

CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

September , 2014
Vol. 52 No. 1

Section Calendar

Upcoming Events

| | |
|----------------|--|
| Sun, Sept 21 | Section Picnic |
| Tues, Oct 7 | YCC Event |
| Oct 19-25 | National Chemistry Week, Local Libraries |
| Fri, Oct 24 | Oesper Symposium, Univ Cincinnati |
| Oct 24-25 | NCW Demos, Cincinnati Museum Center |
| Oct 29 - Nov 1 | Central Regional Meeting, Pittsburgh |
| Mar 22-26 | Spring National ACS Meeting, Denver, CO |

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Come to the first gathering of the Cincinnati ACS for 2013-2014:

**11th ANNUAL
FAMILY AND FRIENDS PICNIC
Chemistry Fun at Germania Park
Sunday, September 21, 2014, 1-4 PM**

Ask family and friends to join you as we welcome the new ACS year and enjoy a beautiful Sunday fall afternoon together. Reconnect with ACS friends and make new ones in a relaxed and casual atmosphere. Activities and entertainment will include food, drinks, games and chemistry fun!

Gathering and Games: 1:00-2:00 PM

Food/Potluck: The section will provide grilled hot dogs, hamburgers, brats, metts, and chicken from Hammann’s Catering. Drinks will be provided, including beer, soft drinks and juice boxes.

Attendees are cordially invited to bring a picnic dish to share (consider ~6 adult servings). (If possible, please note ingredients, like “contains nuts” or “gluten-free” to aid those with dietary restrictions.) Members with last names beginning with A-N are asked to bring a side dish, while those with last names starting with M-Z are asked to bring a dessert. Food will be served at 2 PM .

(Continued on page 3)

THE CINTACS NEWSLETTER**Vol. 52, No. 1 September 2014**

Editor.....Adam Bange

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 September 25 for the October 2014 issue. Electronic submission is strongly preferred. All materials should be sent to:

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From The Chair

The Cincinnati Section 2014-2015 year of meetings and events will kick off with our annual Family and Friends Picnic at Germania Park on the afternoon of Sunday, September 21st. Currently in its 11th year, this family-friendly event is now an established tradition that you should not miss. In keeping with Oktoberfest-like celebrations, we will have grilled bratwurst, metts, burgers, chicken, hot dogs, soft drinks and German beer on tap. These will be provided by the section. We would like to request that you provide a side dish or dessert to share. Please bring your entire family and invite your friends!

National Chemistry Week will be celebrated October 19-25 with the theme, "The Sweet Side of Chemistry – Candy". We are grateful to Atiya Jordan-Brown and Hong Zhang, who are coordinating this year's NCW activities. Thanks additionally to Jackie Thomas, who is handling fund-raising and sponsorships for NCW events. Appreciation is also extended to Gloria Story and Diana McGill, who are helping to lead NCW volunteer efforts, demonstrations and so on. Please contact these folks and volunteer to help with NCW activities!

NCW coincides with the Oesper Symposium and Banquet on Friday, October 25th at the University of Cincinnati. This year's Oesper awardee is Professor Isiah Warner of Louisiana State University, who is a luminary in analytical chemistry. Presenters at the Oesper symposium will include: Patrick Limbach, University of Cincinnati; Mary Wirth, Purdue University; Robert Strongin, Portland State University; Kermit Murray, Louisiana State University; Susan Olesik, Ohio State University; Linda McGown, Rensselaer Polytechnic Institute; Sharon Neal, University of Delaware; Chien Tran, Marquette University; and Sandra McGuire, Louisiana State University

Other upcoming section meetings for the upcoming academic year are being organized. On Dec. 10, Kristin Williams of Procter & Gamble will be the speaker for the joint meeting of the ACS and NOBCCHE Cincinnati sections at Xavier University. In January, Dr. Greg Smith of the Indianapolis Museum of Art will give a presentation on 'chemistry and art'; venue TBD. The February 12 speaker (at Mount St. Joseph University) will be Professor Daniel Feldheim of the University of Colorado, who will speak on his research in the arena of 'nanomedicine'. In March we will celebrate the Cincinnati Chemist of the Year, and the Teacher & Student Awards Event will take place at Northern Kentucky University on April 15th. Stay tuned for more information on these and other events in future issues of CINTACS.

I am looking forward to the year upcoming and I am immensely grateful to the section members and leadership who do so much for our organization. I look forward to seeing you and your families and friends at the Sept. 21 picnic.

Kevin Ashley
Chair, ACS Cincinnati Section
KAshley@cdc.gov

Cost:

\$10 for individual members or \$15 for members with their family or friends.

\$5 for individual members who are re-tired, K-12 teachers, unemployed, or student affiliates or \$10 with their family or friends.

Reservations: The meeting reservation form is online at www.acscincinnati.org/acs. When you register indicate the number of adults and children attending. The deadline for registration is Wednesday, September 17 at noon.

Directions to Germania Park, 3529 West Kemper Road, Cincinnati, OH 45251:

Mark Your Calendar for the Next Younger Chemist Committee Event

Planning is underway for the next Younger Chemist Committee event on Tuesday, October 7, at 7 PM. Learn techniques to make your science come alive to scientists and nonscientists in interviews, presentations, and networks. The ACS Program in a Box webcast session titled "Speaking Simply: Communicating Your Science" features Douglas Dollemore and Darcy Gentleman from the ACS Office of Public Affairs. Location to be announced. Contact [Vanessa Frost Barnes](mailto:vfrostbarnes@markes.com) (vfrostbarnes@markes.com) for more information.

2014 Oesper Award Recipient



Isiah M. Warner

Louisiana State University

Professor Warner is an analytical chemist with more than 300 refereed publications in a variety of journals relevant to his general area of research. He has particular research expertise in the area of fluorescence spectroscopy, where his research has focused for more than 35 years. He is considered one of the world's experts in this analytical spectroscopy. For example, he is the corresponding author in the highly cited biannual reviews on "Molecular Fluorescence, Phosphorescence, and Chemiluminescence Spectrometry", for the journal, *Analytical Chemistry*. Over the past 20 years, he has also maintained a strong research effort in the areas of organized media and separation science.

Professor Warner has been performing research in the more specific area of analytical measurements using ionic liquids (ILs) for several years. It is this research on ionic liquids which has led to the recent conceptualization and implementation of a group of uniform materials based on organic salts (GUMBOS) as novel materials which can be exploited for a variety of applications. Novel nanoparticles (nanoGUMBOS) have been derived from these materials which can primarily be classified as frozen ILs. However, some GUMBOS are not ionic liquids since they do not fit the traditional definition of ILs. The utility of these materials is that they provide solid phase materials with the same tunability of ionic liquids. Several publications in key chemistry journals (e.g. JACS, Nano Letters, ACS Nano, Analytical Chemistry, Chemical Communications, and Langmuir) and pending patents have resulted from this area of research. In addition to his fundamental research, he has developed strategies to encourage undergraduate and graduate students (particularly from underrepresented groups) to go on to pursue terminal degrees in the STEM discipline. Through his fundamental and educational research, Professor Warner has produced 54 PhDs and 100s of undergraduates who have gone on to terminal degrees in various disciplines.

Ralph & Helen Oesper Award Banquet & Poster Session
Friday, October 24, 2014
Great Hall, Tangeman University Center



| | |
|------------------|---|
| 5:30 – 7:00 p.m. | Poster Session/Social |
| 7:00 p.m. | Banquet |
| 8:00 p.m. | Announcements & Award Presentation |
| 8:15 p.m. | After Dinner Speaker, Saundra Y. McGuire, Louisiana State University “Isiah Warner’s Amazing Journey from Bunkie to the Oesper Medal!” |

Saundra Y. McGuire
Louisiana State University

Saundra McGuire is the Director Emerita of the Center for Academic Success and Retired Assistant Vice Chancellor and Professor of Chemistry at Louisiana State University. Prior to joining LSU in August 1999, she spent eleven years at Cornell University, where she received the coveted Clark Distinguished Teaching Award. She has presented keynote addresses or workshops on improving teaching and student learning at over 150 institutions in 39 states. In November 2007 the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) was presented to her in a White House Oval Office Ceremony. In 2010, she was elected a Fellow of the American Chemical Society, and in 2011 she was elected a Fellow of the American Association for the Advancement of Science. She received her B.S. degree, magna cum laude, from Southern University in Baton Rouge, LA, her Master’s degree from Cornell University, and her Ph.D. from the University of Tennessee at Knoxville, where she received the Chancellor’s Citation for Exceptional Professional Promise. She is married to Dr. Stephen C. McGuire, professor of physics at Southern University. They are the parents of Dr. Carla McGuire Davis and Dr. Stephanie McGuire, and the grandparents of Joshua, Ruth, Daniel, and Joseph Davis.



**Isiah Warner’s Amazing Journey from Bunkie to the
Oesper Medal!**

Professor Isiah Warner grew up in a small bayou town in central Louisiana, and has reached heights that were unimaginable to him as a boy. This talk will discuss the strategies he used to excel --- metacognition and mentoring, and will show how he has continued to use these tools to propel his students to heights that they could never have imagined.

2014 Oesper Schedule for Friday, October 24

9:00-9:10 a.m. Anna Gudmundsdottir, Head, Dept. of Chemistry
Welcome and Introductory Remarks

Session Chair: *Bill Heineman*

9:10-9:45 a.m. Patrick A. Limbach, University of Cincinnati

"How to Keep Analytical Chemists From Drowning in Data: Building Selectivity into Biological Mass Spectrometry"

9:45-10:10 Mary J. Wirth, Purdue University

"Obstructed Diffusion of Proteins in Nanoporous Media and the Implications for Separations"

Break (10:20-10:30 a.m.)

Session Chair: *Peng Zhang*

10:30-11:05 a.m. Robert M. Strongin, Portland State University

"Fluorescent Dyes for Near Infrared Imaging and Selective Sensing of Biomolecules"

11:05-11:30 a.m. Kermit K. Murray, Louisiana State University

"Atomic Force Microscopy Directed Laser Ablation Sampling for Mass Spectrometry"

Break for lunch (11:45-12:45 p.m.)

Registration is Required (Space is limited)

Session Chair: *Tom Ridgway*

1:10-1:45 p.m. Susan V. Olesik, The Ohio State University

"*Nanostructured Materials for Liquid Chromatographic Separations and Mass Spectrometric Analysis*"

1:45-2:10 p.m. Linda B. McGown, Rensselaer Polytechnic Institute

"Separation of ssDNA by Sequence"

Break (2:20-2:30 p.m.)

Session Chair: *James Mack* **Session Chair:** *James Mack*

2:30-3:05 p.m. Sharon L. Neal, University of Delaware

"Analysis of Photodegradation and Singlet Oxygen Formation of PAH Mixtures in Solvents that Simulate Cell Walls"

3:05-3:40 p.m. Chieu D. Tran, Marquette University

"Polysaccharide Supramolecular Composite Materials: Recyclable Synthesis and Applications"

Break (3:40-4:00 p.m.)

Introduction of Oesper Awardee: *Pat Limbach*

4:00 p.m. Isiah M. Warner, Louisiana State University

"Moving Ionic Liquid Chemistry into the Solid Phase"

5:30-7 p.m. Poster Session & Reception (see **Call for Submissions**)

7-8 p.m. ACS Banquet (**Reservations** are required)

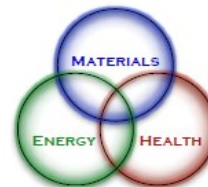
8 p.m. **Award Presentation, Announcements & After-dinner Speaker**

Saundra Y. McGuire, Louisiana State University

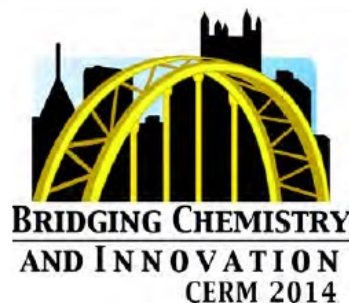
"Isiah Warner's Amazing Journey from Bunkie to the Oesper Medal!"



2014 ACS Central Regional Meeting



WWW.ACSCERM2014.ORG



THE 45TH CENTRAL REGIONAL MEETING

OCT. 29 – NOV. 1, 2014

DOUBLETREE BY HILTON
PITTSBURGH - GREEN TREE

CENTRAL REGIONAL AWARDS DINNER

Thursday, October 30, 2014

6:00 PM

The North/South Ballroom ♦ \$40/Person

Cash Bar: 5:00 PM

Dinner: 6:00 PM

Awards: 7:00 PM

OPEN TO ALL (meeting registration is not required to attend this event) ... but you do need to register for this dinner using the CERM 2014 Registration Form.

Please select one of the following Entrees:

Chicken Florentine



Salmon



Pasta Primavera



FOR MORE INFORMATION CONTACT:

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Lori Bacca is a Technical Leader/Lab Manager within P&G's Global Engineering Group with a B.S. in chemistry from College of Mt. St. Joseph. She has over 27 years experience in the development of Oral Care formulations for gingival health and currently explores/develops liquid processes for understanding material property transformation.

Arif Baig is a Principal Scientist in Oral Care Upstream Technology and Formulation Development at Procter & Gamble. He obtained his B.S. and M.S. in pharmacy from Punjab University, Pakistan and his Ph.D. in pharmaceutical sciences from the University of Utah.



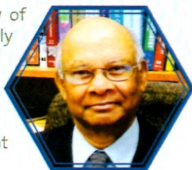
Bill Glandorf is a Research Fellow at P&G with his B.S. in chemical engineering from the University of Cincinnati. With 28 years of experience in oral care formulation and processing. He is currently working on Oral Care formula designs that provide more benefits for more of the worlds' consumers.

Tao He is a Principal Clinical Scientist at P&G responsible for designing and managing clinical trials for Oral Care products. She earned her D.D.S. from Capital University of Medicine in Beijing, a Ph.D. from Tokyo Medical and Dental University, and a Postdoctoral as a Research Fellow at the Japan Society for the Promotion of Science.



Iain Hughes is the Associate Director for Oral Care Technology Development at P&G. He is an applied microbiology graduate from the Department of Bioscience and Biotechnology at Strathclyde University and has over 25 years experience in oral care research.

Satya Majeti is a retired Research Fellow of The Procter & Gamble Company. He currently serves as a technology consultant to Personal Care and Health Care industries. He received his M.S. degree in chemistry from Banaras Hindu University, India and his Ph.D. in organic chemistry from the University of California at Los Angeles.



P&G

The American Chemical Society honors scientists from The Procter & Gamble Company who are the innovators behind Crest Pro-Health. Crest Pro-Health Toothpaste is the result of the successful discovery, development and commercialization of three "paste chemistries": Stabilized Stannous Fluoride (SSF); Hexametaphosphate – Adaptive Solution Complexation (HMP) and an Associative Thickening Formulation/Process. Innovators of Crest Pro-Health were successful in developing a single toothpaste formula using these paste chemistries that provide efficacy for eight separate oral conditions afflicting the world's consumers, including: prevention of caries, tartar, stain, plaque, gingivitis, bad breath, dental erosion, and treatment of dentinal hypersensitivity.



Ross Strand is a Research Fellow at P&G in the Research and Development Division. He earned his B. Eng in Chemical Engineering and has 22 years experience in oral care discovery research.

Xiaoli Wang is currently a Principal Scientist at The Procter & Gamble Company. She graduated from Peking University in China and received a Ph.D. in Physical Chemistry from Institute of Chemistry, Chinese Academy of Science.



Donald White is a Research Fellow at P&G where he and his team lead translational oral biology research toward discovery of future oral health therapies. He received his B.S. in chemistry and his Ph.D. in physical chemistry from the State University of New York (SUNY), Buffalo.



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