Peer review of chapters is underway. Russ, Barbara Foster, Ken and Peter Reinhardt have worked on this revision. Chemical Safety summaries will be put on CD that accompanies the book. New sections include emergency planning and response. Outside review will follow. John Palmer asks if there is information on pregnancy in the lab in the new edition. Russ explains that each person has only read 2 chapters so he isn’t familiar with all of the content but suspects that it is covered.
- International Year of Chemistry is 2011 there is a petition circulating to ask the US Postal Service to issue a stamp to commemorate chemistry
- Wayne reports on the Committee on Community Activities
  - Science Café on Monday evening
  - 2009 NCS theme is “It’s Elemental”
  - Earth Day themes-2010 Plants and 2011 Recycling

- Received comments on UCLA lab fire incident reviews. The subcommittee will respond and send some guidance to ACS; Ken and Larry met with Committee on Ethics; anticipate some proactive measures
• Jay Young has produced chemical laboratory profiles which are printed in the Journal of Chemical Education; we publish on them on web but there are some copyright issues which need to be addressed.
• Other Business – Joint CCS/CHAS Booth at Exposition

Resources – Dr. David Crumrine

Pat Redden has revised the Eye Protection DVD materials after receiving comments at the last meeting. There was some concern about the images. It was suggested that the images be colorized; the mannequin heads will be painted industrial gray and add more color to the buttermilk for greater contrast. The programs will be shown during the break and will comments are welcome.

Updates on other Starting with Safety Presentations Pat is working on revised version;

A brief discussion of the UCLA accident and whether safety should be part of annual Academic reviews? CHAS is working on a survey and we could partner with them. Involve other groups CHAL, CPT, Ethics for example.

Review of safety information on Wikipedia was suggested by Todd Nelson

Safe Practices – Dr. Harry J. Elston

The goggle cleaning document is complete and has been published; good feedback on the document. It was printed in the Tennessee Science Teacher’s Association quarterly publication

Larry Flinn sent a letter objecting to the material in the Reducing Risks in Secondary Schools document. He sent the letter to the ACS Board Of Directors. The letter is on page 41-44 in the 2009 Fall CCS agenda book. Larry Doemeny acknowledged the letter. Harry drafted the CCS response and it has been extensively reviewed and edited. The last sentence was clarify that that we invite Flinn to work with CCS on safety related issues . The Flinn letter pointed out a couple of errors which were corrected. We still need to verify one reference from National Academies of Science.

David Katz states he thinks that Flinn has valid points and that the Committee may not fully appreciate the concerns of the secondary education community.

A statement on handling reactive materials in research is still in progress. Russ Phifer and Neal Langerman are working on it.
Leslie has suggested that the subcommittee explore the idea of providing Sustainable lab experiments for secondary schools.

It was also recommended that the subcommittee work the Lab Waste Task Force develop a standard set of Chemical Safety Levels (CSLs). The subcommittee would provide peer review.

**Laboratory Waste Task Force – Erik Talley and Russ Phifer**

The White paper on p 28 of the 2009 Fall CCS Agenda Book. There have been recent changes in the Lab Waste Rule. The primary change is to statement #2 - Subpart K regulation for labs; this applies to academic labs only. The White paper needs approval by CCS prior to being sent to the BOD for approval in December. The Task Force recommendation serves as a motion and second. The question is called and Approved.

Handbook of Lab Waste Management – has doubled in length; as a result it requires more editing. A final draft will be submitted next month to ACS books for publication in 2010. Next year it will be available for copy editors and peer review.

Would like to develop risk based chemical safety levels for laboratories. Bob Hill has proposed this in the past. These would be similar to Biological Safety Levels where Level I the lowest risk and IV the highest. These would encompass engineering requirements, emergency response, etc. At the “Hood Symposium” in NYC earlier this year this topic came up and participants thought ACS should work on this. The subcommittee may seek out other groups including ANSI, ASHRA, and others. No plan to include radioactivity in the CSL.

Neal discussed how the CSL proposal will fit with GHS (classification of chemicals and mixtures). CSL are more facility related than for a specific chemical. The challenge will be how to implement in existing labs.

**Web Site Update – Mr. Erik Talley**

1. Web report
   b. Lots of traffic
   c. Erik would like to add more info and update current; send to him via email
   d. Add Resource page for handling pyrophoric materials

2. Transition to new Web URL: [http://chemistry.org/committees/ccs](http://chemistry.org/committees/ccs)
   a. No timeline for implementation; change in ACS resources (contractor) has slowed progress
b. So many links to other sites so it is important to ensure that the links work; Marta is working on this and should be seamless

Marta asks if the Committee would like a network. It would be closed but visible. Leslie would support this and notes it would be good for simultaneous review and distribute the work load over the group. Marta will set up and those who are interested can accept the invitation.

Reports of CCS Liaisons: (9:30 – 10:00 AM)

National Registry of Certified Chemists (NRCC) – Russ reports
  • CCHO workshop had 8 attendees on Saturday.
  • There are currently 350 certified CCHO.

ACS Division of Chemical Health and Safety – Dr. Robert Hill
  CHAS and CCS booth had lots of traffic on Sunday evening; there is a log for request for information, etc. and collecting info.
  NAS – promoting chemical safety in developing countries in draft (Russ and Bob Hill)
  ACS is recording sessions. CHAS awards session, Wed. GHS and SCB symposium – will be posted on the web
  Safety in academic institutions – Ed Miller is going to chair a subcommittee to investigate using a survey
  CHAS social Monday evening at Koshland
  Elsevier new database launch
  Election results – Ken Fivizzani new chair (2011)
  Awards –
    Tillmann
    Howard Fawcett
    College

Committee on Community Activities – Dr. Wayne Wolsey
  2010 NCW THEME – The Magic of Chemistry; Behind the Scenes
  2011 International Year of Chemistry – select 4 of previous NCW themes for each quarter

Committee on Chemists with Disabilities – Dr. Bob Gates
  Website is also being moved; all websites must be accessible with screen readers, etc. May want to request and ensure that CCS website is accessible. There are programs available to ensure material is accessible

Women Chemists Committee – Dr. John Palmer
  a. Written report on p. 50 of the 2009 Fall CCS Agenda Book
  b. Request for resources for working in chemistry during pregnancy.
  c. Johnson Controls Supreme Court decision –
  d. WCC set up links on web resources page
  e. Balance with legal requirements
f. Partnership with CEPA, CCS and WCC  
g. Explore further  

Presidential Committee on Ethics  
Ken and Larry attended the meeting on Sunday afternoon. They are interested in UCLA; example of Aberdeen Proving Ground who violated environmental laws – 3 engineers were convicted; now engineering schools teach ethics using this example  
    Develop case studies  
    Want to work with Committee On Ethics, in addition to CHAL, etc.  
Proposed partnership was well received  

American Industrial Hygiene Association - Dr. Doug Walters (not attending)  
- AIHA participation is decreasing in their meetings; UNC is minimizing IH program  
- This may put additional requests on CCS for resources.  

BREAK (10:00 -10:15)  

Old Business (10:15 – 10:30 PM)  

Update on a Schools Chemical Cleanout Campaign (SC3) –  
Russ Phifer and Dr. Larry Doemeny  
    Written report on p. 34 of the 2009 Fall CCS Agenda Book  
    Joint program, twice a month have conference call with EPA; focus group Tuesday afternoon for industry members who can help; local knowledgeable chemists help secondary schools manage their chemical inventory; No EPA budget, volunteer program, EPA website/SC3  

Alliance with OSHA on “Process Safety” - Dr. Neal R. Langerman  

Met August 6th; Alliance has on it’s website best practice resources including self audit guidance and check list. Procedure for isolation of process equipment beyond lock out tag out; general safety best practice on preventing accidents from vehicle impacts (fork lift incidents); incident investigation guidelines currently Neal has proposed revising for pilot plant and lab scale (2 yrs); UCLA scene was compromised is an example of why it is needed.  

Webinars – process safety failure indicators  

Reactives workshop had 10 attendees at the mtg. co-sponsored by ACS  

Alliance terminates in 2010 – lots of OSHA turnover. Need to renew of in Jan. 2010; Sept conf. call to discuss Alliance future; Neal will then make a recommendation to CCS about recommitment to Alliance.
New Business

CCS Strategic Plan

Extract from Operations manual; review at each meeting

1. Response to the letter from Flinn Scientific. Edits previously discussed
2. Determining the State of Safety Attentiveness in Academic Institutions work with CHAS
3. Revisions to the Eye Protection Presentation review following meeting
4. ACS’s International Year of Chemistry

Resources for pregnancy in the lab; reproductive hazards in the workplace and family leave; guidance for employers; provide resources regarding these issues; exposure to chemicals in breast milk; Joint project with CCS, CEPA and WCC.

Information Items

Upcoming ACS Meetings:

- 239th ACS National Meeting & Exposition
  March 21-25, 2010, San Francisco, California
- 240th ACS National Meeting & Exposition
  August 22-26, 2010, Boston, Massachusetts
- 241st ACS National Meeting & Exposition
  March 27-31, 2011, Anaheim, California

Adjourn 11:10 a.m.
Committee on Chemical Safety
Partnerships Subcommittee Report
Saturday, August 15, 2009

Subcommittee member attendees: Joseph Antonucci, Kenneth Fivizzani, Robert Gates, Al Hazari, Erik Talley, and Wayne Wolsey. Other attendees: Lawrence Barton (CONC Liaison); Neal Langerman, CCS Consultant

The meeting began at 7:12 PM. Process Safety Alliance (Neal) – the mission of this alliance is to raise awareness of process safety. Neal is the CCS liaison. At the most recent meeting of alliance members, the OSHA representative announced that the current alliance will expire during 2010. Alliance members have to renew their participation in the alliance. When Neal gets an updated mission statement, CCS will have to decide if we wish to continue in this alliance. A meeting in September will result in a new mission statement for the alliance. Neal will communicate the statement to us. CCS will have to decide if the ACS should continue in this alliance. We will make a recommendation to ACS about this.

Chemical Safety Manual for Small Businesses, 3rd Edition – Ken reported that this manual has been published and is available. The 3rd Edition will be posted on the website, but the cost of the booklet is low enough ($2.50 per copy) to encourage purchase of individual copies. The initial printing was 2000 copies. Ken noted that at the Washington meeting SCHB is sponsoring a symposium centering around the Chemical Safety Manual for Small Businesses on Wednesday afternoon.

Ken reported that Prudent Practices in the Laboratory-3rd Edition will be published late in 2009 or in 2010. He, Russ Phifer, Barbara Foster, and Peter Reinhardt are all on the committee for this book update. The draft of the revised book is circulating among committee members for review; the draft will be sent next to outside reviewers, some of whom may be CCS members.

Committee on Community Activities (CCA): Wayne attended part of the CCA meeting today. There will be a Science Café on Monday from 6:30-8:00 PM, The topic for discussion is the secrets of the universe. The Earth Day theme in 2010 is plants (“the green machine”). The 2009 theme for National Chemistry Week will be “It’s Elemental. Recycling is the 2011 Earth Day theme; 2011 is the international year of chemistry. ACS wants CCA to be one of our most visible groups during the 2011 International Year of Chemistry. There is a petition circulating to ask the Post Office to issue a commemorative stamp honoring chemistry.

Wayne also reported that the Division of Nuclear Chemistry is having a three-day symposium on nuclear energy and the environment.

The Sanji family sent a letter to Madeleine Jacobs and the Board of Directors asking ACS to censure Prof. Harran. There have been suggestions that
ACS Grants and Awards should require inclusion of safety performance data on grant proposals. It would not be their intention to deny a grant solely on the basis of safety deficiencies. But safety could be a deciding factor in selecting one of two or more applicants that are otherwise equally qualified. ACS is not sure how they will respond to this letter. CCS will probably take the initiative to send a letter to Madeleine Jacobs. As another follow-up resulting from this issue, Larry and Ken will meet with a representative from the ACS Committee on Ethics on Sunday afternoon.

Jay Young’s CLIPs are published in Journal of Chemical Education, CCS has posted many of them on our website and would like to continue publishing these on the CCS website, but there may be some copyright issues. Jay would like us to do this. We will have to speak with someone at the Journal of Chemical Education about this.

All CHAS symposia will be in the Washington Plaza Hotel – Diplomat Room.

Monday, August 17, AM, CHAS Award Symposium.

Tuesday, August 18, AM, Hazardous Waste Regulatory Relief for Academic Institutions; School Chemical Cleanout Campaign. PM, Emerging Trends in Laboratory Ventilation.


Tuesday, August 18, AM and PM, ENVR, Biogeochemical Processes of Mercury in Natural and Contaminated Environments, Marriott Metro Center.

Adjournment: The meeting was adjourned at 8:25 PM.

Submitted by Ken Fivizzani, Subcommittee Chair
Committee on Chemical Safety
Safe Practices Subcommittee Report
Saturday, August 15, 2009

CCS Subcommittee Meeting – 15 August 2009
Members in attendance: George Lechner, Russ Phifer, Doug Walters, Lester Bynam, Larry Doemeny (Ex-officio), Linda Stroud, Robert Hill, Leslie Bordas, David Katz, Celia Williams, Harry Elston.

Review of 2009 projects

1. Goggle cleaning document

The Goggle Cleaning document was completed and published after the last subcommittee meeting (Salt Lake City, UT, Spring 2009). There has been some good feedback on the document. Al Hazari pointed out that his local section reproduced the bulk of the guidance document in its local section newsletter.


In June 2009, the CCS received a letter from Larry Flinn, CEO of Flinn Scientific vehemently objecting to the material that was contained in the guidance document, “Reducing Risks...” which is available on the CCS Website. Flinn’s letter was not only addressed to the CCS, but also to the ACS Board as well. The ACS Board deferred to the CCS for a response. Flinn’s letter is available in the DC Agenda Book.

Larry Doemeny, CCS Chair, acknowledged the receipt of Flinn’s letter and told him a response was forthcoming.

Harry Elston took the lead in drafting the CCS response to Flinn. That letter, which appears in the CCS DC Agenda book was discussed among the SP Subcommittee. It was suggested that the letter modify the last sentence to more clearly invite Flinn to work with the CCS accomplish its stated mission. The SP Subcommittee approved the modified letter 9:1 with one abstention.

Ongoing activities

The SP Subcommittee is working with CCS Leadership to draft a statement concerning the use of reactive materials in research. That statement is not yet ready.

Continuing projects

1. Leslie Bordas suggested that the SP Subcommittee explore the idea of providing more sustainable laboratory experiments for secondary schools. (“Sustainability” defined here as the philosophy to look at final product before performing the experiment in order to produce the least amount of waste in the safest manner possible.) Leslie Bordas, David Katz and Linda Stroud will flesh this project out more.
2. Russ Phifer recommended that the SP Subcommittee, in conjunction with the Lab Waste Task Force, develop a standard set of Chemical Safety Levels (CSLs) expanding these into a recommended document to present to organizations that develop current best management practices, such as ASHRAE, NFPA or AIHA. The SP Subcommittee will provide an outline for this project and provide peer-review for the CSL work product. Robert Hill, Doug Walters, Harry Elston, George Lechner, Lester Bynam and Celia Williams will work on this project. Russ Phifer will coordinate SP Subcommittee efforts with the Task Force.
Committee on Chemical Safety
Chair’s Report
239th ACS National Meeting & Exposition
San Francisco, CA
March 22, 2010

Just one year following the tragic and fatal burns to Sanji, a researcher at UCLA, another laboratory injury occurred at Texas Tech. You would think that people would learn and management would be more responsible. As the Committee Chair, I presented an oral report at the ACS Council last August emphasizing the need for more accountability and encouraged council members to read the C&EN article and especially the sidebars with the links to the testimonies of the Principal Investigator and post docs. Earlier, Ken Fivizzani and I met with an equally concerned Committee on Ethics about laboratory injuries as they relate to ethics and professional responsibility. We presented the committee a few examples where investigators were fined and received criminal sentences for their disregard for environmental and health and safety laws. Ethics, scientific integrity, health and safety are playing out in the world of global climate change as well. Regardless of your position on the subject and its consequences, clearly decisions on public health, society, and humanity are in the hands of governments who need untainted data to make decisions that will affect their countries and the planet. This is no time to fudge the data or to be simply sloppy in its presentation or review.

Despite these disappointments, there are encouraging signs. Following the explosion at Texas Tech University, the US Chemical Safety Board announced it would investigate the causes of the explosion. The CSB reports have significant impact to the Occupational Safety and Health Administration and will likely send a signal to all university administrators. We look forward to their report too and will try to make use of its data. Another encouraging development is addition health and safety criteria to the ACS award nomination process. CCS worked closely with the Division of Chemical Health and Safety to draft a letter to the ACS Board Committee on Grants and Awards reasoning that adherence to the ACS Chemical Professional’s Code of Conduct would be a necessary requirement. On December 28, 2009 we received a letter from the Committee on Grants and Awards that beginning in 2010, it will used the revised criteria.

About a year ago, I communicated to the editor of C&ENews concerns about photos depicting people in chemical laboratories without proper personal protection. The problem persisted and ignited a discussion on the Division of Chemical Health and Safety list-server. It turns out that many of the photos violating safety rules originated from ACS organizations. DCHAS and CCS sent a joint letter to the editor, C&ENews pointing out specific photos resulted in a favorable response. This exchange is included in the agenda booklet for your information.

A number of us had the opportunity to staff the DCHAS/CCS booth at the Exposition in Washington. Speaking for myself and probably for the others, it was a wonderful experience. The interest in laboratory safety was greater than I expected and we have an opportunity to engage in many discussions with the ACS members. While we had a sign-in roaster, it did not come close to reflecting the actual number of people who visited. It may be difficult to judge but the committee publication requests were greater than in past years and this may be a reflection on the interest generated by the booth and also the laboratory fatality at UCLA.
The subcommittees and Task Force are productive. They continue to produce useful publications and other media and forge relationships with ACS committees. As you can see, we are making progress but laboratory injuries continue and these cannot be considered a part of the chemist’s condition.
The ACS Committee on Chemical Safety
Report for inclusion in the Chemical and Engineering News, August 2010

In January 2009 the Committee on Chemical Safety was confronted with the tragic death of Research Associate Sheri Sangji. For more information about this tragic accident please refer to the August 3, 2009 issue of Chemical & Engineering News, particularly the electronic version where you can read statements relating to the investigation. The public, scientists, educators, and students have been contacting members of the committee demanding greater leadership from managers in the chemical workplace. That call has resonated with the committee which has reviewed the OSHA citations, the NIOSH report\(^1\) and the UCLA response\(^2\) to the incident and discussed findings at its recent meeting in Washington DC. The following is a summary of recommendations from the cited reports:

- Academic institutions should increase accountability and oversight, improve and expand safety outreach and training as well as improve laboratory design, inventory and recordkeeping.

- Laboratory personnel should follow proper procedures including wearing appropriate clothing and personal protective equipment (PPE) when using pyrophoric chemicals.

- Whenever possible alternative chemicals to pyrophoric compounds should be considered.

Clearly academic institutions must demonstrate leadership in holding its faculty, from presidents to deans to professors, accountable for operating its programs safely and educating future graduates in how to conduct themselves in a safe manner. The Committee welcomes suggestions from the ACS membership and the chemical community about providing information relative to management’s role in health, safety, and environmental matters, which will be considered at the committee’s next meeting.

Laurence Doemeny
Chair

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Let me begin by thanking American Chemical Society, President, Council, members, officers, and guests for the opportunity to speak to you this morning and give you an update on the progress of the Committee on Chemical Safety and on other matters confronting the chemical community.

The Committee on Chemical Safety, like other ACS committees, is composed of dedicated members, consultants, and advisors who have, over the years, contributed to the Committee’s many fine publications. In January 2009, for example, the Committee published the third edition of the *Chemical Safety Manual for Small Businesses* directed to businesses that may not have specialized expertise in chemical safety. Also this year the Committee published a guidance document on cleaning chemical goggles. The Committee work has great impact as evidenced by each year distributing more than 16,000 copies of its publications to secondary schools, community colleges, and colleges and universities.

Following the tragic death of Research Associate Sheri Sangji in January 2009, while working in a UCLA laboratory, there is a call from the public, scientists, educators, and students demanding greater leadership from academic administrations, faculty and managers in the chemical workplace. That call has resonated with the Committee. Clearly academic institutions must demonstrate leadership in holding its faculty, from presidents to deans to professors, accountable for operating its programs safely and educating future graduates in how to conduct themselves in a safe manner. We must use our skills as problem-solvers and researchers to determine what works best for our respective organizations to safeguard the health and safety of people and the environment. For more information on this tragic death, I refer you to the August 3, 2009 issue of *Chemical & Engineering News*, particularly the electronic version where you can read various statements relating to the investigation. The Committee welcomes
suggestions from the ACS membership and the chemical community about providing information relative to management’s role in health, safety, and environmental matters in the workplace.

Please submit your suggestions or request further information to me or Marta Gmurczyk, Staff Liaison, at telephone number (202) 452-2105, or via e-mail at M_Gmurczyk@acs.org.

Respectfully submitted,

Dr. Laurence J. Doemeny
Chair, Joint Board/Council Committee on Chemical Safety
Inventory of CCS Publications:

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Two publications Safety in the Elementary (K-6) Science Classroom and Safety for the Introductory Chemistry Students Brochure need to be reprinted. Because I am not able to locate the files that can be used for reprinting, These publications need to be redesigned, which provides the committee with an opportunity to update them with more current pictures and possibly some revisions to the text. The proposed design of the Introductory Chemistry Students Brochure is attached in the agenda for your information. I will be working with the Resource Subcommittee to finalize this project.

Sales of the CCS Publications:

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Safety Audit Inspection,  9.00  0.00

Management
Report –
December
2009

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The CCS ended the year with $28,054 in sales of the publications. These funds were used to reprint SACL, produce the 3rd edition of Chemical Safety Manual for Small Businesses, redesign the Safety for the Introductory Chemistry Students as well as some of the meeting expenses.

2010
January 01, 2010 - February 28, 2010

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The CCS Website

The CCS website has been moved to the acs.org and its direct address is:

http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_TRANSITION MAIN&node_id=2228&use_sec=false&sec_url_var=region1&__uuid=3bb12863-f2fd-4458-87b1-cd040938455d

which obviously is impossible to use in our communications. The following redirect had been implemented for this website:

www.acs.org/safety

www.chemistry.org/safety (this address is printed on the beautiful CCS wrist bracelets which can be now proudly used again.)

Also the address on the previous website is redirected to the new one, so all bookmarks should work.

I would like to thank you Erik Talley for all his dedicated work on this project. Eric worked closely with my colleagues in web strategy on designing the new architecture for the website, inventorying the content on the new website, and identifying missing information. Erik will continue to serve as the CCS webmaster, and approving the new content, which I will be posting on the new website. I will continue to work with my colleagues on linking to the new website from other acs.org content.
Committee on Chemical Safety

Reports of Subcommittee and Task Forces

Partnership, Resources, and Safe Practices Subcommittee will distribute their reports and present them orally.

CCS Laboratory Chemical and Waste Management Task Force Report
Spring 2010

Chair, Erik Talley
CCS Liaison, Russ Phifer

Activities:

1. Task Force members wrote the following 7 articles on various lab waste issues that have been submitted to the Journal of Chemical Health & Safety:
   - **Russ Phifer - An overview of the first 30 years of RCRA** - The Resource Conservation and Recovery Act was passed by the US Congress in 1976; the law charged the newly created Environmental Protection Agency with developing regulations to control the disposal of hazardous wastes from “cradle to grave”. The RCRA regulations went into effect on November 19, 1980. The ensuing 30 years have seen dramatic changes in how waste is managed both at the generator’s site and in terms of ultimate disposal. This paper will look at those changes and grade the overall progress that has been made to reduce improper disposal.
   - **Kathy Benedict - Everything You Always Wanted to Know about Hazardous Waste But Were Afraid to Ask (with apologies to David Rubin, M.D.)** - An “environmental innocent” moves to the Big Ten and learns more than she ever imagined about managing academic hazardous waste programs. Starting with the questions she should have asked during her interview to her thoughts on her first year anniversary on the job, this gripping tale paints a poignant picture of the end of academic innocence and the onset of environmental maturity.
   - **Todd Houts (Article #1) - Commonly Overlooked Wastes** - Some examples (including the latest) could be refilling alcohol-based hand sanitizers and tossing the old one if it is no full (a new problem for MU since Campus Facilities decided to mount these IN EVERY BUILDING without consulting my program); aerosol cans; auto fluids; custodial supplies; test kit residues, etc.
   - **Todd Houts (Article #2) - Evolution of a Campus Laboratory Recycling Program (Chemicals & Equipment)** - Would include the early failures of implementing chemical recycling up through our current program that averages around $175,000 in avoided chemical purchase costs (plus unknown disposal costs) but also has been expanded in the last few years to include recycling of discarded lab glassware & equipment.
   - **Erik Talley and James Crandall – Making a Non hazardous laboratory waste determination.** - How do you know if a chemical waste is non-
Committee on Chemical Safety

hazardous and otherwise acceptable for drain or trash disposal? This is an important decision which the EPA states must be conducted by a properly trained hazardous waste professional and failure to do so may result in fines up to $14,500 per occurrence. Institutions have shaped their drain and trash disposal policies to not only satisfy EPA requirements but also state and local municipalities receiving these wastes. Some institutional policies may state the "no chemicals may be drain or trash disposed" but what about salines and buffers, common non-hazardous chemical wastes, which are routinely poured down the drain. Other policies are based on restrictive categories which are prohibited from drain or trash disposal and a waste must be evaluated to see if it falls under anyone of potentially many restricted categories. Rather than promoting a restrictive-based disposal policies, the Weill Cornell Medical College disposal program focuses on the pre-determination of approved chemicals for drain and trash disposal. EPA-trained hazardous waste professionals in Environmental Health and Safety pre-determine which chemicals and wastes are non-hazardous and researchers simply confirm their waste is listed as non-hazard prior to drain or trash disposal. If it is not, they then know it must be collected as a hazardous chemical waste. A process has been created for laboratory personnel to add chemicals to the list through EHS.

- **Pete Reinhardt and Brenda Armstrong - Managing Laboratory Biohazardous Waste Using a Large On-Site Autoclave-Shredder** - In 2003 Yale University installed a large autoclave-shredder to manage biohazardous waste from laboratories at the Yale School of Medicine. The unit, which operates five days a week, was installed to comply with Connecticut law, control waste disposal costs, provide an alternative to commercial disposal firms, and limit liability for off-site waste disposal sites. Connecticut state law requires that biohazardous, medical and infectious waste be treated and rendered unrecognizable. Yale’s Office of Environmental Health and Safety operates the unit, as well as collects and transports the waste from the laboratories. While BL1 and BL2 medical waste and sharps are autoclaved in the unit, anatomical/pathological and chemotherapy wastes continue to be disposed of via a commercial disposal firm. After autoclaving and shedding, the waste is disposed of as normal trash—which is usually sent to a local mass burn plant (waste to energy). This paper will describe Yale’s medical waste collection system, source separation and the unit’s operation as well as costs and other operational consideration.

- **Ralph Stuart –Emergency Response Training** - In response to several significant laboratory incidents, UVM Environmental Safety staff developed a training for new laboratory workers that discusses how to respond to common laboratory emergencies. The training uses a scenario-based approach that asks the participants to consider not only physical aspects of the situation, but emotional and practical as well. Since this training has been in place, response to laboratory emergencies has improved, not only on the part of laboratory workers, but also from Environmental Safety staff and the local Fire Department. This article will discuss the format of the training and the reasons for the improvements we've seen.
All of the articles have been received by the Journal and most are finalized. They will be printed together in the November/December 2010 issue of the Journal.

2. The Task Force has completed the initial first draft of the Laboratory Waste Management Handbook. It will be forwarded to ACS Books prior to the San Francisco meeting. A meeting is being scheduled with ACS Books to determine next steps and a timeline for publication.

4. The Task Force’s White Paper, which codifies ACS policies on laboratory environmental health and safety issues, was approved by the ACS Board in December, 2009. A copy of the approved document is attached to this report.

A summer meeting of the Task Force is planned to address the Chemical Safety Levels issue and provide a draft document to the Committee as well as to the Division of Chemical Health & Safety for further review and revision. Locations are being explored; it is hoped an academic member may be able to host the meeting to substantially reduce expenses.
REGULATION OF LABORATORY WASTE

ACS POSITION

Environmental regulatory burdens are inappropriately placed on many academic, commercial, and government laboratories when regulations designed to address large-scale industrial operations are applied to laboratories. Research, development, instructional, and service laboratories generate a broad range of small quantities of hazardous wastes, but are forced to individually manage each type of waste with the same rigor applied to those who create large amounts of relatively few wastes. By applying an industrial regulatory scheme to laboratories, unintended, ineffective, and inappropriate burdens are placed on these facilities.

The American Chemical Society is committed to the health and safety of both humans and the environment in all of the operations of the chemical enterprise, but inappropriate regulation of laboratories hampers their efficiency and effectiveness and slows the progress of science and technology. To this end, the American Chemical Society makes the following recommendations:

Consistent Interpretation of Regulations by Local, State, and Federal Agencies

The U.S. regulatory system involves multiple federal, state, and local regulators. This often leads to inconsistent interpretations and makes development of “best practices” for waste management treatment difficult. State regulations must be at least as stringent as related federal regulations, and local regulations at least as stringent as related federal and state regulations. For consistency, when a local or state regulation is identical to the federal, that regulation should be interpreted and enforced in an identical manner.

- ACS encourages consistent interpretation and enforcement of regulations at the local, state, and federal levels.

Implementation and Expansion of the Environmental Protection Agency’s (EPA) Subpart K Regulations for Laboratories

The recently promulgated Subpart K regulations for academic laboratories represent a good, first step towards needed regulatory relief for laboratory facilities. However, until states with authority to regulate hazardous waste activities adopt these rules, they will not be accessible to most laboratories. State environmental agencies need to be aware of the special issues laboratories face in complying with the hazardous waste regulations. In addition, these rules should also be applied to commercial and industrial laboratory facilities that face the same unique challenges as academic facilities. Additional regulatory relief is needed in the form of Subpart K amendments, including the elimination of the six-month limit on storage of waste in the laboratory. This is an onerous requirement that can significantly increase handling of waste without any apparent benefit to either regulators or the regulated community. Laboratory treatment of hazardous waste without a permit to minimize waste and reduce costs has been a

The American Chemical Society is a non-profit scientific and educational organization, chartered by Congress, with more than 160,000 chemical scientists and engineers as members. The world's largest scientific society, ACS advances the chemical enterprise, increases public awareness of chemistry, and brings its expertise to state and national matters.

American Chemical Society, 1155 Sixteenth Street NW, Washington DC 20036, 202-872-4500, www.acs.org/policy
Fall 2009 Web Report
Committee on Chemical Safety

The CCS website at http://membership.acs.org/c/ccs has been moved to the acs.org portal and the new address is www.acs.org/safety. The visitors to http://membership.acs.org/c/ccs are being automatically redirected to the new site. The acs.org site has the look/feel of the acs.org and is also searchable. Erik worked extensively with acs.org staff to organize the content on the new website as well as assure that the all documents have been transferred to the new website.

The content of acs.org/safety website has been organized as follows:

About
Provides an overview of the mission of the committee as well as the chair welcome message.

Publications
Lists chemical-safety related publications including pricing information as well as Order Form. The publications are categorized as follows:

- White Papers and Policy Statements
- General Safety Reference
- Classroom Safety
- Workplace Safety
- Laboratory Safety
- External Publications

Safety Practices & Recommendations
Lists resources encouraging safe practices in chemical activities and include Chemical Laboratory Information Profiles (CLIPs), Chemical Storage Resources, Goggle Cleaning Recommendations, Cut-Resistant Gloves, Latex Allergy Information, Security Vulnerability Checklist for Academic and Small Chemical Laboratory Facilities, Chemical Storage Resources and other.

Symposia & Activities

Members & Subcommittees
This site also includes information about the Task Force.

Please forward ideas or additional materials to be placed on the website to Erik Talley at ert2002@med.cornell.edu. Marta will be posting the content received from Erik on the new website.
Reports of CCS Liaisons

National Registry of Certified Chemists (NRCC)
Submitted by Laurence Doemeny
Robert Alaimo’s term to the NRCC ended and he was replaced by Laurence Doemeny as the ACS representative of the NRCC Board. Doemeny’s term began January 1, 2010.

In 2009, the State of Tennessee approved NRCC exams for Clinical Chemists, Clinical Technologists, and Toxicological Chemists for licensure purposes. The NRCC reports that interest continues to be strong in obtaining and maintaining certification.

CHAS-CCS Liaison Report to CCS
238th ACS National Meeting
Washington, DC
CHAS Executive Committee Meeting Summary – August 16, 2010
Submitted by Robert H. Hill, Jr.

Key Issues for CCS:

- CHAS/CCS Booth at Exposition this meeting, Aisle 13 – CHAS & CCS members working this. Purpose to solicit interest and answer questions in chemical safety, and create interest in CHAS membership.

- Two NAS Committees
  - Prudent Practices: CHAS involvement – Ken Fivizanni, Russ Phifer, Barbara Foster, Peter Reinhardt; Document under external review to come out late 2009 or early 2010
  - Promoting Chemical Safety and Security in Developing Countries: CHAS involvement – Russ Phifer, Bob Hill; focus on laboratory safety and security; final draft in preparation

- ACS Recording Washington National Meeting Sessions
  - CHAS Awards Symposium – Monday AM
  - Global Harmonization of Safety (Joint SCHB/CHAS) – Wednesday AM
  - Chemical Health, Safety, and Security for Small Businesses (SCHB/CHAS) – Wednesday PM


- CHAS/SCHB Social, Today (Monday), August 17, 2009, 5-7:00 pm, Marian Koshland Science Museum, NAS, 6th Street and E Street NW (Thanks to our sponsor AirClean Systems and NIOSH)

- CCS Taskforce with Safety Practices Subcommittee will be working on a project chemical safety levels.

- Elsevier launching new data base on hazardous chemicals, called HazMat Explorer – compiled from Breterick’s, Sittigs, and others sources. Inquire at booth with Kos or Carol Redden – product managers
• Journal of Chemical Health and Safety, CHAS’s publication, is seeking technical contributions (from CCS members and others) concerning chemical safety and health. Contact Dr. Harry Elston, Editor, at helston@fgi.net.

Other Issues/Topics of Interest to CCS:
• Electronic balloting results: Ken Fivizanni (2010 Chair-Elect); Ralph Stuart (2010 Secretary); At Large Members:
• CHAS 2009 Awards (Monday morning Awards Symposium)
  o 2009 College & University Award: Wellesley College
  o 2009 Tillmanns-Skolnick Award: Ralph Stuart
  o CHAS Award: U.S. Department of State, Chemical Security Engagement Program (Sandia National Laboratories, Global Security)
Committee on Chemical Safety

Presidential Committee on Ethics Liaison Report to CCS
Dr. David J. Chesney

The following is an email to the Chair CCS. The Partnerships Subcommittee agreed to collaborate on this effort and will report on the progress at future meetings. The email with attachments if for information purposes.

From: dave chesney [davechesney@gmail.com]
Sent: Tuesday, January 26, 2010 1:14 PM
To: Laurence J. Doemeny; Marta Gmurczyk
Subject: Safety and ethics
Attachments: Aberdeen Three.pdf; Sheri Sangji.pdf; The Intersection.pdf

Larry,

I have been mulling over how to forge a stronger relation between our committees. I thought that I might take a stab at constructing a new section of our Ethics web page that dealt specifically with safety and ethics. I have started with the Sheri Sangji/UCLA case last year and the 1985 case of the Aberdeen Three. These represent a first cut and I would like your feedback. I would also like to invite you to add a comment to each of these as the Chair of CCS.

As envisioned, the "Intersection" document would be the first web page of this new section to provide the introduction, with the cases individually linked at the end. I think reading the Intersection document will give you a perspective on how I'm approaching this.

The cases have been set up with an introduction, background reading (web links) and finally the relevant statements from PEG or APG with questions following.

I would appreciate comments, particularly on the format of the case questions. Keep an eye out for any factual errors that I may have incorporated inadvertently. Also, make sure you rein me in if I'm too far out of bounds.

This is all preliminary, but I plan on having something up on our web page before SF. You can pass these on to any interested members of your committee, if you want.

Thanks in advance. Are we going to meet in SF?
ATTACHMENTS

Professional Ethics And Chemical Safety – The Intersection

It may seem at first glance that there is no connection between ethics and safety. After all, “safety” implies a list of rules and regulations that we are required to follow to protect ourselves and everyone around us. These rules and regulations often have legal standing and are more than just a collection of best practices that have been compiled over the years by competent and concerned chemical professional for the betterment of their profession. Ethics, in contrast, seems sort of “fuzzy”; some people think one answer is right, some people disagree. In fact, we often observe that good people can have fundamental disagreements on individual issues of professional ethics. Many ethical positions are the result of an individual’s cultural background and applicable experience. So, where is the intersection?

There are policy documents put forth by the ACS that seek to give direction in conducting one’s professional interactions. These documents do not have the weight of law, but do have the significance of having been formulated by official ACS committees and task forces, and have received formal approval by the ACS Board of Directors. Principal among these policy documents are the Chemist’s Code of Conduct, the ACS Professional Employment Guidelines (PEG), and the ACS Academic Professional Guidelines (APG). In each of these are clear statements regarding the conduct of chemical professionals with regards to the culture of safety that is a vital part of every chemical enterprise.

Looking at these documents, it is clear that there are substantial ethical responsibilities incumbent to each chemical professional. It is not illegal to ignore (or be ignorant of) the provisions in PEG and APG that refer to chemical safety. However, because these are considered statements defining those actions that we term “professional,” the guidelines in PEG and APG fall into the realm of ethics. Is it ethical to ignore the provisions in PEG and APG? Are all cases alike? Are these guidelines inviolate? These are the questions that you, as an individual chemical professional, must answer in your own way, in your own time.

The situations in the following sections seek to illustrate the intersection of ethics and safety in the chemical profession. Questions are posed that may seem unfair or may make you uncomfortable. There may be no good answer for a particular situation. In other words, it’s not black and white, right or wrong – it’s the realm of professional ethics. With the Chemist’s Code of Conduct, PEG, and APG as your guides, we invite you to explore the following cases. Please comment back to us.

Sheri Sangjii/UCLA (link)

The Aberdeen Three (link)
Sheri Sangji/UCLA

Introduction
Sheri Sangji was only three months into her job as a research assistant in a molecular biology lab at UCLA when she was burned while working with t-butyl lithium. She died in a burn unit eighteen days later. Her accident and death has become a focal point for safety experts who claim that lax standards and training are pervasive in academic research labs.

According to the ACS Academic Professional Guidelines:

Students and postdoctoral associates should take personal responsibility for understanding, practicing, and promoting appropriate safety procedures.

The faculty member must take responsibility for establishing a laboratory environment consistent with the current best practices in chemical safety, including the workplace right-to-know law governing employees and students. Faculty members should use their expertise to assist university safety personnel in those situations involving chemical hazards or spills.

The institution should provide a safe working environment and promotion of a health- and safety-conscious atmosphere. Formal instruction on safe practices must be provided.

Background reading
A good overview of the incident in the LA Times
http://articles.latimes.com/2009/mar/01/local/me-uclaburn1

A very thorough review of the incident from Chemical and Engineering News
http://pubs.acs.org/cen/science/87/873sci1.html
Note the sidebar links titled “Incident Information.” These are all PDF files with the original witness statements, the incident reports, etc. Very informative, if depressing, reading.

Slate magazine asks the question: “What makes academic laboratories such dangerous places to work?” http://www.slate.com/id/2218825/

The definitive procedure for handling organolithium compounds, from the ACS Division of Chemical Health and Safety
http://members.acs.org/c/clsarchive/organolithium_in_labs.pdf

After Sangji’s death, UCLA formed a committee on campus laboratory safety. Here is a link to their report from Campus Safety Magazine

The “Aberdeen Three”

**Introduction**
This is a case in which the willful disregard of standard chemical safety, storage, and disposal rules by three chemical professionals resulted in the discharge of hazardous chemicals into the public environment surrounding the Aberdeen Proving Grounds in Maryland. They were all chemical engineers who should have been knowledgeable about the management of the chemicals used and the chemical waste generated. All three were tried and convicted in 1989 of illegally handling, storing, and disposing of hazardous wastes in violation of RCRA, the Resource Conservation and Recovery Act.

Chemical professionals have a clear mandate to use their unique position to protect their community and the environment. From the ACS Professional Employment Guidelines:

*Chemical professionals are responsible for working safely and employing all necessary safety procedures in the course of their professional duties. The employer is responsible for providing physical facilities that enable the chemical professional to work safely, comfortably and efficiently. The chemical professional and the employer should work to reduce risks to the environment. The employer is responsible for providing appropriate information, physical facilities and equipment that enable the chemical professional to work safely, comfortably and efficiently. The chemical professional is responsible for seeking information on the safe handling of chemicals and equipment with which they work.*

*The chemical professional should inform the employer and coworkers in writing and/or verbally, as appropriate, of any immediate or potential safety or health hazards. All appropriate personnel should be trained in the proper handling of material and equipment and all pertinent safety procedures to minimize risks.*

*The chemical professional and the employer should both work to minimize risks to the environment. The chemical professional and the employer should strive to ensure that products and processes are safe and that potential hazards to human health or the environment, including air emissions, water effluents, and discharges to land are minimized, properly identified and handled in such a way as to protect the environment. Employers should conduct appropriate environmental studies to ensure the health and safety of their workers and the surrounding community.*

While the magnitude of the chemical release in this incident is probably greater than what would be normally encountered in an academic setting, it is certainly of a scale that could be encountered in an industrial setting and therefore has direct applicability to a wide range of our colleagues, particularly students getting ready to graduate and take that first job.
I stepped down as Liaison to the American Industrial Hygiene Association effective January 2010. I have recommended that Bill Galdenzim of Boehringer-Ingelheim replace me as Liaison. Bill is a member of both the AIHA and the ACS Division of Chemical Health and Safety and also the AHA Laboratory Health and Safety Committee. Such changes are usually approved by the AIHA at the annual meeting.

The next AIHA meeting is May 22-27, 2010 in Denver, followed by Portland, Indianapolis and Montreal in subsequent years. AIHA membership has experienced a decline in the last several years. This has been attributed in part to an aging membership and also the downturn in the economy. The AIHA has now formed a formal alliance with the American Conference of Governmental Industrial Hygienists (ACGIH). The ACGIH is comprised on members who are unaffiliated with industry or special interest groups.

The AIHA/ANSI Z 9.5 Sub-committee on Laboratory Ventilation has completed its revision of the 2003 version of the Z 9.5 Laboratory Ventilation Standard. The members of the sub-committee and the parent ANSI Z 9 Ventilation Committee have accepted the revised Standard. A considerable number of public comments have been received and are in the process of being reviewed and formally addressed. It is anticipated that the new Z 9.5 Standard will be finalized and available for publication after the Denver AIHA meeting in May.

March 1, 2010
Old Business

December 28, 2009

Dr. Laurence Doemeny, Chair
Committee on Chemical Health & Safety

Dr. Neal Langerman, Treasurer,
Division of Chemical Health & Safety

Dear Laurence and Neal,

As Chair of the ACS Board Committee on Grants and Awards (GA&), I would like to again thank you for your concerns regarding the safety records of our national award winners. In response to your concerns, G&A has revised letters to Selection Committee members, to include the following:

“The selection cycle for the 2010 awards will begin in April 2009. Members of selection committees for all ACS awards are anonymous and, therefore, I ask you to keep your appointment confidential. Prior to casting your vote you will be asked to take part in a teleconference review with other members of the Selection Committee. In preparation for the teleconference, please review the nomination documents for all the nominees and then identify 3-5 individuals whose accomplishments, you believe, best meet the award’s description including demonstrated adherence to the ACS Chemical Professional’s Code of Conduct. During the teleconference, I urge you to discuss the research and professional efforts which you found should be recognized by receipt of this award. Outside of the teleconference, confidentiality of your appointment must be maintained.”

In addition, G&A is preparing to revise the national awards nomination form. To assist with this effort, a Subcommittee on Nominations will be appointed by the 2010 G&A Chair, and the Subcommittee will be tasked with revising the form used to nominate individuals for an ACS national award.

As I complete my three-year term as Chair of G&A, I would like to take this opportunity to thank you for all of your efforts to ensure safety in chemistry laboratories across the nation.

Sincerely,

Eric C. Bingham

Committee on Chemical Safety
2011 International Year of Chemistry

Overview
The International Year of Chemistry 2011 is a United Nations-designated worldwide celebration of the achievements of chemistry and its contributions to the well-being of humankind, and is one of a series of special years designated to highlight the importance and contributions of science to the world community. Past international years have included the International Geophysical Year (1957-1958), the International Polar Year (2007-2008), the International Year of Physics (2005), and the International Year of Astronomy (2009). Achieving the IYC designation from the U.N. required a multi-year international effort. There has never before been an International Year of Chemistry. No International Year designation has ever been approved by the U.N. for a second time, so this is most likely a once-in-a-lifetime event.

The IYC 2011 initiative is being led by the International Union of Pure and Applied Chemistry (IUPAC) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Under the unifying theme “Chemistry—our life, our future,” IYC 2011 is intended to offer a range of interactive, entertaining, and educational activities for all ages. The International Year of Chemistry is intended to reach across the globe, with opportunities for public participation at the local, regional, and national level.

The US celebration of IYC 2011 is being coordinated through joint efforts of the National Academy of Sciences (through its Board on International Scientific Organizations and its Board on Chemical Sciences and Technology), and the American Chemical Society (through its Office of International Activities and its Education Division). Both organizations share the long-term and continuing goals of assuring the strength of the U.S. scientific and technical community in chemistry, chemical engineering, and related fields; and of creating a scientifically literate public in the United States for the benefit of the Nation and for the continued good of the scientific enterprise. These goals overlap significantly with the IYC 2011 goals of increasing the public appreciation of chemistry, increasing the interest of young people in chemistry, and generating enthusiasm for the creative future of chemistry.

IYC 2011 goals are to

- Increase the public appreciation of chemistry in meeting world needs
- Increase interest of young people in chemistry
- Generate enthusiasm for the creative future of chemistry
- Celebrate the 100th anniversary of the Mme. Marie Curie Nobel Prize

These goals align very well with the ACS vision and mission and several of ACS’s top strategic goals for 2010 and beyond, notably, to create and sustain global scientific community; to address global challenges through chemistry; and to communicate the nature and value of chemistry and related sciences.
IYC 2011 also represents an outstanding opportunity for chemistry and related sciences to reinvigorate efforts to contribute achieving to the UN’s Millennium Development Goals.

- **Goal 1:** Eradicate extreme poverty and hunger
- **Goal 2:** Achieve universal primary education
- **Goal 3:** Promote gender equality and empower women
- **Goal 4:** Reduce child mortality
- **Goal 5:** Improve maternal health
- **Goal 6:** Combat HIV/AIDS, malaria and other diseases
- **Goal 7:** Ensure environmental sustainability
- **Goal 8:** Develop a Global Partnership for Development

Here are a few details about the planned “ACS Celebrates IYC 2011” effort. There are three buckets into which we might characterize our effort: partnerships, communities, and messaging.

**Partnerships**

To advance the US celebration of IYC 2011, ACS is working closely with the IUPAC US National Committee (USNC) to identify funding opportunities from the National Science Foundation, the National Institutes of Health, the U.S. Department of Agriculture, the Department of Energy, and the National Institute of Standards and Technology.

Capturing ideas provided from ACS and USNC members, ACS and National Academies staff has submitted a proposal to these agencies to materially contribute to the U.S. celebration of IYC 2011. The elements of this proposal are national in focus and their audiences range from middle schools students and their teachers to the scientific community.

Other opportunities for partnerships include the Canadian Institute of Chemistry, the Mexican Chemical Society, and other sister societies that have begun to explore ways in which we might leverage our combined efforts.

ACS is also working with partner organizations (the Chemical Heritage Foundation and the American Institute of Chemical Engineering) to organize place-based celebrations of chemistry in Philadelphia and other major U.S. cities.

**Communities**

We are planning a year full of activities and resources to support the message of IYC. National unifying events will coincide with National Chemistry Week and Chemists Celebrate Earth Day: energy, environment, health, materials – with overarching themes of water and the many faces of chemistry.

Additionally, IYC 2011 virtual tool kits will be available to interested ACS technical divisions, local sections, committees, chemistry clubs, ACS Fellows, Silver Circle members, and Chemistry Ambassadors as they plan additional activities. These virtual tool kits will provide the “how to” in planning a variety of IYC-related events.
**Message**
We will launch “365: Chemistry for Life” on the ACS web site and invite individual ACS members, divisions, committees, clubs, student chapters to nominate a chemical, chemistry innovation that has improved people’s lives through the transforming power of chemistry. Our preexisting ACS media and publications will be utilized to spread IYC messaging as well.

**Spread the Word**
We are working to leverage ACS participation in 2010 STEM Education Week, National Lab Day, CCED 2010, NCW 2010, and the USA Science and Engineering Festival in October 2010 to build up interest and enthusiasm for IYC 2011.

**Plan**
Extending potential IYC contributions in the context of **existing** activities (across web and physical platforms) that can be designated to support IYC’s goals and themes.

ACS IYC contributions involve:
- Repurposing materials and resources
- Event planning
- Outreach to communities and/or networks
- Community engagement
- Collaboration with internal and external partners

**Tag**
In identifying contributions to IYC (whether local or national in scope), we are asking ACS members tag these events as IYC. Staff will be collecting this information for the “ACS Celebrates IYC” calendar of events and for recognition during and after the International Year has occurred.

**Participate**
There will be an IYC 2011 Exhibit (Booth #1124) at the ACS National Meeting in San Francisco for members to share their thoughts and ideas and nominate 365: Chemistry for Life entries. Ideas can be forwarded to iyc2011@acs.org or via our website at www.acs.org/iyc2011.

ACS is initiating a competition among U.S. secondary school chemistry students to design a postage stamp depicting “What chemistry means to me.” Members will have an opportunity to weigh in on the winning design.

For More Information
http://www.chemistry2011.org
(IUPAC site)

http://www.acs.org/iyc2011 (ACS Site)
Update on the ACS Fellows Program

ACS FELLOWS PROGRAM
2010

After a very successful first year in 2009, the ACS Fellows Program opened nominations for 2010 Fellows on March 1. Nominations will close on Friday, May 7, 2010. Program materials, including a nomination form, eligibility requirements, and instructions for submitting a nomination are available on the ACS web at www.acs.org/fellows.

ELIGIBILITY
Nominees for ACS Fellows must be current members in good standing of the American Chemical Society. The selection of Fellows will be based upon significant contributions in two defined areas: (i) Excellence in Science/Profession; and (ii) Outstanding Service to the American Chemical Society.

Excellence in Science/Profession could be achieved via excellence in basic or applied research; distinguished accomplishment in teaching or education; or demonstrated leadership or managerial excellence in an organization within the chemical sciences.

Outstanding Service to the ACS could include, but is not limited to, contributions to governance (division, local, regional and/or national level); publications (editor, assistant or associate editor); meetings (organization of symposia or major presentations); outreach activities (National Chemistry Week, Chemists Celebrate Earth Day, environmental efforts); or public communication (press, radio, TV or electronic media).

There must be evidence of exceptional accomplishments and professional attainment in one of the areas mentioned above with significant contributions in the other.

NOMINATION
Nominations for ACS Fellows will be solicited through multiple sources, including Technical Divisions, Local Sections, ACS Committees, and individual members. Each nomination will require a primary nominator and two secondary nominators who must each write a letter of recommendation in support of the nomination.

Each National Committee may submit only one nomination. The Committee Chair must be a primary or secondary nominator, unless he or she is a current member of the Fellows Selection Committee, the Fellows Oversight Committee or the ACS Board of Directors. In such circumstances, the nomination must be delegated to another member of the Committee. If all members of the Committee belong to one of the groups not eligible to participate in the Program, the Committee must recuse itself from the nomination process.

Self nominations will not be accepted.

SELECTION
ACS Fellows will be selected by a broadly representative Selection Committee appointed by the Board Committee on Grants & Awards.
PRESENTATION
ACS Fellows will be honored at the 2010 Fall National Meeting in Boston. Each Fellow will receive a pin and a certificate.

ADDITIONAL INFORMATION
Additional information on the ACS Fellows Program can be obtained from the ACS web at www.acs.org/fellows or by sending an email to fellows@acs.org. The list of 2009 Fellows was published in the July 27, 2009 issue of C&EN.
Committee on Chemical Safety

Alliance with OSHA on “Process Safety”
No activity to report since the Washington DC meeting. The Agreement expired.

Determining the State of Safety Attentiveness in Academic Institutions

December 16, 2009

Dr. Cynthia Larive, Chairperson
Committee on Professional Training
University of California, Riverside
Department of Chemistry
Riverside, CA 92521

Dr. Larive:

Recently, the Division of Chemical Health and Safety has been discussing an effort to determine a benchmark for the culture of safety that exists in academic departments. This has been prompted by the tragic death of a laboratory technician last winter as well as a lack of sound footing on which to say anything about how safety is inculcated in our chemistry and chemistry-related college majors and graduate students across the country. The National Research Council’s publication “Prudent Practices in the Laboratory”, whose next edition in will be published in 2010 identifies “safety culture” as a key element in developing a safe laboratory environment. The CH&S Executive Committee discussed the issue at the ACS National Meeting in August and resolved that a study of this issue is needed to replace anecdotal approaches that are the norm.

CH&S has developed a survey for chemistry departments to determine the characteristics of the culture of safety that already exists. Ralph Stuart from the University of Vermont, and I are co-chairing the project for the Division of CH&S. However, we believe that the best way to get responses to our survey is if the survey was sponsored by a coalition of the Committee on Chemical Safety, the Committee on Professional Training, and CH&S. We believe that the endorsement of three prominent groups lend weight and an impetus for recipients to complete the survey. So my first request to you is to join the CH&S Division and CCS to endorse our efforts and be willing to sign on as a co-sponsor.

We would like to survey the departments that offer programs that lead to certifiable degrees in chemistry. A survey of this group would need the support of your Committee and of course permission to access your email list. So the second request of your group is for permission to send the survey to the chairs of those departments on your list.

I’ve been in contact with Dr. Marta Gmurczyk, Liaison to the Committee on Chemical Safety, and she suggested that I approach you through letter to ask that you place these
requests on your January 2010 Agenda of the CPT for consideration. A draft survey and the Statement of the Problem are attached. Ralph and I are willing to work with all interested parties to make this survey a reality. I look forward to hearing your group’s response to our efforts.

Sincerely,

Edward J. Miller
Dr. Edward J. Miller, Ph.D.
Chairperson and Professor of Chemistry
SUNY Plattsburgh
COMMITTEE MEMBERS
Cynthia K. Larive, Chair
Lee L. Pelk, Vice Chair
Robert A. Copeland
Rosa W. Darbes
Rebecca E. Diller
Conceela D. Gillyard
Beverly Harris
Scott C. Harris
Bob A. Howell
Clark R. Lands
Robin E. McCarey
Anne B. McCoy
Barbara A. Sawyer
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Cathy A. Nelson, Secretary (202) 872-4589

Dr. Edward J. Miller
ACS Division of Chemical Health and Safety
Chairperson, Department of Chemistry
SUNY Plattsburgh
101 Broad Street
Plattsburgh, NY 12901

Dear Dr. Miller:

Thank you for the opportunity to learn of the Division's plans to conduct a survey of chemistry departments in order to understand key indicators of a successful safety culture in the academic setting. The Committee on Professional Training discussed your proposal and draft survey at our January meeting.

After careful consideration, CPT declines the opportunity to cosponsor this survey, citing the quasi-judicial role of CPT in the evaluation of chemistry programs and their compliance with the ACS Guidelines. In addition, new guidelines for ACS approval were recently released, and the Committee does not wish to confuse departments with respect to the evaluation criteria that apply to safety education as part of the periodic review and accreditation processes.

The Committee is pleased to share the current email addresses for chemistry department chairs at ACS-approved programs and at non-approved programs, if you include those institutions in your survey. Please contact Cathy Nelson, Secretary of CPT, to obtain this information (email: cpt@acs.org).

The Committee hopes you have an excellent response rate to your survey and is interested in seeing the final report that is released. If appropriate, the Committee would welcome an opportunity to discuss possible action items that emerge from the findings of the survey.

Respectfully,

Cynthia K. Larive
Chair
Committee on Professional Training

CAN/daa

c: Dr. Laurence J. Doemeny, Chair, Committee on Chemical Safety
Dear Akram,

We have seriously reviewed your proposal for an Arabic translation of the American Chemical Society’s publication *Safety in the Academic Chemistry Laboratories* (*SACL*). Our initial understanding was that the goal was to publish the direct translation of the ACS publication. Your current proposal however appears to be an expansion of the 45-page pamphlet into a 150-page book. We certainly understand that there may be cultural differences that necessitate some text and photographic changes; however, a three-fold expansion is likely to change the intent of the ACS publication. As you know, the ACS distributes single copies of *SACL* free and bulk copies at a nominal price and ACS would like to keep that policy regardless of the language. Furthermore, your proposal suggests that ACS release its copyrights to the Arabic translation. This is something that the ACS cannot do for several reasons, one being control of content, and second, intellectual property.

If you would like publish a book in the Arabic language on chemical safety, we possibly can work with you in developing a format and obtaining United States and Arab contributors. Some of our members have published very successful books on the subject and consult on safety in Arab countries. This process may take longer but may achieve your objective of a chemical safety book of more than 150-pages using authoritative contributors. In this way, the book editor and the chapter authors each obtain royalties for their efforts.

Sincerely,
Laurence Doemeny

From: Akram Amir El-Ali [mailto:akramir@hotmail.com]
Sent: Sunday, March 07, 2010 11:51 AM
To: Laurence Laurence
Cc: Akram Amir; Marta Gmurczyk
Subject: RE: Translation of "Safety in Academic Chemistry Laboratories"

Dear Laurence

In recent future I would like to write and publish an advanced book in Arabic language on Chemistry Laboratories Safety, cooperating with you in developing and achieving that effort, so later we can translate it to English or other language. Right now, I can give you my translation right FREE to publish and distribute the *SACL* in Arabic version at your price, since I could not publish it here in Arab world.
However if you do so, please don't forget to mention that the work is translated by Akram Amir ElAli.

Sincerely,
Akram

www.akramir.com

Chemistry Yet Simple

Mobile: +966 50 9621804 (Saudi Arabia)
+962 78 5693277 (Jordan)
Request from the Journal of Chemical Education send by Norbert Pienta, the JCE Editor

I would like to increase the availability of safety information in the Journal. A regular report or column for safety seems appropriate to me but I don't have a specific set of material in mind. In fact, I think that the first steps are for us to explore what is most appropriate. Perhaps the first role for CCS is to suggest materials or a strategy. Then we can devise a plan and find some individuals to help us implement it. I am open to suggestions.
Correspondence with *C&E News* Editor on Photos

Over a year ago, the Committee was presented with an ACS member’s complaint regarding an advertisement with a photograph of a person in a laboratory not wearing safety goggles and having a coffee cup. We brought this to the attention of the Editor of *C&ENews* and to advertiser. The company subsequently changed the ad. Late last year on the Division of Chemical Health and Safety, list server a series of exchanges developed that were critical of the photographs in *C&ENews* since there was little regard to established good laboratory safety practice. A review of the advertisements resulted in the following exchanges.

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**From:** DCHAS-L Discussion List [mailto:DCHAS-L@list.uvm.edu]  **Sent:** Wednesday, January 06, 2010 8:21 AM  
**To:** DCHAS-L@LIST.UVM.EDU  
**Subject:** [DCHAS-L] Eye protection in chemistry labs

Chemical safety folks,

My understanding is that most safety professionals who are related to chemistry labs hold the position that the only adequate eye protection in labs that use “chemicals” (as reagents, not in the sense that a screwdriver is ultimately a “chemical”) is the chemical splash goggle. In particular, safety glasses, even with side shields, are not appropriate since they do not adequately protect against splashes. At my college, the rule is “splash goggles all of the time” (except when we are in a lab that has no chemicals present, such as when we do computational chemistry experiments using the computers in a lab). So, I’m starting this discussion with this assumption.

However, I would say that 90% of the images that I see in publications (such as *C&ENews*, a recent ACS CPT report, and MANY websites of chemistry departments at colleges and universities) students and faculty in lab settings are not wearing splash goggles, but usually safety glasses of some design. As I scrutinize the images, the exact nature of the lab is sometimes unclear although often it is very clearly a “chemistry lab”. I often find myself yelling at the image about the inappropriate nature of the eye protection. (This does not usually elicit a productive response. I also sometime yell at TV commercials, with the same result.)

I’ll add two more comments before posing my questions to the DCHAS group.

First, I believe that the appropriate eye protection in any situation should be the eye protection that is necessary to prevent exposure in that situation. There are surely many circumstances in labs (but perhaps not chemistry labs) where safety glasses are appropriate. I can imagine that in many physics and biology labs, there is no reasonable need for splash goggles. Or, on a given day for a particular experiment, the splash hazard may be so minimal that safety glasses (which are presumably designed to protect against shrapnel of some sort) are adequate and appropriate. I can also imagine that in some lab
circumstances there is no reasonable need for eye protection at all. If I’m running an FT-IR of a Nujol mull of a solid sample between NaCl plates, what is the eye exposure risk? Do I need PPE when sitting at the console of an NMR? However, the danger of this line of argument in chemistry labs is that it is unreasonable to expect chemists to constantly be changing their “level” of eye protection as they move from one lab to another lab, or one bench to another bench, or from day to day, depending upon the local situation and what experiment is being performed. Thus, we take the position described in paragraph one above.

Second, safety glasses are more comfortable to wear. However, the degree of difference in comfort level between goggles and glasses has dropped dramatically in recent years, it seems to me. Foggling is still a problem for some folks (students) but the actual level of comfort of wearing goggles is quite high these days. I assume, though, that the main reasons glasses are worn (preferred) more often is due to comfort.

So, finally, to my questions.

What the heck is going on? If goggles are the standard level of eye protection, why do we still see so many images of chemists wearing safety glasses? The ancillary comment to this question is: since “a picture is worth a thousand words” don’t these images regularly contradict our admonitions about eye protection? What is the effect of the picture of a chemist, obviously in a chemistry lab, wearing safety glasses in (almost?, well, at least “commonly”) every issue of C&ENews. Should CHAS write a letter to Rudy Baum in capital (screaming) letters saying “STOP THIS PRACTICE OF PUBLISHING THESE INAPPROPRIATE IMAGES?” And, if there are lots of chemistry labs (in academia and industry) where the CHP calls for only safety glasses, at what risk is the CHO and the institution if there is an incident and they are asked: “Why does your CHP not require the ‘accepted standard’ of PPE practice?”

Finally, as devil’s advocate for safety glasses, do we safety professionals have a database of accidents or episodes where we can show that instances have occurred where safety glasses were not adequate eye protection? There are surely incidents where NO eye protection was the critical lapse in PPE that led to eye damage, but do we know of examples where safety glasses (only) led to eye damage?
laboratories for countries other than the United States and their workplace laws may be different from U.S. laws or practices. That said, there are specific examples that should alarm the readership. The following table lists examples from two recent C&EN issues.

<table>
<thead>
<tr>
<th>Date</th>
<th>Issue</th>
<th>Page</th>
<th>Advertiser</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4, 2010</td>
<td>CENRAR 88 (1)</td>
<td>25</td>
<td>ACS Publications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38</td>
<td>C&amp;EN Recruitment Advertising</td>
</tr>
<tr>
<td>December 21, 2009</td>
<td>CENEAR 87 (51)</td>
<td>12</td>
<td>ACS Publications (nice start on the goggles and gloves but no lab coats)</td>
</tr>
</tbody>
</table>

Clearly, what is alarming are the ACS generated photos that do not conform to good laboratory practice. Images like these have appeared for many months. As a start, the two of us will alert Mr. Baum to our concern and see where that leads.

Laurence Doemeny
Neal Langerman

From: Neal Langerman [mailto:neal@chemical-safety.com]
Sent: Saturday, January 09, 2010 1:05 PM
To: Rudy Baum
Cc: 'Laurence Doemeny'
Subject: FW: [DCHAS-L] Eye protection in chemistry labs

Rudy –
The issue which was raised in the email I forwarded to you last week is still being discussed. In addition, Larry Doemeny (Chair, CCS) and I have raised some justifiable concerns over the ACS ads which are questionable vis-à-vis safety perceptions. These concerns are below.

If you would like to respond to the CHAS members email forum, I can arrange it. I think it would be helpful. At very least, C&EN would be responsive to member issues, even if the forum is outside C&EN.

Hope all is well and I continue to look forward helping you and your staff as I can.

nl
From: Rudy Baum [mailto:R_Baum@acs.org]
Sent: Friday, January 15, 2010 9:19 AM
To: neal@chemical-safety.com
Cc: Maureen Rouhi
Subject: RE: [DCHAS-L] Eye protection in chemistry labs

Neal,

I’m sorry I haven’t responded sooner. I would be happy to respond to the CHAS members e-mail forum. I’ve already ordered the photo used in the C&EN recruitment ad changed. We’ve pulled the two ads from the publications division from circulation. They will be replaced, and all ads will either have photos of people in their offices or wearing proper eye protection in the lab.

As you noted in your response to the original posting, I really cannot be expected to police the photographs used in advertisements. The appropriate response is to contact the advertiser with concerns about photographs. By the way, I cannot express how thankful I was to you for your response.

Best,
Rudy

Rudy M. Baum
Editor-in-chief
Chemical & Engineering News
115516th St., NW

Dear Mr. Baum,

Neal Langerman alerted you to an active discussion on the Division of Chemical Health and Safety’s list-server concerning C&ENews content relating to photos displaying unsafe and sometimes illegal laboratory practices. Neal and I posted a message to the list server on January 8, 2010 promising we would bring such photos to your attention. Neal forwarded to you a copy of that posting on January 9, 2010. The list-server has yet to hear from you but Neal did forward to me an email dated January 15, 2010 that you sent to him.

While I appreciate you pulling some of the ACS advertisements I think you are missing the larger issue, which is running C&EN issues with obvious safety violations. The photos cited in the January 8, 2010 message were all ACS content that C&EN had control over, not provided to C&EN by third party advertisers. The C&EN is a magazine read by students, teachers (can you imagine a student challenging an instructor for being required to wear protective equipment and using C&EN to support the argument?), and laboratory workers and its content should adhere to the highest standards including laboratory standards. While you claim you cannot monitor this sort of content it seems simple to develop guidelines for your staff, and potential advertisers that help them ensure the highest standards. Neal and I advised in our January 8 message by suggesting that all photos be reviewed by the health and safety official and using Kenneth Fivizzani’s November 29, 2004, 82:48 p33 C&EN article “Look Over Those Lab Photos” as additional guidance.
Please also note that the members of the Division of Chemical Health and Safety list-server are looking forward to hearing directly from you.

As an aside, while I do not closely review the content of C&EN or other magazines for safety and health content I cannot recall seeing similar photos in Science magazine. This makes me wonder what AAAS is doing differently.

We look forward to hearing from you.

Sincerely,

Laurence Doemeny
Chair, Board/Council Committee on Chemical Safety

January 29, 2010

Dear Laurence,

I’m sorry it’s taken me several days to respond to your e-mail.

You have a misimpression about how much control C&EN has over activities in other parts of ACS. The Publications Division Sales & Marketing Dept. is, effectively, a third party as far as we are concerned. That said, the ads you pointed to have been removed and all of the Publications Division ads are being checked for appropriate safety considerations. No new ads will be produced that picture people in lab settings without appropriate safety glasses and apparel. I have no doubt that we will still get something wrong somewhere along the line, but we’re trying.

The only ad that you pointed out that was generated by a unit of C&EN was the ad in the classifieds department, and I am deeply embarrassed that it ran. It has been pulled, and the people who generate those ads have been given clear marching orders about eyewear for individuals in labs.

I have also discussed with our Production & Imaging team—the only people at C&EN who actually see full-page ads before they appear in the magazine—to keep a watch out for photos taken in lab settings. I will not pull an ad because of its safety considerations—I simply cannot afford to—but I will alert the advertiser to the inappropriate photograph.

I am not aware of how I am supposed to interact with the Division’s list serve. I am not a member of it. Please let me know if there is something I need to do.

Best regards,

Rudy

Rudy M. Baum
Editor-in-chief
Chemical & Engineering News
115516th St., NW
Washington, DC 20036
202-872-4491
January 29, 2010

Dear Rudy,

Thank you for your reply. My email to you was in response to my personal interest in the field of health and safety, and as chair of the Committee on Chemical Safety, and several members on the DCHAS list-server enquiring about the status of Neal Langerman’s and my message to the list server about recurring photos showing a lack of protective equipment. I still believe that providing those third parties with suggested guidelines as I stated in my email to you would serve both C&EN and the third-parties well.

Regarding how to respond to the DCHAS list server you can either send a response to Neal or to me and we will be post it.

Again thank you for your response. I think your actions should significantly reduce the number of photos showing poor lab practices and indirectly improve those third party health and safety programs.

Sincerely,

Laurence Doemeny
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
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<td>AHERA</td>
<td>Asbestos Hazard Emergency Response Act</td>
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<td>AICheE</td>
<td>American Institute of Chemical Engineers</td>
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<td>AIHA</td>
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<td>ALARA</td>
<td>As Low As Reasonably Achievable</td>
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<td>ANSI</td>
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<td>ASHRAE</td>
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<td>Full Form</td>
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