

THE OCTAGON



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Lehigh Valley Section of the American Chemical Society

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September LVACS Meeting

Lafayette College

Date: September 24, 2008
Location: Faculty Dining Hall, Lafayette College
Reception: 5:30, cheese and fruit
Dinner: 6:00
Meeting: At the conclusion of dinner
Talk: At the conclusion of the meeting, Hugel Science Center, Jaqua Auditorium (Rm 103)
Menu: Chicken Cordon Blue or Beef Brisket, Roast Garlic Potatoes, Fresh Green Beans, Coffee/Tea/Soda, Chocolate Layer Cake; Vegetarian Option-Portabello Stacks.
Cost: members \$20, students & retirees \$10
Contact: Debbie Bastinelli at 610-330-5213 or bastined@lafayette.edu by September 19
Directions: On the web at <http://www.lafayette.edu/community/directions.html>

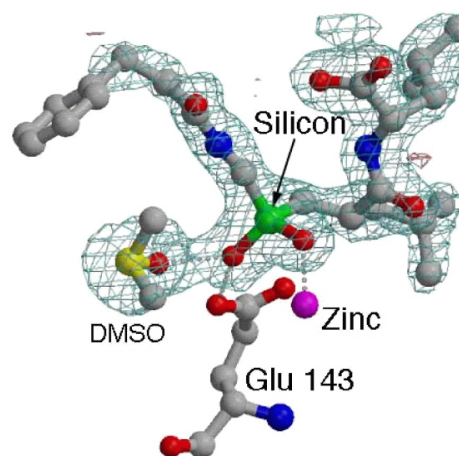
Speaker: Scott McN. Sieburth
Dr. Scott McN. Sieburth is a professor of chemistry at Temple University. Scott received his BS degree from Worcester Polytechnical Institute in 1977 and his PhD from Harvard University in 1983. He worked for FMC Corporation for seven years in their Agricultural Chemical group. Before he moved to his present position at Temple University, he was professor of chemistry at SUNY-Stony Brook. He has diverse interests in organic chemistry, especially the [4+4] photocycloaddition reaction, and the synthesis and

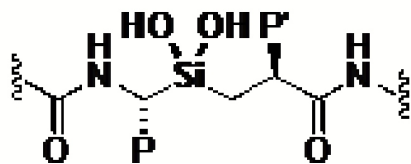
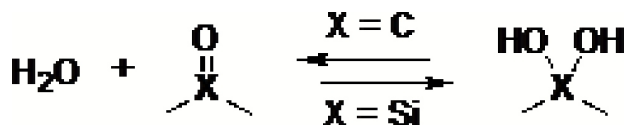
biological activity of silanediols (<http://astro.temple.edu/~sieburth/>). Scott received the 2008 Philadelphia Organic Chemists' Club Award in recognition of his outstanding contributions to organic chemistry and service to the scientific community.

Abstract

Using Silicon to Design New Pharmaceuticals

Silicon is the second most abundant element, and the element closest to carbon in its properties. Despite more than a century of organosilane research, only two silanes are produced commercially because of their biological activity, with silicon replacing a quaternary carbon. Unlike carbondiols ($X=C$) that dehydrate to ketones, silanediols ($X=Si$) do not dehydrate to give silanones. We have employed this property to design protease inhibitors where a silanediol mimics a hydrated





amide carbonyl. These are more complex than any silanediols previously prepared and they have stimulated a broad investigation of organosilane chemistry.

Protease inhibitors are an important class of drugs, applicable to almost any disease. Our silanediols have been found to be reliable protease inhibitor design components, leading to low nanomolar inhibitors of an aspartic protease (HIV protease) and metalloproteases (thermolysin, angiotensin-converting enzyme).

This Month in Chemical History

Harold Goldwhite, California State University, Los Angeles - hgoldwh@calstatela.edu,

Prepared for SCALACS, the Journal of the Southern California, Orange County, and San Gorgonio Sections of the American Chemical Society

The word “chemurgy” was not in my vocabulary until a couple of months ago. Perhaps that just shows my limitations. Let me flash back to the occasion when it was thrust upon my consciousness. I was browsing the 25 cent table at my local public library sale (last of the big-time spenders) and encountered a must-buy title: “Modern Chemists and their Work” by Christy Borth, published by the New Home Library, New York in 1943. It’s actually a “New Enlarged Edition” of an earlier book by this author; “Pioneers of Plenty” was first published in 1939 and the Publishers’ foreword refers to the events of 1939 through 1943 that make the book even more timely.

A Google search on Christy Borth yielded no direct biographical information, but plenty about the books he published. (His gender, even though Christy is ambiguous, is clarified by reference to him in the

Publishers’ foreword). He seems to have been a successful author of popular books on technology and science. His titles include “True steel; the story of George Matthew Verity and his associates”; “Masters of mass production”; and “Mankind on the move; the story of highways”.

The introduction to “Modern Chemists and their work” is titled simply “Chemurgy” and the whole book, despite its title, reads as a propaganda piece for chemurgy. The word seems to have been coined by William J. Hale, a chemist, and was first publicized in his book “The Farm Chemurgic” published in 1934. It means applied chemistry aimed at making industrial products from agricultural raw materials derived from both animals and plants. Hale gets three full columns in Wyndham D. Miles “American Chemists and Chemical Engineers”, ACS, 1976. Born in 1876 he received bachelor’s and master’s degrees from Miami University of Ohio, and a Ph.D. in chemistry from Harvard in 1902. He traveled to Germany on a fellowship and returned to the University of Michigan, rising through the ranks to Associate Professor. Recruited by Dow in 1917 he headed their organic chemistry research division. He was awarded 45 patents while at Dow, including one for the Dow process of converting chlorobenzene to phenol.

In 1935 Hale retired to become a consultant, and devoted much of the rest of his career to chemurgy. In that year he founded the National Farm Chemurgic Council which involved such prominent figures as Henry Ford and Francis P. Garvan. The Council stimulated the U.S. Department of Agriculture to establish four regional agricultural research laboratories to explore industrial applications of farm crops.

While Hale was undoubtedly influential in reinventing chemurgy, we should not forget perhaps the greatest pioneer of this area, George Washington Carver. I have written previously about Carver, and I will just remind my readers that Carver used cotton, sawdust, peanuts, and sweet potatoes as far back as the first two decades of the twentieth century to make products as varied as insulating board, synthetic stone, washing powder, bleach, and glue.

Discussions of chemurgy have an interesting resonance in 2008. Hale, among others, back in 1935 saw the important potential of ethanol as an additive or substitute for gasoline in automobile fuel. There are

some striking passages in this book that seem relevant to current concerns with the lessening availability of oil, and the steadily increasing prices of oil-based products including gasoline.

In a reported discussion with Charles Franklin Kettering, Vice President for Research at General Motors, the following exchange occurs: Kettering (K): How do we run[automobiles] now? Respondent (R): With gasoline. K: Where do we get gasoline? R: We distil it from petroleum. K: What is petroleum? R: Oil that is in the earth. K: How did it get there? R: The chances are that it came from decaying plants and so forth. K: Where did the plants come from? R: They grew. K: How did they grow? R: The sun made them grow. K: So we're running [automobiles] now by "radio" – by radiation of the sun, seasoned forty million years in the ground. Maybe we can learn how to pick up our sun-energy direct, instead of going along on that long-drawn-out process. ... I'm sure we can grow all our fuel after a while, because all of the fuel that we have has been grown.

One of the first endeavors of the chemurgic movement was to introduce ethanol as a blending agent in gasoline (sound familiar?). They supported a pilot plant for Agrol, a gasoline-ethanol blend. The petroleum industry was not amused. By 1938, because of financial and administrative problems, the Agrol plant was closed.

Chemurgy was prominent during World War II; synthetic rubber ingredients were processed from corn, and other plants such as guayule were studied for rubber production. But after the war the surge in petrochemical production swept aside chemurgic products, and the National Farm Chemurgic Council, founded by William J. Hale in 1935, was wound up in 1977. And now we need it – or something like it.

Many current processes being researched by the chemical industry and academics are examples of what would have been termed chemurgic studies in the old days. One example is the quest for biodegradable packaging materials derived from natural products. These could beneficially replace polyethylene, an omnipresent nuisance which contaminates our waterways and the oceans and is a hazard to wildlife. Now that even the petroleum industry has (grudgingly?) embraced ethanol blends with gasoline, many studies are under way on processing materials that are relatively waste agricultural products (corn husks, sawdust) into

ethanol. Borth's book is visionary for many possible applications of chemurgy: plastics from soy beans that could replace many metal body-parts in automobiles, lightening the cars and improving their mileage standards; and fibers and fabrics from casein obtained from the whey in cheese manufacturing.

With current concerns about the increasing prices of foodstuffs around the world, perhaps it is time to call for the New Chemurgic Movement. This would have as its object making useful products from plant and animal materials that have no use as foodstuffs. That's a challenge for chemistry in the 21st. century.

Chem Shorts for Kids

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by Dr. Kathleen A. Carrado, Argonne National Labs
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The Elementary Education Committee of the ACS Chicago Section presents this column. They hope that it will reach young children and help increase their science literacy. Please share with children and local teachers.

Please note: All chemicals and experiments can entail an element of risk and no experiments should be performed without proper adult supervision.

Heat-Activated Invisible Inks

Kids, how can you send an invisible message? Some science projects don't require any chemicals that you don't already have around the house, and a great example is invisible ink.

You use the ink by writing your message with it using a cotton swab, dampened finger, or toothpick. Let the message dry. To be extra sneaky, you may want to write a normal message on the paper so that it doesn't appear to be blank and meaningless. If you do write a cover message, use a ballpoint pen, pencil, or crayon (fountain pen ink could run into your invisible ink). Don't use lined paper for the same reason.

Most invisible inks are made visible by heating the paper. Some messages are developed by spraying or wiping the paper with a second chemical; others are revealed by ultraviolet light.

Examples of common invisible inks are: any acidic fruit juice (e.g., lemon, apple, or orange juice), onion juice, baking soda (sodium bicarbonate), vinegar (acetic acid), white wine, dilute cola, dilute honey, milk, soapy

water, and sucrose (table sugar) solution. Here is just one example:

1. Mix equal parts water and baking soda.
2. Use a cotton swab, toothpick, or paintbrush to write a message onto white paper.
3. Allow the "ink" to dry.
4. One way to read the message is to have your adult partner hold the paper up to a heat source, such as a light bulb. The baking soda will cause the writing in the paper to turn brown.
5. A second method to read the message is to paint over the paper with purple grape juice. The message will appear in a different color.

Tips:

1. If you are using the heating method, avoid igniting the paper - don't use a halogen bulb.
2. A cotton swab makes an excellent disposable 'paintbrush'.
3. Baking soda and grape juice react with each other in an acid-base reaction, producing a color change in the paper.
4. The writing turns brown because the weakened paper burns before the rest of the paper. Be careful not to overdo your heating and ignite the paper!

Reference: Anne Marie Helmenstine on her April 27, 2008 blog at <http://chemistry.about.com/>.

See these links for baking soda and lemon juice "inks": <http://chemistry.about.com/cs/howtos/ht/invisibleink2.htm> and <http://chemistry.about.com/cs/howtos/ht/invisibleink3.htm>

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ACS "Facebook" - Member Network.

LVACS members are signing up for the ACS Member Network. You can register from acs.org (middle of right side of home page). There are already about 50 LVACS-ers signed on. This a great way to contact members, find those with like interests, etc.

What is the ACS Member Network?

Join the network of the world's largest scientific society for chemical professionals. It's safe. It's searchable. It's

FREE. And it's a great way to stay connected with the best and brightest.

Are you an ACS member? Have you opted into the Member Network? To access it, simply:

1. Register/Create an ACS account (one time only).
2. Log into the ACS Member Network.
3. Begin creating your Member Network Profile.

Why Join?

Create and build your personal scientific network
Find friends and colleagues by career, education, local section, and divisions

Collaborate and share scientific research

Search for publications information

Highlight your involvement with ACS

Keep up-to-date with ACS membership activities

New PA ACS State Government Affairs Initiative

From The Pennsylvania Government and Legislative Affairs Committee - (PA-GALA)

This year, the American Chemical Society (ACS) is launching a new legislative initiative focused on improving science education at the state level. The mission of this initiative, which will be coordinated by the ACS Office of Public Affairs (OPA), is to create new opportunities for ACS members to engage with state policymakers to improve science education at the state level so that this nation will remain the world's leader in science and technology and American students will successfully compete for the best jobs of the 21st century.

Pennsylvania has been selected by the ACS Board of Directors as one of five states that will be participating in this new state government affairs effort. The other states are California, Tennessee, Alabama, and Arkansas. In each of these states, OPA will be working with ACS members to chart an agenda for science education reform and to engage with other state education stakeholders such as science teacher organizations, other education constituencies, and business and industry groups. The ACS will also be working very closely with the National Science Teachers Association in this new state effort.

The new Pennsylvania state program will be overseen by and conducted through the ACS Pennsylvania Government and Legislative Affairs (PA-GALA) Committee, which comprises representatives from ACS local sections across the state. Listed below are the

initial members of the state committee:

Alan Heldon, Chair, Philadelphia Section,
alanheldon@comcast.net

Cheryl Campo, Penn-York Section,
Cheryl.Campo@fredonia.edu

Christin Palombo, Central Pennsylvania Section,
christin@chem.psu.edu

Larry Pederson, Scranton-Susquehanna Valley Section,
lpederse@misericordia.edu

Tuan Dang, Corning Section,
Tuan.Dang@sylvania.com

Michael McAdams, Southeastern Pennsylvania
Section, memcadams@comcast.net

We invite you to participate in the inaugural event of this new initiative! The PA-GALA will host a session on August 19 from 9:00 - 11:00 a.m. at the ACS National Meeting in Philadelphia on the subject of science education in the early grades in Pennsylvania schools featuring a panel of state education policymakers from across the state. An invitation to the event is attached to this message.

What does this new initiative mean for you?

As an ACS member, this state initiative will provide you with many additional opportunities to engage with your state legislators and to make sure the voices of chemists, chemical engineers, and chemical practitioners are heard by policymakers.

As a part of this initiative, you will be contacted from time to time through the ACS Legislative Action Network to write letters to your state legislators. These alerts will be similar to the action alerts you are already receiving regarding legislative developments at the federal level. Each action alert will brief you on the facts and issues so you can make an informed choice about supporting the request for action.

This new Pennsylvania initiative is still being organized, and we are seeking to identify volunteers who are interested in becoming more involved by either serving on the state committee or by participating in events and activities at the state level in Pennsylvania. If you are interested in being included on an email list of people who would like to participate in these activities, please contact one of the Pennsylvania committee members listed above or James Brown in the ACS Office of Public Affairs, j_brown@acs.org.

We look forward to working with you to make this new state initiative a success.

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Octagon Editor & Webmaster:
T. Michelle Jones-Wilson (see above)

25 years of ChemMatters on one CD!

Looking for ways to make high school students excited by the fascinating chemistry of their everyday lives? Explore the extensive 25-year archive of ChemMatters, the award-winning magazine for high school students. All the issues of ChemMatters published through April 2008 are available on one CD! Search for your favorite chemistry topics by browsing through the various issues of ChemMatters and their corresponding ChemMatters Teacher's Guides. The price of the CD is only \$30! You can order it by calling 1 (800) 227-5558 or by visiting ChemMatters' Web site: <http://www.acs.org/chemmatters>.

For more information about this resource and other ACS high school chemistry resources, please visit the ACS Education website at www.acs.org/education (under "Educational Resources," then "High School") or e-mail Marta Gmurczyk at m_gmurczyk@acs.org.

ACS Debuts Global Challenges Podcasts

ACS' Global Challenges/Chemistry Solutions, a series of podcasts describing some of the 21st Century's most daunting problems, and how cutting-edge research in chemistry matters in the quest for solutions, debuted June 25. The first podcast deals with the shortages of clean water as the basis of other global problems.

This sweeping panorama of global challenges includes dilemmas such as providing a hungry, thirsty world with ample supplies of safe food and clean water; developing alternatives to petroleum to fuel society; preserving the environment and assuring a sustainable future for our children and improving human health.

An ongoing saga of chemistry for life — chemistry that truly matters — Global Challenges continues through December. Subscribe at iTunes or listen and access other resources at www.acs.org/globalchallenges.

ACS Public Policy Fellowship Applications Due December 31

For more than 30 years, the American Chemical Society (ACS) has been working to bridge the gap between science and public policy through its Public Policy Fellowship Programs. These programs provide a unique opportunity for ACS members to gain practical

experience and insights into public policy by working on Capitol Hill or at the ACS offices in Washington, DC.

The ACS Congressional Fellowship Program places two fellows each year as staff members in the office of a Senator, Representative, or Committee. As part of a broader effort administered by the American Association for the Advancement of Science (AAAS) (<http://fellowships.aaas.org>) that places more than 30 scientists per year in Congress, this program has two main goals: to provide policy-makers with high quality information on science-related issues and to educate scientists on how government works and how science policy is made. Fellows join the Congressional staff of their choice, with placement support provided by ACS and AAAS. Fellows typically serve as legislative assistants, advising staff and members of Congress on a range of science policy issues and interacting with constituents. Former ACS Congressional Fellows have worked in the both the Senate and the House of Representatives—on the staffs of individual members (including key committee chairs and the Office of the Majority Leader) and for committees in both the House (for example, the Homeland Security and Armed Services Committees) and Senate (e.g., Energy & Natural Resources and Health, Education, Labor & Pensions Committees). The fellows have had assignments in important science-related areas as diverse as environmental issues, science education, health policy, energy policy, and federal funding for scientific research.

The ACS Science Policy Fellowship Program (http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_TRANSITIONMAIN&node_id=1291&use_sec=false&sec_url_var=region1) places one fellow in the ACS Office of Legislative & Government Affairs (OLGA) for one to two years. The Fellow works with experienced OLGA staff to provide information to policy makers on the role of science in public policy, advance specific recommendations on issues affecting the chemical enterprise, and inform ACS members and involve them in the policy process. In past years, Science Policy Fellows have played an important role in organizing ACS's "Science & the Congress Project," a highly acclaimed program that provides expert panel briefings and educational information to Congressional staff on subjects ranging from "Science & Technology in the Intelligence

Community” to “Partnering for Results in Science, Technology, Engineering & Math Education.”

Applications are due December 31 for Public Policy Fellowships beginning in September 2009.

All ACS members with a sincere interest in the public policy process are encouraged to consider applying. More information on the program, qualifications, and application content are available online at http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_TRANSITIONMAIN&node_id=1291&use_sec=false&sec_url_var=region1 or by contacting the ACS Office of Legislative & Government Affairs at (202) 872-4387.

Addressing Global Scientific Challenges through Chemistry

The “ACS Strategic Plan for 2008 and Beyond,” which was released in January at www.acs.org/strategicplan, provides a blueprint for how we can work together to advance our vision of “Improving people’s lives through the transforming power of chemistry” through the pursuit of six focused goals. A novel element of the strategic plan is goal 3, which declares our aspiration that “ACS will be a global leader in enlisting the world’s scientific professionals to address, through chemistry, the challenges facing our world.” It seems that every day there are news reports on the need for renewable energy resources, clean water, and sustainable food. Chemistry and chemists must play a central role in providing viable solutions to many of these challenges. In addition to the direct benefit to the global community, any activity the Society undertakes to address these challenges can also strengthen efforts to communicate the nature and value of chemistry and to advocate for members and the profession, which reflect goals 4 and 5 of the strategic plan.

During May and June, members and stakeholders participated in a Web-based survey to gather perspectives on the most important challenges to address, activities that are already underway, and suggestions for new or expanded approaches. The resulting feedback paints a picture of shared enthusiasm behind addressing these challenges through chemistry. The feedback received from the survey has also provided the Society with clear direction; the emphasis will be on sustainability, for example, in the areas of sustainable energy, water, and food.

In June, ACS launched the Global

Challenges/Chemistry Solutions website to inform interested parties of the advances chemists are making related to world needs (www.acs.org/globalchallenges). The site features biweekly podcasts, related facts, and information for anyone interested in the challenges or in understanding developing solutions. Through the inclusion of child-friendly educational resources, the Society is also reaching out to future generations. Each month, the site will focus on a new challenge, moving from water to climate to sustainability to security.

All ACS members have an integral part to play in addressing and identifying solutions to the challenges that lie before us. Ideas or suggestions are welcomed through e-mail at strategicplan@acs.org or participation in the goal 3 discussion taking place online at www.acs.org/strategicplan.

Bring together Kids & Chemistry

Share educational resources from ACS with your favorite teacher this fall

It’s back-to-school season and teachers are gearing up for a new year. As a chemist, you are in a unique position to help teachers and students learn and love science. After all, you enjoyed learning science so much that you chose to devote your career to it! Help the teachers you know by introducing them to the outstanding resources developed by the American Chemical Society.

To help you spread the word, we’ve created a flyer you can give to teachers describing ACS education resources. We’re also offering some of our best resources at a discount during the months of September and October. Your favorite middle school teacher might benefit from Inquiry in Action, a teacher’s guide to inquiry-based investigations that teaches chemistry principles through experimentation and hands-on learning. Or, a local high school chemistry teacher in your area might benefit from a gift subscription to ChemMatters, a publication that investigates the chemistry of everyday phenomena for high school students. Other resources can be accessed for free! Consult the table below for more information on other ACS educational resources and the grade levels they serve.

In addition to sharing resources, you can improve science education by offering your time and expertise. You could volunteer to give a presentation about science in a local classroom or answer chemistry

questions from a class throughout the year. Visit the Kids & Chemistry section of the ACS website for presentation ideas and sample activities that you can use to introduce chemistry to students in your community. Your gifts and time will definitely be appreciated by teachers and students alike this year and for years to come!

Ways you can help K-12 teachers with ACS resources:

- * Give a teacher the flyer summarizing ACS resources
- * Purchase a book or magazine subscription and give it to a teacher
- * Introduce a teacher to free online resources
- * Answer science questions from a class throughout the year
- * Teach a science lesson
- * Give a career talk
- * Suggest a high school textbook
- * Mentor a high school chemistry club
- * Sponsor a professional development workshop for local elementary and middle school teachers

Pre-K to 2

Apples, Bubbles, and Crystals
Sunlight, Skyscrapers, and Soda Pop

Grades 3-6

Science for Kids www.acs.org/kids
The Best of WonderScience

Grades 3-8

Inquiry in Action
inquiryinaction.org
Inquiry Matters

Grades 9-12

ChemMatters Magazine
ACS Chemistry Clubs
Green Chemistry
ACS textbook Chemistry in the Community
Workshops for teachers
Exams Institute
Chemistry Olympiad
Project Seed

Register for ACS Careers Industry Forum

SAVE THE DATE: Thursday, September 11, 2008 from

2 to 3 pm EDT. (Second Thursday of the month for those following).

The ACS Careers Industry Forum will be launched in order to disseminate timely information on cutting edge industrial issues affecting employment—allowing chemical scientists to make informed decisions about their careers. Conference Call Registration will open Thursday, August 7th at <http://www.acs.org/careers>.

Take control of your career by staying informed. CHECK OUR WEBSITE FOR FURTHER DETAILS on the Industry Forum as well as other newly developed programs and services.

We look forward to serving you.

Take an ACS Webcast Short Course This Fall

Few companies are immune from the economic hardships in the headlines and many budgets have been trimmed. But it is still crucial to your career to engage in continuing education to expand your skills and stay abreast of new topics. So save your time and money and take a look at the courses available online through ACS. A wide variety of webcast short courses are offered and the fall schedule is open for registration now.

ACS courses are well-respected throughout the industry. ACS Webcast Short Courses provide the same quality training that ACS has long been known for, but, because the courses are presented over the Internet, they offer added convenience and flexibility.

Small Class Sizes and In-Depth Personal Attention – The average class has 12 participants, and our instructors are available by e-mail in-between sessions so you will have ALL your questions answered.

Interactive – We've chosen a great technology that allows you to participate just as in a live class; you can even write on the whiteboard.

Ready when you are – Scheduled class sessions are the best way to get the most out of your experience. But if you miss a session, it's okay. All class sessions are recorded and ready for viewing when you're available.

More Application Time – Instead of getting all the information in a few days, you have time between sessions to apply what you've learned and come back to class with your burning questions. Overall, an extended learning schedule means more impact for you.

There are expanded course offerings in analytical, organic, pharmacology, engineering, instrumentation, and other areas. For the full list of Webcast Short

Courses and more information on available discounts, visit www.acs.org/webcourses

2008 Fall Webcast Schedule

Effective Technical Writing - Sept. 8, 15, 29, Oct. 6, and 20

Essentials of Organic Chemistry - Sept. 8, 15, 29, Oct. 6, and 20

Fourier Transform Infrared Spectroscopy - Sept. 8, 10, and 12

Infrared Spectral Interpretation, Basic - Sept. 8, 10, and 12

Stimuli-Responsive Polymeric Films and Coatings - Sept. 9, 16, 23, 30, Oct. 7, and 14

Mass Spectroscopy Basics - Sept. 17, 24, Oct. 1, 8, 15, 22, 29

Essentials of Chemistry - Sept. 18, 25, Oct. 2, 9, 16, 23, 30 Nov. 6

From Beaker to Barrel: Chemical Engineering for Chemists - Sept. 19, 26, Oct. 3, 10, and 17

Infrared Spectral Interpretation, Intermediate - Sept. 22, and 23

Modern HPLC in Pharmaceutical Analysis - Sept. 23, 30, Oct. 7, 14, 21 and 28

Gas Chromatography Basics - Sept. 26, Oct. 3, 10, 17, 24, 31 and Nov. 7

HPLC Basics - Sept. 26, October 3, 10, 17, 24, 31 and Nov. 7

Infrared Spectral Interpretation, Special Topics - October 6 and 7

Principals of Analytical Chemistry - October 8, 10 and 14

A Pharmacology Primer for Chemists - October 8, 15, 22, 29, Nov. 5 and 12

Pharmacokinetics and Pharmacodynamics for Chemists - October 9, 16, 23, 30, Nov. 6 and 13

Effective Technical Writing for Scientists with English as a Second Language - October 20, 27, Nov. 3, 10 and 17

Take the ACS Presidential Challenge – ‘Putting a Human Face on Chemistry’!

We invite the ACS Student Affiliates Chapters to produce a short video for viewing on the web with the theme “Putting a Human Face on Chemistry.” Reach out to elementary and middle school students and help them develop an awareness of who chemists are and

understand how important chemistry is to their lives.

Chapters producing the top three videos will each be awarded \$1000.00 from the ACS presidential succession. Award winning videos will be highlighted on the ACS website, therefore please use QuickTime (.mov) or Windows Media (.wmv) format. Only one entry per chapter is allowed and only active chapters can receive an award.

To be considered for an award, submit an original three to five minute video conveying a clear and coherent message in a creative manner. Ensure that all information contained in the video is accurate and all content is age appropriate for elementary and middle school students.

Video entries are due on Friday, October 31, 2008. Monies will be awarded at the end of 2008. Please post your video on YouTube site: <http://www.youtube.com/group/saprogram>. Please include the name of your Institution in the title or subtitle. Submit the completed entry form and consent forms (attached) to saprogram@acs.org or FAX to (202) 833-7732, Attn: Robin Lindsey.

For more information, please go to the ACS Student Affiliates website www.acs.org/saprogram or contact the Undergraduate Programs Office at saprogram@acs.org or call 1 (800) 227-5558 ext. 4480.

All videos will become the property of the American Chemical Society and ACS will own all rights.

Teleconference Held on Electronic Elections for Local Sections & Divisions

On May 28, a joint teleconference was hosted by the ACS Committee on Local Section Activities (LSAC) and the Committee on Divisional Activities (DAC) on Best Practices for Electronic Elections in Local Sections and Divisions. Protocols for conducting elections in divisions and local sections, and the process of changing local section/division bylaws to allow electronic balloting were discussed as well as successful best practices. A complete text transcript and an audio transcript, available in downloading and streaming format, have been posted to www.acs.org. Guidelines for initiating electronic balloting in your local section are also available on the website: Protocols for Electronic Elections; Bylaw Review & Amendment Process; and Electronic Balloting Best Practices.