CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

March, 2013 Vol. 50 No. 6

Section Calendar Mar 13 Joint meeting with Dayton, Marriott North Apr 7-11 National ACS meeting, New Orleans Apr 20 Chemists Celebrate Earth Day Apr 24 Dr. Ariel Fenster, & Teacher / Student Awards @NKU May 10 Party Night

Program:

11

12-15

Featured Speaker

Dr. Thomas Werner, Union College, Florence B. Sherwood Professor Emeritus of Physical Sciences

March Monthly Meeting

Wednesday, March 13, 2013

Marriott North Hotel, West Chester

Joint Meeting with Dayton ACS; **Sponsored by NETZSCH Instruments**

March mtg. announcement From the Chair 2 March Speaker: Prof. Tom Werner. Union College, NY 4 2012 NCW winners 5 2012 Guenther Award recipient 7 Dr. Stephen Hanessian 8 Project SEED announcement 8 NanoDays Announcement ACS short course listing 9 STEM conference announcement 10

CERMACS announcement

CINTACS Advertisers

In this issue

5:30 - 7:00	Registration, Marriott North Hotel
5:30 – 7:00	Social Hour, Hotel Atrium
6:00 – 6:30 ideas for	Planning Committee Meeting Come join Chair-Elect Diana McGill to discuss r next year's program
7:00 – 8:00	Dinner, West Chester Ballroom I & II, (\$25.00, or \$15.00 for students, emeritus, unemployed or K-12 Teacher members). Menu: Seafood Stuffed Tilapia with Spinach and Lemon, or Roasted Chicken with Tomato Coulis, or Veg. option Served with Pan Roasted Market Vegetables, Au Gratin Potatoes, Tossed Green Salad, Soft Rolls, Creamery Butter. Dessert: Carmel Fudge Cake & Lemon Twist Cake, Coffee, Tea
8:00 - 9:00	Featured Speaker, Dr. Tom Werner: "Doping in

Sports – How Chemists Help Catch the Cheaters" (sometimes)

THE CINTACS NEWSLETTER

Vol. 50, No. 6 March, 2013

Editor......Adam Bange Advertising.....Dan Esterline

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 March 25 for the April 2013 issue. Electronic submission is strongly preferred. All materials should be sent to:

Adam Bange Xavier University 3800 Victory Parkway Mail Location 4221 Cincinnati, Ohio 45207-4221

Tel.: (513) 745-3950 Fax: (513) 745-3695 E-mail: Bangea1@xavier.edu

ACS Cincinnati Section

<u>Chair:</u> Beth Reno reno.ea@pg.com

1st Vice Chair & Chair-Elect: Diana McGill mcgill@nku.edu

2nd Vice Chair: Kevin Ashley kea0@cdc.gov

Secretary: James Mack james.mack@uc.edu

<u>Treasurer:</u> Keith Walters walterske@nku.edu

Trustees
Susan Hershberger (Chair)
Victor Arredondo
Rick Mullins

From The Chair:

Hello Cincinnati ACS - March Madness is here!

This month we have the privilege of hosting Dr. Thomas Werner, Florence B. Sherwood Professor of Physical Sciences Emeritus, Union College, NY. His presentation will provide real life examples of how scientists are using chemistry to identify banned substances in athletics and highlight current issues in detecting performance enhancing drugs. There must be chemists who have gone rogue, or to the "dark side", designing subsequent compounds to avoid such detection, and Dr. Werner, and others like him chasing down the evidence with their analytical acumen. A sports version of CSI! The Dayton ACS section will be joining us at the lovely Marriott Hotel North in West Chester on March 13.

I am very pleased to share that Dr. Stephen Hanessian, Director of Medicinal Chemistry and Pharmacology at UC, Irvine, will be in Cincinnati on Tuesday, March 19. Dr. Hanessian is the 2012 recipient of the Ernest Guenther Award in the Chemistry of Natural Products, and he will present a lecture entitled, "A Century of Natural Product Synthesis: From Concept to Practice" at Givaudan's Edison Drive facility. A special "thank-you" to Ioana Ungareanu for coordinating this event, and to Givaudan for hosting the social hour and lecture.

Other March happenings include the Science Olympiad 2nd level exam on March 14, the Science and Engineering Expo at UC on March 16, and abstracts for Cermacs are due March 20.

It is time to gather nominations – if you know an amazing science teacher, and want to nominate them for Teacher of the Year, please send their name to Lynn Hogue of the Awards Committee, or Linda Ford of the Educators Committee. The three Teacher of the Year categories are elementary, middle and high school. It is also time to fill the slate for local Section officers. Rick Mullins, Nominating Committee Chair, will present the slate at the March meeting, as well as take nominations from the floor. And, let Phil Christenson know who you think should receive the Outstanding Service and Catalyst awards for our section.

On February 15, Keith Walters and I filed our Annual Report with National ACS, and Keith and Susan Hershberger filed our

(Continued on page 3)

Directions to Meeting Venue:

The street address is 6189 Muhlhauser Rd • West Chester, Ohio • 45069 • Phone: (513) 874-7335 http://www.marriott.com/hotels/travel/cvgnocincinnati-marriott-north?hwslo=2&orgref=https% 3A%2F%2Fwww.google.com%2F

FROM South

- Take Interstate 75 North
- After the I-275 interchange, move to the right 2 lanes for Exit #19 Union Center Rd exit.
- Move to the middle left turn lane of the exit ramp, and turn left onto Union Center, crossing over the highway.
- Turn right at the intersection with Muhlhauser Rd (you can see the hotel is situated at this corner) Turn right into the hotel entrance

FROM East/West:

- Take Interstate 275 to I-75 North.
- Stay in the right 2 lanes for Exit #19 Union Center Rd (next exit after I-275)
- Turn left onto Union Center Rd. and go over the highway.
- Turn right at the intersection of Union Center with Mulhauser Rd.

The hotel entrance is on your right.

FROM North (Interstate 75 South):

Take Interstate 75 South to Union Center Rd exit #19 (This exit is after CinDay Rd exit.)

• Turn right off the exit ramp onto Union Center, and then right again on Muhlhauser Rd.

The hotel entrance is on your right

From The chair (continued from page 2)

taxes with the IRS! We nominated 2 events for ChemLuminary awards, and submitted Cincinnati for Outstanding Section. Look for the full report to be posted on our website next month.

Start training now to race this Fall! The Indiana Section is hosting the National ACS meeting "Chemistry in Motion" in September 2013 in Indianapolis. As part of that meeting they are planning a big science day at the Indianapolis Speedway, complete with race car rides and race chemistry events. They would like to extend an invitation Cincinnati section members to volunteer for STEM activities connected to the event. We will post links and volunteer opportunities on our website under the Outreach tab, and include forthcoming details in a later Cintacs edition.

I would like to acknowledge NETZCH Instruments, for generously sponsoring our March meeting. Make sure to let Dr. Tais Doll know how much we appreciate this

March Featured Speaker:

Prof. Tom Werner, Florence B. Sherwood Professor Emeritus of Physical Sciences, Union College, NY

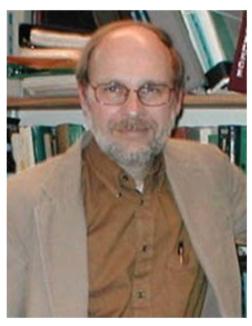
"Doping in Sports – How Chemists Help Catch the Cheaters"

Abstract:

Doping is to sport as criminality is to society, and there will always be criminality in society.

Jacques Rogge, President, International Olympic Committee

The alleged use of performance-enhancing drugs is increasingly tainting athletic accomplishment. Examples of this sports "doping" problem appear almost daily in the news: pro cycling is brought to its knees by doping allegations, resulting in the loss of sponsorship, the BALCO case and the Mitchell Report pummel Major League Baseball with evidence of steroid use, and



drug testing concerns become a higher profile issue at the Olympics. The talk will focus on the methods that chemists use to detect sports doping with substances such as amphetamine, steroids, human growth hormone and erythropoietin (EPO), an anemia treatment to increase red blood cells, thus increasing the amount of oxygen delivered to the body. Limitations of these methods will be discussed, along with a listing of some of the enormous challenges facing chemists as new doping substances are developed. For instance, testosterone naturally occurs in the body. Determining if the levels are within "normal" range is done by comparing testosterone levels with another related hormone, epitestosterone, providing a T-E ratio. This talk is based on a course entitled *Chemistry and Athletic Performance*, which was developed by the speaker with the aid of Dr. Don Catlin and staff at the UCLA Olympic Analytical Laboratory and Anti-Doping Research, Inc. http://www.antidopingresearch.org/index.php

About the Speaker:

Tom Werner received a B.S. in chemistry from Juniata College and a Ph.D. in analytical chemistry from MIT. After serving post-doctorial positions at Harvard and Tufts Medical School, he taught for 36 years at Union College (Schenectady, NY), retiring as Florence B. Sherwood Professor of Physical Sciences Emeritus in December, 2007. Werner has served as Principal Investigator on several external grants awarded for the support of undergraduate research including funding from Petroleum Research Fund, Research Corporation, NSF-ILI, NSF-AIRE and the Camille and Henry Dreyfus Foundation. Werner served as Chair of the Board of Governors of the National Conference on Undergraduate Research (NCUR), as Director of the NCUR/LANCY Initiative and as a NCUR Board Member. In 2002, he received the American Chemical Society Award for Research at an Undergraduate Institution. Near the end of his Union career, he developed a course entitled "Chemistry and Athletic Performance" that combined his expertise in analytical chemistry and interest in sports with the goal to teach chemistry from a more socially relevant perspective. The course syllabus was developed with input from Dr. Don Catlin and his staff at the UCLA Olympic Analytical Lab and Anti-Doping Research, Inc.

2012 NATIONAL CHEMISTRY WEEK

As a part of National Chemistry Week that was held in October 2012, the local Cincinnati Section of the American Chemical Society sponsors a poster contest for local students to express their creativity and artistic ability while focusing on a chemistry theme. This year the contest was expanded to also include a poem based on the theme "Nanotechnology: The Smallest BIG Idea in Science." The poem was judged based upon relevance to and incorporation of the theme, word choice, and imagery, colorful artwork, adherence to poem style, originality and overall presentation.

One winner was selected for each grade category (K-2nd grade, 3rd- 5th grade, 6th-8th grade, and 9th-12th grade) for the section. Unfortunately, there were no entries for the 6th – 8th grade category. The winners are as follows:

Category	K- 2nd Grade	3 rd – 5 th Grade	9 th - 12 th Grade
1 st Place Winners	Brian Cannon	Caleb Mary	Kelsey McQueen
Grade	2 nd	4 th	12 th
Represented School	Silverton Paideia	Cincinnati Hills	Villa Madonna
	Academy; M ² SE	Christian Academy	Academy
		Armleder	
Teacher	Tonya Howard	Catherine Cepress;	Nancy Kordenbrock
		Malinda McReynolds	-
Location	Cincinnati, OH	Cincinnati, OH	Villa Hills, KY

The first place winners along with their teachers and parents will be honored as guests of the local section at the Awards Banquet dinner /meeting in April 2013, at the Northern Kentucky University. Their teacher will need to email iheimkreiter@petercremerna.com with their contact information and to obtain further details.

The section also submitted the winning posters to the National ACS poster contest in Washington, DC. The national winners are now listed on the national ACS website.

We would also like to recognize Alana Osterday for Honorable Mention from Archbishop McNicholas High School in Cincinnati, Ohio. She will receive a certificate in the mail to their respective school in April 2013.

Parents, Educators: We were very pleased with all of the Illustrated poems that were submitted. Thank you for being a part of the contest and encouraging your student to participate. Our children are the greatest investment into our future.

American Chemical Society Cincinnati Section Jamie N. Heimkreiter Contest Committee Chair

Milton Orchin

The University of Cincinnati Department of Chemistry must sadly report the death of its most senior faculty member, Milton Orchin, on 14 February 2013 at age 98. Born in the small town of Barnesboro, Pennsylvania, on 4 June 1914, Orchin – following the early death of his mother – spent his childhood and adolescence in the Jewish Orphan Home in Cleveland, Ohio. After leaving the home, he went on to obtain his B.S., M.S. and Ph.D degrees from Ohio State University in Columbus – the latter in 1939 for work in the field of organic chemistry done under the supervision of Melvin S. Newman.

Following graduation, Orchin worked as a chemist for the federal government, first with the Food and Drug Administration in both Cincinnati and Chicago, then with the Department of Agriculture in Beltsville, Maryland, and finally with the Bureau of Mines in Bruceton, Pennsylvania. In 1953, at age 39, Orchin decided to return to academia, joining the University of Cincinnati that same year as a faculty member in the Applied Science Laboratory and soon after as a Professor in the Department of Chemistry. Despite his late start, Orchin's academic career was highly successful. By the time of his retirement in 1981 at age 67, he had published seven books, 15 reviews, and 198 research papers, as well as supervising the thesis work of nine M.S. candidates and 43 Ph.D. candidates. In addition, he served as Department Chair from 1956-1962 and, as a result of his industrial consultancy work, largely in the field of organometallic catalysis, he was also the holder of more than 20 patents.

Retirement, however, hardly affected Orchin's productivity. During the next 25 years, as Professor Emeritus and Director of the Hoke S. Greene Laboratory of Catalysis, Orchin would publish, in collaboration with several postdoctoral fellows, yet another 47 research papers and in 2006, after finally closing his laboratory, he embarked, at age 92, on the writing of his eighth book – a biography of the Israeli chemist, Ernst David Bergmann, in collaboration with William B. Jensen of the UC Department of Chemistry and Henry Fenichel of the UC Department of Physics. The book was finally published in December of 2011, six months after Orchin's 97th birthday.

In 1957 Orchin received the Eminent Chemist Award of the Cincinnati Section of the ACS and in 1980 the Morley Medal of the Cleveland Section of the ACS. He was also recipient of the Rieveschl Award for Distinguished Research in Science of the University of Cincinnati in 1975, the Distinguished Scientist Award of the Technical Societies of Cincinnati in 1976, and served for many years as a member of the Nomenclature Committee of the National ACS – an interest reflected in his book, *The Vocabulary of Organic Chemistry*, first published in 1980.

Readers interested in a more detailed account of Orchin's life and work may request a copy of the booklet, *What a Privilege!*, which was published by the Department of Chemistry in 1999 in celebration of his 85th birthday.

William B. Jensen, 17 February 2013



Givaudan Flavors Global Science+Technology invites you to attend

A Century of Natural Product Synthesis: From Concept to Practice



Professor Stephen Hanessian

Department of Chemistry, Université de Montréal and Department of Chemistry and Pharmaceutical Sciences University of California, Irvine

2012 Guenther award recipient

The present-day level of achievements in organic synthesis methodology in general, and natural products in particular, is the highest ever compared to as recently as a generation ago. Natural products varying in their structures and biological activities continue to provide synthetic chemists the incentives to initiate and pursue challenging research programs. This has also led to innovative methods toward efficient bond-forming reactions and greater rewards in co-worker training. When presented with the structure of a target molecule to synthesize, our first contact is visual. What follows is a subliminal interplay between the eye and the mind's eye, triggering a complex, yet quasi-instantaneous series of visual relational and visual reflexive chemical thought processing events that are a part of the psychobiological basis of generating a synthesis plan. The heuristic aspects of visual and mental thinking paradigms, coupled with computer-generated information will be discussed in the context of viable synthetic strategies toward biologically relevant molecules.

Tuesday, March 19 2013

3:00 pm Social Hour – light appetizers and drinks will be served

4:00 pm - Lecture

WHERE:

Givaudan Flavors Corp. Auditorium Edison II 1199 Edison Drive, Cincinnati, OH 45216

RSVP by March 11, 2013 at ioana.ungureanu@givaudan.com

NanoDays 2013 Announcement

Our section will join other local educators, industries, and organizations at the <u>Cincinnati Museum Center</u> on April 6, 2013 from 10 AM to 5 PM to help celebrate the study of small things in a big way at Nano Days 2013! Nano Days is a national celebration of nanoscale science and engineering, an initiative of the NISE (Nanoscale Informal Science Education) Network and the National Science Foundation.

Guests will become a scientist at the all-day celebration of nanoscience, the study of how atoms and molecules behave on a super tiny scale in everything from sunscreen to computer processors to gecko feet. There will be hands-on experiments in the LITE Lab of the Museum of Natural History & Science, as well as the CMC's rotunda area where CINTACS members and local nanoscience experts will be ready to share. There will also be an opportunity to help build one of the largest scale models of a carbon nanotube ever constructed in the Rotunda – out of balloons!

Want to volunteer? Contact Beth Reno (<u>reno.ea@pg.com</u>) or Gloria Story (<u>story.gm@pg.com</u>)

ACS Project SEED Program

Summer Research Internship Program for Economically Disadvantaged High School Students

The ACS Project SEED summer research program opens new doors for economically disadvantaged students to experience what it's like to be a chemist. Students entering their junior or senior year in high school are given a rare chance to work alongside scientist-mentors on research projects in industrial, academic, and federal laboratories, discovering new career paths as they approach critical turning points in their lives. More about Project SEED

Summer Programs

Summer I

For first-time participants, students conduct research in chemistry or a related field supervised by a scientist mentor and receive a fellowship award of \$2,500.

Summer II

Summer I students get a second opportunity to continue working on their Summer I project or beginning a new one. Students receive a \$3,000 fellowship award and may be eligible for a travel grant to present research at an ACS or other scientific meeting.

Contact Hairong Guan, Hairong guan@uc.edu for further info on the local section SEED activities.

ACS Short Courses Planned for Cincinnati in June, 2013

Check out these Short Course offerings coming to the Cincinnati area the week of June 24th, 2013, hosted by National ACS. Details on course subject, instructor and registration are contained in the links below.

Chemical Engineering for Chemists – June 24-25, 2013

Dispersions in Liquids: Suspensions, Emulsions, and Foams – June 24-25, 2013

Effective Supervision of Scientists and the Technical Staff – June 24-25, 2013

<u>Methods Development, Validation Procedures, and Regulatory Compliance Issues</u> – June 24-25, 2013

Experimental Design for Productivity and Quality in Research & Development – June 24-26, 2013 Qualification and Validation of Laboratory Instruments and Equipment for Regulatory and QS Compliance (IQ, OQ, PQ) – June 26, 2013

Laboratory Safety – June 26-27, 2013

STEM Conference

May 6, 2013 • Tangeman University Center • University of Cincinnati

Get REAL! STEM Education brings REAL Challenges, REAL Connections, REAL Life.





When and Where

• Monday, May 6, 2013 at Tangeman University Center, on the campus of the University of Cincinnati

Who Should Attend

- K-12 STEM (**S**cience, **T**echnology, **E**ngineering and **M**athematics) teachers and administrators from public and private schools, who are seeking innovative instructional strategies
- Leaders in higher education, business and industry that support STEM education and STEM-related career opportunities

Conference Features

- From 8:00 a.m. 3:15 p.m., includes a welcome speaker, four concurrent break-out sessions led by teachers, administrators and business and industry leaders, and a working lunch
- Presentations selected from a variety of proposals for K-12 teachers featuring Interactive Workshops,
 Panel Discussions and STEM Related Opportunities
- Presentations geared specifically for administrators and leaders in business and industry regarding Common Core and New Science Learning Standards, 21st Century Learning Skills, College and Career Readiness and other STEM Initiatives
- Up to 5 professional contact hours offered

Registration Information

Single Fee: \$25.00 which includes: lunch, on-campus garage parking, up to 5 contact hours, and a flash drive loaded with all the materials supplied by each of the presenters.

Conference and Registration Website (registration begins January 24)

http://ceas.uc.edu/special programs/ceems/CEEMS Events/Events STEM.html

Contacts

For Request for Proposal Information:

Julie Steimle | 556-6454 | steimlje@ucmail.uc.edu and Debbie Liberi | 556-6419 | liberid@ucmail.uc.edu

For Registration and Conference Logistics:

Florine Postell | 558-1810 | event.services@uc.edu

2013 Central Region Meeting

The 44th Central Region Meeting (CERM2013) of the American Chemical Society will be held on May 15-17, 2013 on the campus of Central Michigan University in Mt. Pleasant, Michigan. The theme of the meeting is "Building Blocks for a Sustainable World."

Papers are requested for symposia covering chemical education, analytical, biological, computational, environmental, inorganic, organic, medicinal, physical, and polymer chemistry, and more.

Abstract submission is now open. Abstracts may be submitted online at http://abstracts.acs.org. The deadline for abstract submission is March 20, 2013.

Technical program highlights will include poster sessions, undergraduate research symposia, a beer and wine making symposium with a related visit to a brewery, a silicon science symposium to celebrate the 150th anniversary of the discovery of organosilicon compounds and the 70th anniversary of Dow Corning Corporation, a sustainability symposium, materials-related (including nanotechnology) symposia, symposia about chemistry and global health, re-examining water fluoridation, also water-biogeochemistry, an exhibition showcasing the latest products and materials from a range of vendors, and technical and career workshops.

Special events will include chemistry related art and history exhibits ("History of The Dow Chemical Company Plant in Mt. Pleasant - 1903-1930" and "Images of The Dow Chemical Company from the Brush of Arthur Knighton-Hammond", and "History of the Midland ACS Section, 1919-2013") with an art reception, and plenary lectures highlighting the theme of sustainability with guest speakers including Dr. Martine Vermeulen, Dow Corning Global Manager of Product Safety and Regulatory Compliance (retired), and Dr. Kishor Wasan, Professor of Pharmaceutical Sciences at the University of British Columbia

The Awards Banquet on Thursday night will feature presentation of the ACS Division of Chemical Education Regional Award for Excellence in High School Chemistry Teaching, the E. Ann Nalley Regional Award for Volunteer Service to ACS, and the Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences. The featured speaker will be Dr. Mary Kirchhoff, ACS Director of Education.

Advance registration for the meeting will end on April 19, 2013. Regular registration will continue through May 17, 2013. Please visit the CERM 2013 website for registration and contact information, useful Web links, and up-to-date details on events as they become available. http://2013cerm.sites.acs.org/

CINTACS NEWSLETTER



Robertson Microlit Laboratories

Where speed and accuracy are elemental™

Elemental CHN, S, X, Analysis (same day service) Metals by ICP-OES, ICP-MS, AA/AE FTIR, UV/VIS Spectrometry TGA, DSC, Melting Point/Range

Bioavailability Polarimetry Ion Chromatograpy, HPLC KF Aquametry, Titrimetry

1705 US Highway 46 * Suite 1D * Ledgewood, NJ 07852 * 973.966.6668 * F 973.966.0136 www.robertson-microlit.com • email: results@robertson-microlit.com
Additional services available... Please call for information

Rapid Results • Quality • Accuracy • Competitive Pricing

ADVANCED · TESTING · LABORATORY

- MICROBIOLOGY
- **▶ CHEMISTRY**
- ON-SITE LAB SERVICES
- PROFESSIONAL SERVICES

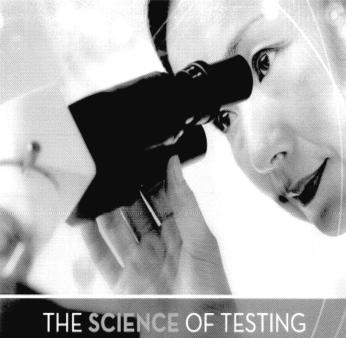
6954 Cornell Road | Suite 200 Cincinnati, OH 45242

513.489.8447

513.489.9291 fax

ClientRelations@AdvancedTesting.net

VISIT www.AdvancedTesting.net



THE ART OF SERVING

MARKES international

The sky is not the limit

Thermal desorption for flavor & fragrance profiling of food and beverages, materials testing...



...and air monitoring!

The most comprehensive supply of premium quality thermal desorption equipment & consumables anywhere

Purchase online or contact the thermal desorption experts at Markes

shop.markesus.com

T: 866-483-5684 (toll-free)

T: 1-513-745-0241

E: enquiries@markes.com

Kinetica, Inc.

ISO 17025 Certified Thermoanalytical Testing Services for the Chemcial Process Industry

Kinetica provides testing and consulting services for process safety and process development

- Accelerating Rate Calorimetry
- Bomb Calorimetry
- Differential Scanning Calorimetry
- Solution Calorimetry
- Explosives and Pyrotechnics Analysis
- Large-scale SADT Testing
- Litigation Support

9560 North Dixie Highway • Franklin OH 45005 • Telephone: 937-743-3082 • Fax: 937-743-3652 www.thermochemistry.com

SPONSORS SOUGHT FOR 8 SECTION MEETINGS IN THE 2012-2013 PROGRAM YEAR

We continually seek sponsors for each of our 8 monthly Section Meetings in the new program year. Sponsorship entails a commitment of sponsorship (cash or cash equivalent) of \$1000 to essentially pay for the many expenses associated with a quality meeting to be presented to the membership. These expenses include retiree and student meal discounts, speaker's expenses, travel, housing, food, A/V, room rental for the meeting, and a Social Hour where attendees can meet others and build networks and contacts for career growth and enhancement.

Sponsors are recognized in all of the eight yearly issues of CINTACS, and by introduction at the sponsored meeting. This "advertisement" is of great value, especially to new companies in the Cincinnati area. In several instances this has led to participation in governance activities in the Section.

Over the past seven years of this successful program, companies, academic departments, retirees, and faculty have been sponsors of monthly meetings. We are always striving to broaden the base of sponsors as this leads to better representation in Section programs and services to the membership.

If you or your employer has an interest in being a sponsor, please contact the undersigned for more details. Beyond these volunteers, we will be making phone calls and letter contacts to reach our goal of eight sponsors. Every effort will be made to align the Sponsor's areas of interest with our monthly topics.

Please contact Ed Hunter at: edhunter@fuse.net



micron inc

ANALYTICAL SERVICES

MATERIALS CHARACTERIZATION MORPHOLOGY - CHEMISTRY - STRUCTURE

3815 LANCASTER PIKE WILMINGTON DE. 19805 Voice 302-998-1184, Fax 302-998-1836

E Mail micronanalytical@compuserve.com WEB PAGE: WWW.MICRONANALYTICAL.COM

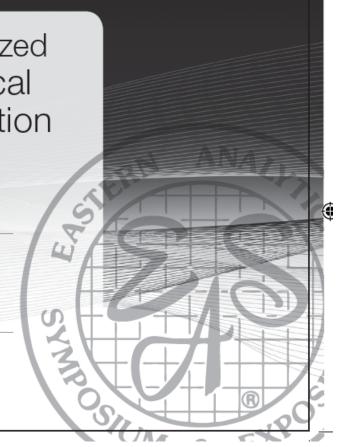
BE A PART of an energized 2012 Eastern Analytical Symposium & Exposition

November 12–15, 2012 Garden State Exhibit Center Somerset, New Jersey

With over 600 presentations, 40 short courses and more than 200 exhibitors, there is something for EVERYONE! There is something for YOU!



For more information visit EAS.org **EAS Hotline** (732) 449-2280



POWERING

To enhance your Pittcon 2013 experience, we will be co-programming with The American Chemical Society's Division of Analytical Chemistry (ACS-DAC). Attend one of the many ACS-DAC sessions such as:

- Bioanalytical Chemistry Advances in Analysis of Living Systems
- · Ion Mobility Spectroscopy in Pharmaceutical Analysis
- Mass Spectroscopy of Proteins in the Pharmaceutical Sciences
- Nanoparticles in Separation Science
- · Supercritical Fluid Chromatography

For more information on technical sessions, exhibitors and short courses, visit www.pittcon.org.





Scan this or go to www.pittcon.org to save 50% on registration.







American Chemical Society – Cincinnati Section

Xavier University Department of Chemistry 3800 Victory Parkway Cincinnati, Ohio 45207 Non-Profit Org. U.S. Postage Paid Cincinnati, Ohio Permit #517