

CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

January, 2007
Vol. 44, No. 4

Meeting Calendar

Jan. 18	Dr. Glenn Storrs Cincinnati Museum Center
Feb. 15	Chemist of the Year Givaudan Flavors
Mar. 14	Shirley Corriher Beckett Ridge CC (joint w. Dayton Section)
Apr. 19	M. Sarquis/L. Hogue Teachers Night Northern Kentucky U.
May. 23	Party Night HofbrauHaus Newport, KY

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January Monthly Meeting

"The CMC Dinosaur Field School - Citizen scientists in Montana"

*Dr. Glenn Storrs
Cincinnati Museum Center*



Abstract

Dr. Storrs will report on the activities of Cincinnati Museum Center's Dinosaur Field School in Red Lodge, Montana. Community members from near and far join Museum Center scientists in field excavations of 145 million year old dinosaur bones from a Jurassic "graveyard." This annual summer project allows participants to experience a rare adventure, contribute to the furtherance of Museum Center programs, and support a major research effort in paleontology, all the while pushing back the frontiers of knowledge in one of the most beautiful locations in the world. In addition to exploring dinosaurs and paleontological techniques,

(Continued on page 4)

About the Speaker

Dr. Glenn W. Storrs is Assistant Vice President for Natural History & Science and Withrow Farny Curator of Vertebrate Paleontology at Cincinnati Museum Center, and Adjunct Professor of Geology at the University of Cincinnati. Dr. Storrs joined Museum Center in 1995 as Assistant Curator of Vertebrate Paleontology. He was promoted to Associate Curator in 1998, and appointed to a full curatorial chair in 2001. He administers the education, research, registration, preservation and conservation efforts and staff of the Museum of Natural History & Science at Cincinnati Museum Center. These include programs at Cincinnati Museum Center at Union

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THE CINTACS NEWSLETTER**Vol. 44, No. 4 January, 2007**

Editor.....Bruce S. Ault
 Advertising.....Ed Hunter

CINTACS is published eight times a year (September through May) by the Cincinnati Section of the American Chemical Society. The submission deadline will be approximately January 22 for the March, 2007 issue. Electronic submission is strongly preferred. All materials should be sent to:

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From the Chair,

The New Year brings with it many exciting events and new opportunities!

Our January meeting sponsored by the Procter & Gamble Co. will be held in the Cincinnati Museum Center at Union Terminal, a place worthy of a visit in its own right. We are pleased to have as our guest speaker Dr. Glenn Storrs, Assistant Vice President for Natural History and Science and Curator of Vertebrate Paleontology at the CMC. Dr. Storrs will be describing current activities of the CMC's Dinosaur Field School in Red Lodge, MT. This yearly event sponsored by the CMC provides for the public at large one of the most exciting and accessible "citizen scientist" activities in the country. In addition, an Organic Chemistry Discussion Group is planned and will feature Dr. Kevin Kittredge of Miami University who will be describing results of his current research. And, remember also this is the meeting at which we will announce the winners of the Cincinnati Chemist and Research Associate Awards. Ample and convenient all-weather parking is provided at the CMC and is included in our (reduced) meeting fee of \$20. The Section thanks P&G for their willingness to sponsor this meeting.

In 2007 our Section plans to break new ground by sponsoring a Science Café on the campus of Miami University in Middletown. Science Cafes, as their name suggests, are opportunities for scientists and non-scientists to gather in an informal environment to discuss current and relevant scientific topics. For example, a very successful SC dealing with the subject of fuel cells was held by ACS during the 2006 National Meeting in San Francisco. Susan Hershberger, our Section's Secretary has offered to run a Science Café at Miami sometime next summer or fall. A possible topic under consideration is the "threat of a flu pandemic". The ACS is offering minigrants of \$500 to support local sections' participation with Science Cafes, and Susan has applied for and already received one of these grants. I applaud Susan for her leadership to take on this additional task which is certain to extend the Section's goal for public outreach.

For those of you having some free time and a strong desire to influence government policy-making activities in Washington, consider applying for an ACS Congressional Fellowship. These fellowships provide a year of support to live in DC and to work in Congress on the staff of a senator, representative or to serve on a committee. The fellowships provide chemists the opportunity to supply needed technical expertise for our policy makers in Washington. Stipends range from \$55-65K plus additional allowances. Deadline for application is Dec. 31, 2007 (see this CINTACS for more details).

Finally, recall that the time has arrived when we must elect new Officers and some Executive Committee Members for the

(Continued on page 4)

January Monthly Meeting
Jan. 18, 2007
Cincinnati Museum Center at Union Terminal
sponsored by the Procter and Gamble Company

Featured Speaker
Dr. Glenn Storrs

Program

- 5:30 - 6:30 Organic Chemistry Discussion Group, Collett Gallery
Chair: James Mack (UC), Speaker: Kevin Kittredge (see page 5 for details)
- 6:30 - 7:00 Registration (cash bar, one beer/wine/soft drink included with ticket), Cincinnati Dining Room
- 7:00 - 8:00 Dinner Buffet, Cincinnati Dining Room
Menu: Caesar salad with creamy dressing and toasted croutons, Grilled boneless chicken breast with balsamic demiglace, Sliced roast pork loin with a warm apple chutney, Penne pasta served al dente with assorted grilled vegetables and tossed in a creamy gorgonzola alfredo sauce, Chocolate torte and cheesecake, Iced tea, freshly brewed coffee
- 8:00 - 9:00 After dinner speaker, Dr. Glenn Storrs
"The CMC Dinosaur Field School - Citizen scientists in Montana"

Parking is included in dinner price; guests must mention ACS at parking lot gates

Reservations: The meeting reservation form is online at <http://www.che.uc.edu/acs/cinacs.html>. This is the best and easiest way to register. As a last resort, you may send your reservations by e-mail to kim.carey@uc.edu. If it is impossible to make your reservation via the internet, call 513-556-0293; leave name, affiliation, a contact phone number, and state if you are in one of the half price categories. *The deadline for registration is Mon., Jan. 15.*

Directions:

From South: I-75 N to US 50W—River Road/Linn Street, Exit 1G. Take Gest Street Exit on left and go North to Freeman; then, North to Ezzard Charles Drive.

From North: I-75 S to Western Avenue, Exit 2A. OR I-71 S to I-75 N to Ezzard Charles Drive, Exit 1H.

From West: I-74 E to I-75 S to Western Avenue, Exit 2A.

From East: I-275 W to I-471 N. Take US 50 W to I-75 N to Ezzard Charles Drive, Exit 1H.

Ezzard Charles Drive leads directly into the Museum Center and parking lots.

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instruction is given in regional geology, ecology and history, as well as the process of contextual data collection and hypothesis testing. This is truly one of the most exciting and accessible "citizen scientist" programs in the country. Learn what has been discovered, and where this unique project is heading.

(Continued from page 1)

Terminal, the nearby Geier Collections and Research Center, The Richard and Lucile Durrell Edge of Appalachia Preserve System in Adams County, Ohio, and the Museum's Dinosaur Field School in Red Lodge, Montana. In particular, he oversees the Museum's fossil vertebrate research program and collections, the largest such program in the Ohio Valley. He is an international authority on the anatomy and evolution of fossil reptiles and is particularly well known for his work on fossil crocodiles and extinct marine reptiles, especially plesiosaurs and their relatives.

Dr. Storrs was born in Poughkeepsie, New York and educated at Syracuse University (B.S., 1979), The University of Texas at Austin (M.A., 1981), and Yale University (M.Phil., 1983; Ph.D., 1986). Before coming to Cincinnati, he was a Research Associate (later Visiting Senior Research Fellow) in the Department of Geology at the University of Bristol, England. He has studied dinosaurs and other fossil reptiles in many parts of the world, including the U.S. Western Interior, Canada, England, Germany, Russia and East Africa. He has led numerous expeditions to Wyoming, Montana, Kansas, and Nevada, as well as many nearer to home in Ohio and Kentucky. Recent Museum excavations have resulted in the discovery of several fossil animals previously unknown to science.

Dr. Storrs is the author of many scientific papers, book chapters, and popular articles on fossil vertebrates, as well as two books for children. He is an active member of The Society of Vertebrate Paleontology, The Paleontological Society, The Geological Curators Group, The Systematics Association, and The Yellowstone - Bighorn Research Association. Dr. Storrs was elected a Fellow of the Linnean Society of London in 1993 and serves on numerous professional committees. He was recently awarded a grant from the National Science Foundation that is enabling excavation and study of a significant new Carboniferous age site in KY.

(Continued from page 2)

2008/2009 meeting year. Positions available include : 1st Vice Chair (Chair-elect); 2nd Vice Chair ; Treasurer ; Secretary ; Trustee (by succession); Councilor and Alternate Councilor. If you are interested in running for office or know of likely candidates please contact Emel Yakali at UC, our Nominating Committee Chair. We need your help.

Wishing you all a Happy and Prosperous New Year 2007!

George Rizzi, Chair

Science Fair Judges Needed

The District Science Fair to be held at the University of Cincinnati (Science & Engineering Expo 2007) is seeking judges. The Fair relies on many qualified teachers and area scientists to serve as volunteer judges. General information on the Science Fair can be found at the following web site: <http://www.uc.edu/sciencefair/>. The date of the fair is March 10, 2007. There is a section on the web site for judges (<http://www.uc.edu/sciencefair/Judges.html>), including the option to register as a judge online. The help of the scientific community is greatly appreciated!

YCC Dinner and a Movie

Wednesday January 31 we'll get some pizzas and have a screening of "An Inconvenient Truth" (details TBA). Bring a date! Maybe this will mark the beginning of a tradition of checking out science-related movies. Don't forget to check the web site to see what we're up to: www.che.uc.edu/ycc. Thanks to everyone who has come to our recent events!

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Organic Discussion Group

*Assembled Nanoparticle
Films With Crown Ether -
Metal Ion "Sandwiches" as
Sensing Mechanisms For
Metal Ions*

Kevin Kittredge
Department of Chemistry
Miami University



Abstract

Specialized nanoparticles known as monolayer-protected clusters (MPCs) were affixed with metal selective crown ether (CE) functional groups and assembled into novel thin films to form potential metal ion sensing materials. Films of MPCs modified with potassium specific 15-crown-5 ligands were successfully assembled using both dithiol linkages and ester-coupling reactions. Film response to potassium is observed spectroscopically as the manifestation of changing interparticle spacing within the film in the presence and absence of potassium. Growth dynamics, film structure, and metal response are examined. Additionally, the important role of flexibility, especially in the interconnectivity of the CE-MPCs within the film and between the CE groups themselves is experimentally identified.

About the Discussion Group Leader

Professor Kittredge received a B.Sc. in Chemistry from the University of Illinois at Urbana Champaign in 1988 where he did undergraduate research with Prof. W.G.K. Klemperer, a M.Sc. in physical-organic chemistry from California State University at Fresno in 1991 where he studied with Prof. Joseph Gandler, and a Ph.D. from University of California at Santa Cruz in 1998 where he studied with Prof. Claude F. Bernasconi. After a post-doc with Chancellor Marye Anne Fox at North Carolina State University, he joined the faculty at Miami University in 2001. He is currently an assistant professor in chemistry working on the synthesis of molecules that can be used as selective metal ion sensors when assembled into thin films.

ACS Congressional Fellowships

The ACS Congressional Fellowship program provides the opportunity each year for two ACS members to work in Congress as staff members in the office of a Senator, Representative, or Committee. As part of a broader effort administered by AAAS that places more than 30 scientists per year on Capitol Hill, the program has two major goals: to provide policy-makers with high quality technical information on science-related issues and to educate scientists on how our government works and how science policy is made. Congressional Fellows work on the Congressional staff of their choice, and ACS Congressional Fellows have covered issues as diverse as federal funding for scientific research, science education, and health policy.

The ACS Congressional Fellows program is an outstanding opportunity for chemists who are interested in policy to learn about it in a hands-on environment—something I experienced personally as an ACS Congressional Fellow in 1998 with the Senate Budget Committee. Not only did I get to see the Congressional budget and appropriations processes firsthand, I was able to participate in formulating federal policy on funding for the Department of Energy and the NIH. I worked as an equal with other Congressional staff while providing a science-based perspective that is somewhat lacking on Capitol Hill. There are now more than 40 former ACS Congressional Fellows: every one can tell you a similar story about his or her experience, and all are tremendously enthusiastic about the Congressional Fellowship program.

Congressional Fellowship applications are due each year on December 31, with the Fellowship beginning the following September or January. The ACS offers two positions per year, one aimed at an entry-level individual and the other at a more experienced professional. Applicants must possess a Doctoral degree or Master's degree (with equivalent work experience) at the time of appointment in one of the chemical sciences or engineering disciplines. Fellows receive a stipend of \$55,000 to \$65,000, depending on their level of experience, with allowances for relocation, health insurance, and travel during the year.

Additional information can be obtained by contacting ACS staff at congfellow@acs.org.

Project SEED for High School Students - Summer 2007

For the fifth summer in a row, the Cincinnati Section will participate in the 2007 Project SEED Program, an ACS sponsored program that places economically disadvantaged high school students in academic, industrial, and governmental research laboratories for eight-to-ten weeks during the summer.

The program will build on its success from the past four summers, during which students from Aiken, Hamilton, Jacobs, Purcell Marian, Winton Woods, and Withrow International high schools worked with University of Cincinnati and Xavier University chemistry faculty. This coming summer will involve as many as four students who each will receive \$2,500 while working for 8-10 weeks in local research laboratories under the direct supervision of a mentor.


If you are a high school teacher with a student who might be interested in participating or if you are a practicing chemist (academia, industry or government) who would like to host a student, or make a contribution to the program, please contact the program coordinator, Dr. Suri Iyer at the University of Cincinnati, suri.iyer@uc.edu. Student eligibility and application information are available at http://www.che.uc.edu/undergraduate/hs_research.html. Participating research sites are expected to contribute a fraction of the stipend for each hosted student.

Chemical Educators Group

Come POGIL with Us!

On Wednesday, January 24th, the chemical educators' discussion group will meet in Julie Hust's classroom at St. Xavier High School to "POGIL". Julie got very excited about Process Oriented Guided Inquiry Learning at the BCCE held at Purdue University last summer. She has written

some lessons in the POGIL style for her first year chemistry classes. POGIL is a technique that simultaneously teaches content and key process skills. Students are arranged in small, self-managed teams to collaborate on a topic and support one another's critical thinking. You can learn more about POGIL at www.pogil.org and by attending the January meeting. Linda Ford and Paula Butler have used published POGIL materials with their AP chemistry classes. Please join us from 7 to 8:30 PM to try out POGIL activities presented by these 3 teachers. Directions to St. X (located at 600 North Bend Rd.) from any direction can be found at the school's website (www.stxavier.org). Click on "About Us". Once you arrive at the school, enter through the main entrance and go up to the third floor. Take 2 immediate rights and follow the hallway to room 3568. We begin at 6:30 PM with announcements, social time, and light refreshments.



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Coming to Cincinnati in Spring 2007...

Experimental Design for Productivity and Quality in R&D

The acclaimed course that teaches the proper way to design experiments for improved research quality.

Who Should Attend

Chemical scientists, engineers, R&D managers, and others who need to learn proven methods of designing quality into products and processes. The course assumes no previous knowledge of statistics and is aimed at both beginning and experienced R&D workers. Each participant should bring a hand-held calculator to the course.

Key Topics You'll Learn About

- Basic concepts of experimental design.
- Strengths and limitations of popular experimental design techniques.
- Applicability of common designs.
- Determining which experimental designs are appropriate or inappropriate for particular situations.

How You'll Benefit from This Course

- Get solutions to your experimental design problems from seasoned experts.
- Learn how to significantly improve R&D quality and efficiency.
- Become more efficient in performing experiments by learning how to save resources by eliminating unnecessary experimentation.
- Learn how to match appropriate experimental designs to real-world problems.
- Gain an improved understanding of statistical process control and statistical quality control.
- Understand statistical terminology and be able to communicate more easily with statisticians.
- Develop a firm foundation for understanding advanced design techniques.
- Receive a brief introduction to Taguchi methods.
- Learn about commercial software packages for data treatment.
- Improve your skills in communicating research strategies to co-workers.

About the Instructors

Stanley N. Deming is Professor Emeritus of Chemistry at the University of Houston, Texas. He is also the President of Statistical Designs. Dr. Deming is the author or co-author of more than 90 publications in the areas of analytical chemistry and related disciplines.

Stephen L. Morgan is Professor of Chemistry at the University of South Carolina. His current research interests include optimization and experimental design in chemistry, pattern recognition on chemical information, and data preprocessing strategies. Dr. Morgan is the author of more than 100 publications in the field of analytical chemistry and analytical biochemistry.

Program Agenda

Check-in will begin at 8:10 a.m. the first day. The course will be taught from 8:30 a.m. to 5:00 p.m. each day. If you have technical questions about the course, contact Dr. Deming at (713) 947-1551 or at standem-ing@statisticaldesigns.com. The course consists of lectures on the following modules, interspersed with problem sets to enhance your learning.

Date and Site

April 30 - May 2, 2007. This is a 3-day course.

Fee approximately 50% off of National ACS prices

ACS Members: national price \$1,345, *price for this short course ~\$675*

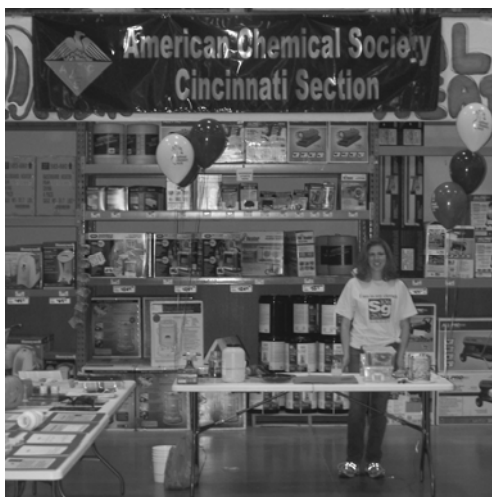
Nonmembers: national price \$1,445, *price for this short course ~\$775*

National Chemistry Week 2006 Highlights

This year's theme "**Your Home – It's All Built on Chemistry**"!! gave us a unique opportunity to present a wide range of chemical principles and relate their importance and benefit to our society in a very tangible way. It was absolutely clear to me that the children and adults I interacted with during National Chemistry Week (NCW) understood how CHEMISTRY is essential to the development of ubiquitous items found in every house and how this science makes life much easier and comfortable for each one of them.

As I write this article, I am still receiving stories and accounts of the multiple NCW demonstrations programs that took place all over the Tri-state area by our talented and wonderful group of volunteers!! Thus, in this article I will share with you selected highlights of the events:

- Thermal insulation was demonstrated at Corryville Library by monitoring the temperature of cold water samples wrapped with various different insulating materials. At Pleasant Ridge and North Central libraries it was done by observing the melting rate of wrapped ice cubes. A thermal camera was used at College Hill, Avondale and Groesbeck to "see" thermal insulation at work. The kids certainly understood the benefits of having a properly insulated house during the cold days of fall and winter.



Emily Adkison at Home Depot ready for NCW

- *Polymers, polymers, polymers.....* in all kinds of products. At Home Depot and Living Waters Church home building objects made of PVC, PET, Nylon, Cellulose and Polyurethane were displayed each accompanied by their chemical structure. Polymers were discussed with "kid-mers" and made using "Mountain in Minutes". The latter was a great hit, as the polymer grew so did their eyes in amazement as well!! The children also experience bulk properties such as hardness, flexibility, bounciness, etc. and had also the opportunity to make their own slime or playdough and take it home.



Keith and Tess touching the polyurethane foam after it hardened at Home Depot.

- October 2006 marked the 60th year since the introduction of Tide by P&G. In connection to the designation of Ivorydale Technical Center as a National Chemical Landmark during NCW, a "Bubble House" was demonstrated using a kid wadding pool, hula hoop, concrete block and bubble solution outside of the Children's Museum at the Cincinnati Museum Center. Children had a great time and proclaimed that the bubble house to be "AWESOME".
- Chemiluminescence was discussed and demonstrated at a number of venues. It was also explained how light is composed of red, yellow, green and blue light and each one has different energy. Phosphorescence was shown using different color LEDs, glow sticks and two kinds of glow in the dark vinyl tape.

Fluorescence was also shown with a fluorescein solution and LED's. Participant took home a sample of a glow in the dark tape made with strontium oxide aluminate doped with europium to test phosphorescence "life" at home.

- Copper, iron, aluminum..... Home building objects made with METALS were shown at Home Depot and Living Waters Church. Their electrical conductivity was demonstrated with a conductivity tester and compared versus insulators, e.g. plastic coating of copper wires, at Pleasant Ridge and North Central libraries.

- Several hundreds people at the Cincinnati Museum Center came up-and-close with Gloria Story's thermal camera and used it to observe exothermic reactions such as the decomposition of hydrogen peroxide with potassium iodide and endothermic processes such as the dissolution of baking soda in water. To the audience's amazement an egg was cooked using the "Eggs-O-Thermic" reaction of CaO and water at the Covington Library, Home Depot and Living Waters Church.



Child looking at NCW logo with 3D glasses after NCW event at Living Waters Church

Children and adults alike had a lot of fun learning about chemistry and its role in their homes. The NCW events were publicized through the Cincinnati ACS local section, the Public Library of Cincinnati and Hamilton County, and the Cincinnati Museum Center web sites. Also, National Chemistry Week awareness and hands on activities for children was accomplished through the Newspaper In Education (NIE) program which distributed newspaper to

schools and featured the "Your Home – It's All Built on Chemistry" in their website (<http://www.cincinnati.com/nie/chemistry/>). These are only a few examples of the kinds of things that took place in our communities during NCW held on October 21-28 2006.



Happy to celebrate Halloween and NCW at Covington Library

Chemists Celebrate Earth Day is coming on April 21 2007. For the past 2 years we have participated in the Earth Day Event organized by the Greater Cincinnati Earth Coalition, a community of non-for-profit organizations, businesses, government agencies and individuals from the Tri-State area. I invite you to join our team, this event takes place by the Ohio River at Sawyer Point, it is a very family oriented event and great fun!

In closing this article, I want to THANK ALL of our NCW volunteers for making NCW 2006 a fantastic event!! I also want to thank Givaudan, Procter & Gamble, and Cognis for their financial contribution. We also truly appreciate Wright Brothers Inc., Lyondell, Home Depot, the Cincinnati Museum Center, Cincinnati Hills Christian Academy and the Public Library of Cincinnati and Hamilton County for being great partners!

Stay tuned for a complete account of NCW 2006 in the next CINTACS issue!!

Victor M. Arredondo, NCW Chair

Call for Section Teacher Award Nominations

Award Nominations Solicited:

Outstanding Teaching Awards: Do you know a teacher who inspires his/her students? Fills them with a curiosity about the world of science and chemistry? The Cincinnati Section of the American Chemical Society is looking for these people – and honors three each year.

The *High School Chemistry Teacher of the Year* is awarded annually, to recognize accomplishments of those of us who teach chemistry at the secondary school level.

The *Middle School/Junior High School Science Teacher of the Year* is awarded annually to honor science teaching at this level.

The *Elementary School Science Teacher of the Year* is awarded for excellence in elementary teaching.

All three awards recognize teaching ability, enthusiasm, mentoring skills, and other leadership activities. Nominees need not be members of the American Chemical Society. Generally speaking, anyone teaching in these capacities within 35 mile radius of downtown Cincinnati is eligible. These awards will be given at the April Meeting. The deadline for teaching award nominations is January 18, 2007 (at the meeting).

For a nomination form contact:

Jim Hershberger
Department of Chemistry
Miami University
Ph 513-529-2441
Fax 513-529-1675
Hershbjw@muohio.edu

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Final Listing of Sponsors for the 2006-7 Section Program

We now have a sponsor for each of the 8 Section meetings in the 2006-7 program year. This is the 5th straight year that our generous individual members, academic institutions, and industries have seen the value of sponsorship and stepped forward to fund this important need.

The meeting dates and specific sponsors for each meeting are presented below:

Meeting Date	Sponsor
Sept. 24, 2006	Dr. R. G. Laughlin
October 27, 2006	U. of Cincinnati, Chemistry
November	No Meeting
Dec. 14, 2006	Xavier University, Chemistry
Jan. 18, 2007	Procter & Gamble Company
Feb. 15, 2007	Givaudan Flavors
March 14, 2007	Advanced Testing Laboratory.
April 18, 2007	Girindus America, Inc.
May 23, 2007	Dr. Milton Orchin

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Chemical Information Update – The IUPAC Gold Book

Edlyn S. Simmons, Chair
Chemical Information Discussion Group

The *IUPAC Compendium of Chemical Nomenclature* is known as the Gold Book, but not just because it was published with a yellow cover. The original author was Victor Gold, who passed away shortly before the book was completed. When the first edition was published in 1987, the color gold was chosen as a tribute. The second edition, published by Blackwekk Science in 1997, was made available on the Internet as a searchable HTML version. The Internet version of the Gold Book is available through the Royal Society of Chemistry at <http://www.chemsoc.org/chembytes/goldbook/index.htm>, free to the entire chemical community and searchable to the extent that the HTML format allows.

Now that the development of XML technology has allowed better indexing of text and images, a new version of the Gold Book has been published. Miloslav Nic, Jiri Jirat, and Bedrich Kosata of the Institute of Chemical Technology (ICT) Prague transformed the second edition into XML, with better indexing, chemical structure representations in InChI format, and hyperlinks. It has been accessible online since September 29, 2006, at <http://goldbook.iupac.org/>.

Although the XML version of the Gold

Book is based on the PDF version of the second edition, it includes more than 200 new entries that were added by Aubrey Jenkins after the print version was published. Terms can be found by searching, by browsing an alphabetical index and by opening categorized lists. Definitions are linked to the source document and to the PDF version of the definition. Mousing over linear chemical structures in the text generate pop-up windows showing the 2-dimensional chemical structure. There is an index of chemical rings, with each ring linked to the chemical structure of the molecule that contains it. Interactive link maps are provided for each entry, allowing instantaneous viewing of the definitions it references and definitions that refer to it. The link maps are built on three levels, allowing the reader to see the exact context of the term being indexed and two broader levels.

For more information about the XML version of the Gold Book, you can refer to the article "Chemical Terminology at Your Fingertips, by Miloslav Nic, Jiri Jirat, and Bedrich Kosata, *Chemistry International* 28(6), November-December 2006, at <http://www.iupac.org/publications/ci/2006/2806/ic1.html>, and the linked editorial in the same issue.

Footnote:

This year, the Chemical Information Discussion Group is once again offering hints and updates on chemical information resources available to most chemists and techniques for using them. Feedback, contributions, and requests for information you'd like to see in future columns are welcome. If you have any comments, suggestions, or contributions, please email them to simmons.es@pg.com



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 - *Nanobiotechnology: From the Single Cell to the Single Molecule*
 - *Nanoscale Self-Assembled Systems*

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Travel Awards Available

The Eli Lilly & Company is once again sponsoring a program to provide funding for undergraduate, graduate, and postdoctoral women chemists to travel to scientific meetings in 2007 to present the results of their research. Grants may be applied only for registration, travel, and accommodations, and are restricted to travel to meetings within the United States. Grant funds are limited, but there are some funds set aside for undergraduates. Only U. S. citizens and permanent residents are eligible. Applications should be limited to one per research group. Awards will be given with preference to the following order: (1) any applicant who will be making her first presentation (regardless of format) at a national or major meeting, (2) graduate or postdoctoral applicants who have not presented at a national or major meeting since leaving undergraduate school. Women who have received a prior award under this program are ineligible.

The deadline is February 15, 2007, for

receipt of applications for meetings between July 1 and December 31, 2007. For application and more information visit the WCC Web site:

<http://membership.acs.org/W/WCC/>

or write wcc@acs.org.

Mentors Wanted!

The U.S. National Chemistry Olympiad Invites You to Apply for the Mentor Position. High School and College educators are invited to apply for a position as mentor for the U.S. National Chemistry Olympiad program. (Preference will be given to high school teachers). To learn more or to apply visit:

www.chemistry.org/education/olympiad.html

CALL FOR PAPERS

**CERMACS 2007-ACS Central Regional Meeting
Northern Kentucky Convention Center
Covington, KY, May 20-23, 2007**

The CERMACS2007 organizing committee invites you to join us for an action packed meeting of science and fun! The meeting, with the theme "*Learn Today...Influence Tomorrow*" will have technical sessions, workshops and poster sessions spanning the breadth and depth of the wonderful world of chemistry. A small sampling of the special symposia planned are:

- **The "Fantastic Four" Science Guys---** **Bassam Shkhashiri, David Katz, Al Hazari & John Fortman** will amaze and delight you with their demonstrations.
- The real world of CSI Chemistry will be explored in the symposium "**Investigative Forensic Science**" featuring **William Dean, Chief of Forensic Sciences & his team at the Hamilton County Coroner's Office.** Coupled with this symposium is a session on teaching "Forensics in the Classroom"
- The scientific art of "dazzling and sensing" will be explained in multi-day symposia entitled "**Illuminating Molecules**" and "**Chemical & Biological Sensors**"

An ambitious undergraduate and graduate student program is also planned.

- A 2-day graduate workshop "**Preparing for Life After Graduate School**" (PFLAGS) will take place on May 18-20 at Xavier University.
- Workshops and sessions on "**Targeting the Job Market**", "**Resume Preparation**", "**Interviewing Skills**" and "**Going Somewhere?-Career Paths in Chemistry**" are open to all.
- Students will have an opportunity for individual **Resume Reviews.**
- Students are highly encouraged to present their research in the many general and poster sessions that are planned.

For more information or to submit your abstract, follow the links at www.cermacs2007.org

For further information, please contact us:

Technical Program: Jeanette Krause,
jeanette.krause@uc.edu, 513-556-9226

Exhibits: Michael Kurutz, kurutz@MeasureNet-Tech.com or Robert Voorhees,
robert.voorhees@uc.edu, 513-556-9297

Undergraduate/Student Affiliate Events: Heather Bullen, bullenh1@nku.edu, 859-572-5411 or Keith Walters, walterske@nku.edu, 859-572-5315

(see also following page)

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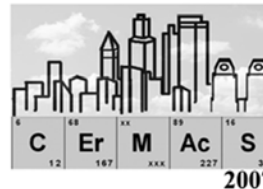


**Central Regional Meeting of the American
Chemical Society—CERMACS 2007**

Hosted by the Cincinnati Section of the ACS

Northern Kentucky Convention Center, Covington, KY

May 20-23, 2007



“Learn Today...Influence Tomorrow”

Plan now to attend this action packed meeting of science and fun!

**For more information or to submit abstracts, follow the links on our website
www.cermacs2007.org**

Symposia & General Sessions & Events

- **Investigative Forensic Science** featuring William Dean, Chief of Forensic Sciences & his team at the Hamilton County Coroner's Office
- **Chemical Education** featuring the “Fantastic Four” Science Guys---Bassam Shakhshiri, David Katz, Al Hazari & John Fortman
- “**Illuminating Molecules**” and “**Chemical & Biological Sensors**” will enlighten us with the newest in the art of “dazzling and sensing”—probing photochemistry, photophysics & sensors around the region
- “**Art of Brewing**” brought to you by the Master Brewers Association of the Americas (MBAA)

Forensics in the Classroom

Chemistry of Obesity

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Job Hunting & Interviewing Workshops

Going Somewhere?-Career Paths in Chemistry

Poster Sessions

*Chemical Abstracts Service 100th Anniversary Celebration
Cincinnati Section of the ACS “Party Night”, Wednesday May 23, ALL WELCOME*



Oral & Poster presentations from all areas of Chemistry are welcome

Program information, contact:

Jeanette Krause 513-556-9226 jeanette.krause@uc.edu

Vendor & Exhibits information, contact:

Robert Voorhees 513-556-9297 robert.voorhees@uc.edu

Michael Kurutz 866-621-3427 kurutz@MeasureNet-Tech.com

Student Program information, contact:

Keith Walters 859-572-5315 walterske@nku.edu

Heather Bullen 859-572-5411 bullenh1@nku.edu

Chemistry in Cancer Research: A Vital Partnership

February 4-7, 2007 - San Diego, CA

Chemistry plays a critical role in research on cancer diagnosis, prevention, and treatment. The American Chemical Society (ACS) and the American Association for Cancer Research (AACR) have organized a joint conference to provide a forum for research discussions among chemists with cancer research interests. A major goal of the conference is to increase awareness in young chemists of the exciting career opportunities that exist in the field of cancer research.

This conference will feature research and educational lectures by prominent leaders in several key chemically oriented areas of cancer research such as drug discovery, proteomics, the chemical biology of carcinogenesis, biomarkers and analytical chemistry, modeling and bioinformatics, and structural biology. Each session will include two symposium talks, followed by short presentations from abstracts submitted by young investigators. We anticipate that this conference will energize younger chemical investigators and inform them of the many opportunities to apply the power of chemistry to important problems in cancer research.

For more information and to view the conference program, please go to

www.chemistryincancerresearch.org.

The Women Chemists Committee Turns 80 in 2007

The Women Chemists Committee (WCC) will celebrate its 80th birthday in 2007. The committee has planned a number of events to honor and recognize their achievements since 1927. We will kick off our celebration at the American Chemical Society's 233rd National Meeting in Chicago, IL. Symposia planned include "Symposium in Honor of the Recipient of the ACS Award for Encouraging Women into Careers in the Chemical Sciences" and "Women Achieving Success: The ACS as a Platform in Leadership Development." In addition to the above symposia, WCC will hold its WCC Luncheon on Tuesday, March 27, 2007. The keynote speaker is Dr. Laura Kiessling of the University of Wisconsin, Madison who is the recipient of the 2007 Garvan-Olin Medal, an ACS National Award that recognizes a female scientist for her contributions to chemistry.

Additionally, the WCC will recognize 13 of the 22 recipients of the 2007 spring Eli Lilly Travel Award during the WCC/Eli Lilly poster session and reception on Tuesday, March 27. On Monday, March 26, the WCC will hold its Women in Industry Breakfast. Other spectacular events and programs are in the works. Please check the WCC Web site

<http://membership.acs.org/W/WCC/>

in January 2007 for a complete listing of all the Chicago national meeting activities.



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Chemistry Merit Badge Councilors Needed

The Dan Beard Council of the Boy Scouts of America will be offering their annual merit badge challenge program on February 3, 17 and March 10, 2007 at Sycamore High School. Once again, the program organizers would like to offer the Chemistry merit badge but qualified councilors are desperately needed. Councilors will need to take approximately 50 to 75 scouts through the merit badge requirements on the mornings of the dates above. If you would like to volunteer for this opportunity and help cultivate an interest in chemistry and science in young men, please contact Ray D'Alonzo at 622-1977.

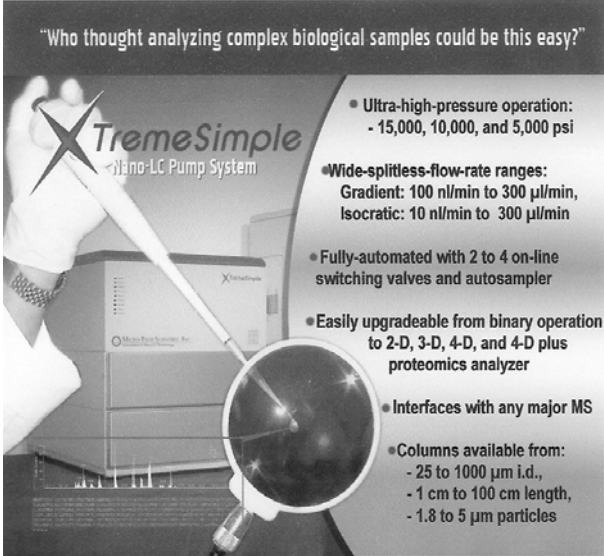
(Continued from page 10)

The Section's governance and members are grateful for this support, which will lead to higher meeting attendance and improved quality and value of our meetings.

Ted J. Logan, Chair
Sponsorship Solicitation Committee
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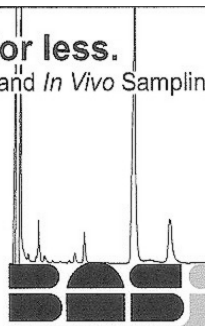
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