CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

Feb. 2006 Vol. 43, No. 5

Meeting Calendar

Feb. 15 Chemist of the Year Procter and Gamble Co. analytical discussion group (see page 9 for details)

Mar. 15 Bill Jensen at Golden Lamb Inn Joint with Dayton Section

Apr. 19 Howard and Sally Peters Oesper H.S. Awards at Northern Kentucky U.

May Party Night TBA

In this issue

From the Chair	2
Meeting Details	3
About the Award Recipient	4
Outstanding Service Award	6
Project SEED	6
Earth Day	6
Expert List	7
Greeb Receives Recognition	7
Nominate a Section Officer!	7
National YCC Newsletter	8
Chemical Information Update	8
Chemical Educators Group	9
Analytical Discussion Group	9
Zimmer International Scholar	10
National Chemistry week	11
Section Meeting Sponsors	13
beetion frieding beomsons	13

2006 Cincinnati Chemist of the Year

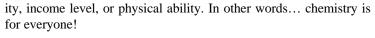
Chemistry is for Everyone!

Professor Mickey Sarquis Miami University Middletown

(see page 4 for "about the recipient")

Abstract

Chemistry can be fun, engaging, and doable by everyone--young or old, male or female—without barriers such as ethnic-





The trick? Hook them young, and then empower them to become engaged. Nurture them along the way, and then challenge them to make their own discoveries and build their own personali-

(Continued on page 5)

2006 Cincinnati Research Associate of the Year

Mr. Brian Limberg

Brian graduated from Purdue University (1991) with B.S degrees in Genetic Biology and Microbiology. After graduation he worked on the Molecular Biology of dopamine and GABA receptors at the Neurogen Corporation (Branford, CT) through 1993. Brian then



(Continued on page 6)

THE CINTACS NEWSLETTER

Vol. 43, No. 5 February, 2006

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 February 23 for the April, 2006 issue. Electronic submission is strongly preferred. All materials should be sent to:

Dr. Bruce Ault
Department of Chemistry
University of Cincinnati
Cincinnati, OH 45221-0172
Telephone:(513) 556-9238
FAX: (513) 556-9239
E-mail: bruce.ault@uc.edu

Section Officers

Chair:

Emel Yakali 513-745-5686 emel.yakali@uc.edu

1st Vice Chair: George Rizzi

513-761-0816 georgerizzi@prodigy.net

2nd Vice Chair:

Phil McKittrick ptmjr@fuse.net

Secretary:

Judson Haynes III 513-634-9379 haynes.jl@pg.com

Treasurer:

Michael Baldwin 513-556-9225 michael.baldwin@uc.edu

Councilors:

Roger Parker (12/31/06) 513-771-3613 parker.r@fuse.net

Bill Oliver (12/31/08) 859-572-5409 oliver@nku.edu

Bruce Ault (12/31/07) 513-556-9238 bruce.ault@uc.edu

Kathy Gibboney (12/31/07) 513-622-2289 gibboney.k@pg.com

From the Chair

February meeting is for recognizing chemists who have distinguished themselves in their area of expertise. Congratulations to the 2006 ACS Cincinnati Section Chemist of the Year Professor Mickey Sarquis (57th recipient since 1950) and 2006 Research Associate of the Year Brian Limberg (15th recipient since 1990).

Mickey is a leader in chemical education recognized nationally and internationally. She is an educator of educators. Through programs offered by the Miami University's Center for Chemical Education, for which she is the director, she has reached a huge number of kindergarten through college educators, hence many more students. Having participated in one of her programs, I know she will get the attendees hooked in activities as the speaker of the meeting.

With degrees in Genetic Biology and Microbiology, Brian Limberg has been a valuable member of the Cardiovascular Group at P&G Pharmaceuticals under the guidance of Dr. Jan Rosenbaum. Brian will not be able to attend the meeting due to a prior conference commitment. I hope we can recognize him personally at the May meeting.

We are grateful to the Procter & Gamble Company for providing both the site and the sponsorship for this meeting. Please remember successful meetings need membership support; "do come to the meetings and every time ask a different person, colleague, coworker, friend or student to come with you".

I just want to remind you that the next meeting is at the historic Golden Lamb in Lebanon, jointly with the Dayton Section on another topic of high interest in the membership survey, history of chemistry.

Lastly, the section is again participating in Project SEED in the summer. This program aims to encourage economically disadvantaged students to pursue careers in science. Please check the article inside for more information and contact address.

Emel Yakali

Visit the Section's Home Page

http://www.che.uc.edu/acs

February Monthly Meeting February 15, 2006 Lakeside Café Procter & Gamble Health Care Center Sponsored by the Procter & Gamble Company

Honoring

Professor Mickey Sarquis, Miami University ACS Cincinnati Section Chemist of the Year 2006

and

Brian Limberg, P & G Pharmaceuticals, Inc.
ACS Cincinnati Section Research Associate of the Year 2006

Program

5:30 – 7:00 Registration and Social Hour (Cash Bar)

5:30 – 6:30 Board Meeting

7:00 – 8:00 Dinner

Roast Beef Au Jus with Sautéed Mushrooms and Onions or Grilled Mahi Mahi with Mango Chutney. Chef's Fresh Green Salad Garnished with Cherry Tomatoes, Red Onions, Black Olives, and Croutons. Herbed Roasted Redskin Potatoes. Chef's Fresh Vegetable. Rolls and

Butter. Deluxe Dessert Station. Coffee and Tea.

(\$28 or \$14 for students, emeritus, unemployed, and first-time new members)

8:00 – 9:00 Speaker, Professor Mickey Sarquis

Reservations – Deadline Monday February 13, 2006 Noon

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, please call 513-556-0293; leave name, affiliation, phone number, entrée choice, and price category, if half-price.

Directions P & G Health Care Research Center, 8700 S Mason-Montgomery Rd., Mason, OH 45040 From the North

I-71 South to Exit 19 Mason Montgomery Rd. Turn right off the exit. Forward 1.2 miles to P & G on the right. I-75 South to I-275 East to I-71 North to Exit 19 Mason Montgomery Rd. Turn left to Mason Montgomery Rd. Forward 1.2 miles to P & G on the right.

From the South

I-71 North to Exit 19 Mason Montgomery Rd. Turn left off the exit. Forward 1.2 miles to P & G on the right. From the East

I-275 North or West to I-71 North. I-71 North to Exit 19 Mason Montgomery Rd. Turn left off the exit. Forward 1.2 miles to P & G on the right.

From the West

I-275 East to I-71 North. I-71 North to Exit 19 Mason Montgomery Rd. Turn left off the exit. Forward 1.2 miles to P & G on the right.

After turning into P & G, go straight and park. Enter main doors and check in with security. Go down escalator, turn right to Lakeside Café. Contact is Nancy Carver 622-3012.



About the Award Recipient

Mickey Sarquis is Professor of Chemistry and Biochemistry at Miami University (Ohio), where during her 28-year tenure, she has taught an array of undergraduate and graduate courses, including numerous ones for teachers of all levels. She directs Miami's Center for Chemistry Education, which is nationally and internationally recognized for its efforts to enhance science education by engaging teachers and students in active learning. These programs have reached more than 16,000 kindergarten through college educators nationally through credit courses and numerous others through non-credit outreach efforts. With mottos such as "Let's roll up our sleeves and work together to make a difference," "Chemistry is for everyone," and "When you capture a teacher, you capture a generation," her efforts have dramatically impacted science education in the U.S.

In addition to her service to many local and national organizations, Mickey presently represents the Division of Chemical Education as ACS Councilor (2004-2006) and is a member of the ACS Membership Affairs Committee and consultant to the ACS Community Affairs Committee. She is also program chair for the 19th Biennial Chemical Education Conference to be held in summer 2006. She was the CHED's Chair (2001-2003), SOCED consultant (1986-89), PolyEd liaison (1986-95), and the first high school editor of the *Journal of Chemical Education* (1979-96), and has held many important committee and task force appointments and writing committees including the Preparation and Continuing Education of Secondary School Chemistry Teachers, Chemists in the Classroom, and Report with Recommendations: School Science Curriculum Conference.

Through her research in chemistry education, she and her graduate students have developed a research-based protocol for providing teachers with the science content knowledge, experience, confidence, and support they need to bring quality science instruction to their classes. This award-winning protocol has become a national template for teacher professional development programs. In addition, Sarquis and her

(Continued on page 5)

(Continued from page 1)

ties into the process. Ask our friends in the video game industry: they'll tell you it's about ownership and personal fulfillment. Gamers put in hours and hours of effort developing sophisticated strategies and learning and deciphering codes all to get through a complicated maze, defeat video rivals, and match wits with gamers from throughout the world. Ask the millions of kids and teachers we have impacted over the years—they will agree that the same fun and challenging puzzles are found in science in general and chemistry in particular.

Much is being said about the state of science and chemistry education in our nation's classrooms, but we must also recognize the important role played by non-educators: chemists in industry, government, the private sector. Wherever chemists are, whatever job we do, we share the responsibility to help educate and engage the public, and to show the public just how much we love our science and to show them that there is a place for them in the process of science. If we capture the imagination and creative talents of our friends, neighbors, families, and the public in general, we have opportunities to capture and nurture the minds of the young and old alike. Outreach does not always have to take the form of big formal events (like National Chemistry Week) to be effective. Smaller-scale interactions, like visiting 4-H or scout clubs, community organizations, and church groups or even chatting with the neighbors about how excited you are about your latest discovery, can make tremendous differences.

Come prepared to roll up your sleeves and get involved in this fun evening of doing chemistry with an engaging, outreach flare. Bring the action of atoms and molecules to life by getting involved in some kinesthetic activities; join in some storytelling and role playing; play with the toys of chemistry learn a bit about the research that shows these methods to be effective, and hopefully take home some new ideas.

Support CINTACS Advertisers (Continued from page 4)

team have created a continuous quality control protocol for developing and publishing high-quality instructional materials. Additional areas of research include developing inquiry based labs for college-level general chemistry courses, chemical technology education, technology conversion of face-to-face courses into web-based distributive learning courses, and storyboarding and visualization to improve conceptual understanding.

Mickey has co-authored several textbooks, including *Health Chemistry* (for high school) and *Physical Science: The Challenge of Discovery* (for junior high school), both published by D.C. Heath. She has authored/edited more than 20 teacher resource books, including the popular *Teaching Science with TOYS* series, the industry-based *Science in Our World* series, and *Building Student Safety Habits for the Workplace*.

As a leader in chemical education, Mickey has given more than 165 invited presentations at national and international gatherings including the XVII Mendeleev Congress on General and Applied Chemistry (co-presider for Chemistry Education Symposium and speaker, Kazan, Russia), the 17th Chemistry Conference (Santiago de Cuba), XXV Chilean Chemistry Society Meeting (Antofagasta, Chile), and the 17th International Conference on Chemical Education (Beijing, China).

For her efforts, Mickey has been awarded regional (1986) and national (1994) Chemical Manufacturers Association Catalyst Awards and The Ohio Academy of Science Outstanding University Educator Award (1990). She has also been awarded more than \$15 million in grant funds from state, federal, and industrial sources.

The American Chemical Society Central Regional Meeting

CERMACS 2007 is coming to Cincinnati *May 20-23, 2007!* Contribute and Participate!

See: www.cermacs2007.org for more details.

(Continued from page 1)

worked briefly as a research associate at the University of Iowa studying the Cell and Molecular Biology of neural progenitor cells from the olfactory epithelium. In late 1994 Brian took a position with the Procter & Gamble Co. working in the Hair Growth field. Finally, Brian joined the Cardiovascular group at P&G Pharmaceuticals, Inc. in 1997. While in the Cardiovascular group, Brian has been studying the Molecular Pharmacology of Receptor Tyrosine kinases and G-Protein Coupled Receptors, under the guidance of Dr. Jan S. Rosenbaum, Ph.D.

When not working, Brian enjoys spending time with his family by going day hiking, coaching soccer, and working on model trains with the children. Brian and Aimee have been married 10 years, and they have three children (Michael, Katie, and James).

Call for Nominations for Outstanding Service Award

Nominations will be accepted for the Cincinnati Section Outstanding Service Award until Thursday, April 20, 2006. The nominee should have performed an extraordinary service to the Cincinnati Section. The nominator should be a member of the Section. A complete nomination consists of a letter written by the nominator detailing the reasons the nominee is deserving of the award, and at least one supporting letter by another member of the Section. Nomination materials should be sent to: James W. Hershberger, Cincinnati ACS Awards Committee Chair, Department of Chemistry and Biochemistry, Miami University, Oxford, OH 45056. Alternatively, materials can be sent by email (hershbjw@muohio.edu) or fax (513-529-1675).

Visit the Section's Home Page

http://www.che.uc.edu/acs

Project SEED 2006

The Cincinnati Section will participate in the 2006 Project SEED, 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 three summers, during which students from Hamilton, Jacobs, Purcell Marian, and Withrow International high schools worked with the University of Cincinnati chemistry faculty. This coming summer will involve as many as five students who each will receive \$2,275 while working for 8-10 weeks in local research laboratories under the direct supervision of a mentor. The Cincinnati Section encourages high school chemistry teachers to identify eligible students who might be interested in participation. Applicant evaluation will begin February 14, 2006. Student eligibility and application information are available at http://www.che.uc.edu/SEED/SEEDmain.htm. Participating research sites are expected to contribute \$750 of the stipend for each hosted student. Prospective mentors are encouraged to consult the web site and contact Suri S. Iyer at the University of Cincinnati, suri. iver@uc.edu, 513-556-9273.

CHEMISTS CELEBRATE EARTH DAY 2006!

I want to invite all interested chemistry practitioners (chemists, teachers, students) to join the Cincinnati ACS. We are gearing for **Earth Day** on April 22nd 2006. We would like to provide demonstrations and hands-on activities that reflect the positive role chemistry plays in addressing environmental issues. The first official recognition of Earth Day was on April 22, 1970, as a way to demonstrate support for a healthy environment and raise awareness about environmental issues. The ACS has taken part in Earth Day since 2003 under the banner Chemists Celebrate Earth Day.

Please consider helping us celebrate Earth Day in classrooms, libraries, museums and parks in the Tristate area. Contact Victor M. Arredondo, NCW & Earth Day Chair, at arredondo.vm@pg.com or (513) 627-1948; I would gladly answer any questions you may have and welcome you to the team.

Hank Greeb Receives Section Recognition

Hank Greeb, who recently moved to Michigan to be closer to his grandchildren, received a special appreciation award from the Cincinnati Section at its



regular meeting on December 7 at Xavier University. Greeb was recognized for his many contributions to the Section's programs and activities. He held several elected positions including Chair (2001-2002) and Trustee, and served on Regional committees and is presently leading a group working on Section tax issues.

Greeb came directly to P&G after completing his BS and MS degrees at the University of Denver and he retired with 33 years of service in 1994. He is the only Chemical Engineer to hold the Section Chair position.

He was cited for his use of computers in Section activities, generosity in helping others with computer problems, and general helpfulness in establishing and achieving Section goals. Greeb is shown receiving his plaque of appreciation from Ted Logan at the December 7 meeting.

Nominations for Section Officers

The election of Cincinnati Section officers will be held in April and the nominating committee is seeking candidates for offices in the Section. Being an officer and helping to maintain our excellent overall local section program and activities is a great way to serve our section. If you would like to run for Chair-Elect, Second Vice-Chair, Secretary, Treasurer, Auditor, Councilor or Alternate Councilor – or have questions about the responsibilities of these offices- please contact Phil Christenson, Chair of the Nominating Committee, at: phil. christenson@givaudan.com or 513-948-4942.

We specialize in recruiting and placing professionals for contract employment, direct placement, and contract-to-hire positions across the complete scientific and clinical research spectrum including: Clinical Research Associates, Clinical Data Managers, Clinical Data Coordinators, Research Scientists, Regulatory Specialists, Medical Writers, & more.

For more information, contact Michelle Davin (513) 229-2078

or

Emily Shafer (513)229-2030

If I never knew they were one of the nation slargest staffing companies.

All I know is they were the right fit for me.

People, Fit. Perfectly.

Experts List

Explosive. Biohazard. Corrosive. Carcinogen. Hazardous. All of these words can bring fear and sometimes chaos when the news media announces a potential exposure. Unfortunately, there are instances when this chaos is a result of misinformation. In an effort to ensure that our local media receives accurate information concerning chemicals and their properties, the Cincinnati ACS would like to ask you for your help. The Public Relations Committee is formulating a "Chemical Experts List" of local chemists. This list will be distributed to the local news media in which they will be able to contact you as a resource. Therefore, if you would like your name to be included, please contact Jamie Heimkreiter at jheimkre@advancedtesting.net or 513-489-8447 ext. 3005 with your name and contact information.

Chemical Information Update – More on Wikipedia

Edlyn S. Simmons, Chair, Chemical Information Discussion Group

My December, 2005, Chemical Information Update column was about Wikipedia, the volunteerauthored free encyclopedia on the Internet. sooner had I submitted the column to Cintacs than articles on Wikipedia began appearing prominently in the press. First there was an article in the British newspaper, The Guardian, in which experts on various topics evaluated Wikipedia articles and gave them a wide range of grades 0-8 on a scale of 1-10. Then there was a followup from the Mail and Guardian of Johannesberg, South Africa, which evaluated articles relevant to South Africa and found a range of 0-10 on a scale of 1-10. Probably the most damning recent article is a column in the November 29 edition of USA Today in which John Seigenthaler describes his a libelous "biography" posted on Wikipedia (http://www.usatoday.com/ news/opinion/editorials/2005-11-29-wikipediaedit_x.htm/). Mr. Seigenthaler's biography contains both untrue statements about his life and unfounded allegations linking him to the assassinations of John F. and Robert F. Kennedy.

After Mr. Seigenthaler contacted Jimmy Wales, Wikipedia's founder, the incorrect information about him was deleted from the website, but it had remained there for 132 days. Today, Wikipedia's article on John Seigenthaler includes a summary of the controversy. Wikipedia is taking measures to reduce the chance that blatently inaccurate information will be posted by vandals in the future. Creators of new articles will be required to register, although anonymous changes will continue to be permitted. High profile information will be subject to a short delay before its release to the Internet so that editors have a chance to check its accuracy. That will not help more esoteric topics; unless a knowledgeable editor notices errors in an article, incorrect information can remain permanently.

How reliable is the information in Wikipedia? Probably as accurate as on most websites. In fact, you may be searching Wikipedia any

time you do a Web search, as search engines like MSN, Google and Ask.com frequently list a Wikipedia article at the top of their relevance rankings. There is some evidence that scientific topics may be relatively accurate. An informal study by Dr. Engelbert Zass the head of the ETH Chemistry Biology Pharmacy Information Center in Zurich (https://listserv.indiana.edu/ cgi-bin/wa-iub.exe?A2=ind0512&L=CHMINF-L&P=R3238&I=-3) found that "for 20 test questions that the results in Wikipedia were comparable in utility to those from the Roempp Chemistry Dictionary, an established source." A study published in Nature reported a comparison by subject experts of 42 Wikipedia articles with the corresponding articles in the online version of the Encyclopedia Britannica (Nature 900-901 (15 December 2005) doi:10.1038/438900a; http://www.nature.com/nature/ journal/v438/n7070/full/438900a.html). The Nature study found that neither encyclopedia was completely reliable, with an average of 4 errors per Wikipedia article vs. 3 per Britannica article.

All this light shining on the inner workings of Wikipedia hasn't changed my opinion of it. I still think it's is a good place to satisfy curiosity, not a good place to do serious research. For serious chemical information searches there are many more authoritative places. Stay tuned in!

Footnote: This year, the Chemical Information Discussion Group is 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

Younger Chemists Committee Newsletter

News Flash: The YCC Newsletter Has Gone Electronic! The YCC newsletter will only be sent electronically. Sign up for our e-mail notification system! It's easy—just visit our Web site and follow the signup link! Even if you choose not to receive our e-mails, you can always read the newsletter on our Web site, chemistry.org/ycc.

See you on the Internet!

Analytical Discussion Group

Applications of Pulsed Laser TeraHertz Imaging

Philip F. Taday TeraView Limited

abstract

The terahertz spectral region extends from the end of the far-IR spectral region (i.e., 1.3 cm-1 or 0.2 THz) to the beginning of the microwave spectral region (i.e., 133 cm-1 or 4 THz). Absorptions observed in this region are commonly associated with intermolecular hydrogen-bonding vibrations and crystalline structure lattice vibrations.

Terahertz pulsed spectroscopy (TPS) measurements obtained in both transmission and reflectance modes advance the current state-of-the-art for elucidating solid state crystalline structures such as polymorphs, hydrates, and solvates by providing fundamental spectra-structure correlations for hydrogen-bonding and other organic moieties. TPS provides a unique insight into API/excipient compatibility for product formulation, bioavailability testing, and product dissolution.

Terahertz pulsed imaging (TPI) combines TPS measurements with refractive index measurements to provide a quick and nondestructive 3D mapping technique for determining the composition and integrity of intact pharmaceutical dosage forms. TPI yields unique information for product formulation, product quality, and manufacturing trouble-shooting consistent with the FDA's Process Analytical Technologies (PAT) initiatives.

In this talk, an overview of terahertz technology and practical implementation considerations for TPS and TPI applications in pharmaceutical R&D and manufacturing environments will be provided. Using actual pharmaceutical product examples, the benefits of terahertz for determining API polymorphs and crystalline states and the unique ability of 3D imaging to determine API homogeneity in coatings, coating thickness, and product formulation defects will be described.

About the discussion group leader

Dr Philip F. Taday earned his Bachelor of Science degree in physics (1986), and his Ph.D. in

chemistry (1991) from the University of Reading in England. When working at the Central Laser Facility at the CLRC Rutherford Appleton Laboratory he developed a femtosecond tabletop laser system as well as worked on novel tunable sources. In August 2000 Dr. Taday began working at Toshiba Research Europe Limited, of Cambridge, England, on terahertz spectroscopy. In April of 2001 this terahertz program was spun-out of Toshiba, becoming TeraView Limited.

Dr Taday is currently the Principal Scientist and Head of the Pharmaceutical Applications and Spectroscopy Group at TeraView Limited. He has authored and coauthored 73 published papers and presented at numerous scientific conferences. He is a co inventor of 5 patent applications.

Teachers Have Howling Event

The teachers will gather together in Colleen Epperson's classroom at Highlands High School on Thursday, February 23rd, to share Halloween Show demonstrations. Actually, we plan to share holiday ideas for not only Halloween but also other important calendar times - Christmas, Valentine's Day, St Patrick's Day, and National Mole Day. The focus is Halloween because several area teachers perform larger demonstration shows at that holiday. But I think you get the idea. So wear your favorite costume, grab your crucial props, and mix your necessary solutions. The teachers always gather at 6:30 PM for light refreshments; the meeting starts promptly at 7 PM. We try to conclude by 9 PM. Doesn't that sound like enough fun to invite a colleague? Please do!

Directions to Highlands High School from Cincinnati: Travel over the river on I-471 bridge. Take the KY 1120/Memorial Parkway exit (#4) toward Bellevue/Newport. Turn left on Memorial Parkway and travel 2.5 miles to the school at 2400 Memorial Parkway in Fort Thomas. You will pass the new middle school on your left first. As you go around a bend, you will find the high school also on the left. Enter the parking lot and proceed to room 39. Direct your questions to Linda Ford at Linda.ford@7hills.org.

The 2006 Hans and Marlies Zimmer International Scholar

The Department of Chemistry at the University of Cincinnati is very pleased to present the

fourth series of lecture-visits by international scholars actively engaged in areas of frontier chemiresearch. fourth scholar in this series is Professor Peter J. Sadler, Crum Brown Professor of Chemistry at the University of Edinburgh, Scotland. Professor Sadler received his B. A. in 1969 and M.A., D.Phil. in 1972 at the



University of Oxford. He is the recipient of the Royal Society of Chemistry Award for Inorganic Biochemistry, the Dwyer Medal from the University of New South Wales Australia and is a Fellow of the Royal Society of Edinburgh.

His research interests focus on metals in biology and medicine. His group has recently iden-

tified for the first time the major zinc binding site on human albumin, characterised the first multinuclear form of a transferrin protein, a new class of bacterial proteins involved in zinc resistance containing novel zinc-finger-in-a-zinc-cluster centres, a novel copper site in a bacterial copper chaperone, and has proposed a new mode of interaction of metallated anti-HIV macrocycles with the CXCR4 receptor. His work involves close collaboration with biologists, clinicians, and industry.

Professor Sadler will be in residence at the University of Cincinnati April 24 – April 28 and will deliver a series of talks which will be open to the public:

- "Genetic Codes for the Periodic Table: Proteins as Therapeutic Targets for Metals."
- "Organometallic and Photoactivated Metal Anticancer Complexes."
- "The Elements of Life and Medicines: a Web of Health."
- Professor Sadler will also present a Short Course on "Inorganic Chemistry and Medicine"

For More Details see the UC Chemistry homepage at http://www.che.uc.edu/kim/alumni/Zimmer/zimmerindex.htm

ADVANCED • TESTING • LABORATORY™

"The Science of Testing - The Art of Serving"

Cincinnati, OH • www.AdvancedTesting.net • 513.489.8447

Supplier of Chemical and Biological Testing Solutions in support of RkD, regulatory compliance and routine SAFEGUARDING FOR THE CONSUMER GOODS AND RELATED MANUFACTURING INDUSTRIES.

Spreading Joy and Knowledge – National Chemistry Week 2005

National Chemistry Week 2005, October 16-22, gave us an opportunity to find the "child within us" and have fun with all kinds of toys. It also gave us the chance to share with children and adults the role chemis-

try plays in making toys and the chemical principles that make them work the way they do. Thanks to a wonderful team of volunteers, NCW was celebrated by *over 2000 people* at public libraries, museums, schools and colleges in the Tristate where chemistry demonstrations were presented. We also reached about *a million readers* with four days of quarter-page NCW hands-on activities through the *Newspapers in Education (NIE)* program with the Cincinnati Enquirer/Post. Newspapers were delivered free-of-charge to schools, and the hands-on activities were also made available at: http://www.cincinnati.com/nie/chemistry/index_05.html. What a tremendous effort to inspire ALL children, spark their interest in chemistry and fuel their imagination and creativity!!!

Let me share some stories and pictures of the great events that took place during NCW 2005 in our communities:

 Polymers, polymers, polymers...... were discussed, made, handled, shrunk and built with "kid-monomers" and crosslinked with adults in almost every event venue. Many children experienced bulk properties such as hardness, flexibility, bounciness, etc. and had the opportunity to make their own slime or playdough and take it home.



- At the Cincinnati Museum Center, Gloria Story and her team had a blast! Millie Mole greeted visitors
 while volunteers amazed kids with magic sand, oil-adsorbing polymers, dry ice, liquid nitrogen, and
 many more demonstrations. Also, thanks to our friends at Equistar/Lyondell over 500 hovercraft rides
 were clocked!!
- What fun with gases! Alka Seltzer rockets at North College Hill Library, Film Can Cannons at Living



Waters and at Wilmington College, and Cartesian Divers at Pleasant Ridge and Mt Healthy, they all were big hits with children, students and adults alike.

- Drinking Birds were at hand at the Franklin Library. The audience, fascinated with this toy, learned how they work.
- The nature of light and Chemiluminescence were discussed and demonstrated at various venues. At Elmwood a prism was used to show how light is composed of red, yellow, green, and blue light; meanwhile at Pleasant Ridge their relative energy was demonstrated by using light sticks, LED's, phosphorescent vinyl, and fluorescent markers. UV active bracelets and key chains were made at North College Hill.



• At Wilmington College, High School Chemistry Night (HCN) took place in which 35 students from 7 different High Schools learned how to do chemistry demonstrations. Students were also divided in teams and then competed against each other for best presenters as selected by a panel of judges.

For the first time, public awareness of the 40+ venues for NCW events was done both in English and Spanish through the Cincinnati ACS local section web site and through flyers distributed to two local organizations in Ohio and Kentucky. The events were also publicized through the Public Library of Cincinnati and Hamilton County and the Cincinnati Museum Center web sites.

No doubt about it, the smiles and wonder in the faces of the children who attended our events were the

highlight of NCW 2005. If we take them as a measure of success, we did an awesome job!! My wholehearted appreciation goes to the many volunteers of the NCW team. As in years past, your tireless efforts, abundant talents, and selfless disposition make NCW possible. Special thanks to Ed Escudero for leading a fabulous NCW Training Night at Summit Country Day for the second year in a row and Ed Vonbargen for taping it and creating the CD for the second time as well; Jamie Heimkreiter for creating and printing all the flyers; Gloria Story for leading the events at the Museum Center; and Kathy Gibboney for closely working with the Cincinnati Enquirer/Post NIE program. I look forward to working with all of you during NCW 2006, "Your Home – It's All Built on Chemistry.



I also want to thank Givaudan, Procter & Gamble, and Cognis for their financial contribution and Wright Brothers Inc. for in-kind donations.

Victor M. Arredondo, NCW Chair



Section Meeting Sponsors, 2005-6 Program Year

Four local industries and two universities have generously agreed to sponsor one each of our Section meetings in this year. This leaves only one meeting (Party Night, May) without a sponsor, but we expect a volunteer to come forward shortly.

Recall that Sponsorship entails a contribution of at least \$1000 cash or an "in-kind" contribution of the same amount of goods and services required to deliver the many aspects of a monthly meeting. Meeting expenses include Social Hour, meeting room, audio/visual equipment, student and guest meals, and miscellaneous speaker expenses. The sponsors' contributions turn loose funds that we can use to provide better speakers, which leads to better attendance and more value to meeting attendees.

The Section and its members appreciate the generosity of these organizations and thank each one for their support.

September 18 No Sponsor Solicited October 14 UC Chemistry department

November No Meeting
December 7 Xavier University
January 18 Givaudan Flavors

February 15 The Procter and Gamble Company March 15 Advanced Testing Laboratory April 19 Girindus America Inc.

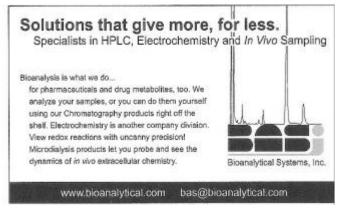
May Seeking Sponsor

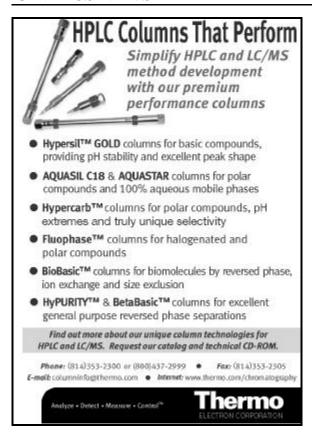
Who will come forward to sponsor the May Meeting and give us full sponsorship for the 2005-6 program year?

Ted J. Logan, Chair Sponsorship & Solicitation Committee Cincinnati Section, ACS.











Specializing in providing the best qualified candidates for contract, contract-to-direct, and direct hire positions in the Scientific and Engineering fields. Our clients include the area's most prestigious companies and research facilities! As one of the world's largest and most successful staffing companies, we offer competitive pay, great benefits and invaluable industry experience!

Check out our current local and national job openings at www.AdeccoTechnical.com

To be included in our database, send your resume to Cincinnati.Technical@AdeccoNA.com.

ADECCO TECHNICAL SERVICES 4520 Cooper Road, Suite 100 Cincinnati, OH 45242 513-769-9797

Chemical Analysis Services

Materials ID / Deformulation
Manufacturing Problems
Litigation Support Services
Contaminant Analysis

Polymer Analysis & Testing
Failure Analysis
Product Development
Competitive Product Analysis



CHEMIR

Analytical Services

(800) 659-7659

ISO 9001 Certified

chemir.com



CAREER SERVICES

Unemployed? Need Resume Advice? Seeking New Opportunities? Looking for chemists?

FIND OUT WHAT ACS CAN DO FOR YOU!

For more information, visit the career services website at:

http://www.che.uc.edu/acs/career.html or contact acscincinnati@yahoo.com



American Polymer Standards Corporation

P.O. Box 901, Mentor, OH $\,44060\,$ * 8686 Tyler Blvd., Mentor, OH $\,44060\,$

Ph: (440) 255-2211 * Fax: (440) 255-8397 www.ampolyer.com * email: apsc@ampolymer.com

Gel Permeation Chromatography:

* Conventional single detector (RI or UV)

*Universal: two detectors (RI and viscometer)

Additional Services:

- * GPC/SEC Molecular Weight Stds
- Aqueous & Organic
- *Light Scattering by MALLS
- *Fraction by Supercritical $C0_2$
- *Fraction by Preparative Scale
- *New and Regenerated GPC/SEC

Columns

CINTACS N	EWSL	ÆT	ΓER
-----------	------	----	-----

16

American Chemical Society - Cincinnati Section

Jim Hershberger 102 W. Central Oxford, OH 45056 Non-Profit Org. U.S. Postage Paid Cincinnati, Ohio Permit #517