

A publication of the Midland Section of the American Chemical Society

May 2014, Vol. 51, No. 5

Contents

Chair Column	1
The Science and Technology of Fighting Fraud, June 3	2
CERM 2014 – Registration and Call for Papers	2
MMI Announces 2014 TAVP Program and Visit Dates	3
Furner Alfrey Visiting Professor Course – Complex Polymer and Hybrid Architectures, June 9–13	
TAVP Program Joint Technical Society Dinner Meeting, June 11	
Honey Bees and the Colony Collapse Disorder, June 1717	
leff Seifferly Selected as the 2014 Outstanding Chemical Technologist of the Year	
Women Chemists Committee Kickoff Event a Success	
loin the Midland Women Chemists Committee (WCC)	
Midland Section ACS Outreach Update	
Jpcoming Dates, Events, and Other Updates	

Chair Column Michelle Cummings, Chair, Midland Section ACS



Recently I read an article in Forbes (2/22/2013) titled "14 Things Successful People Do On Weekends". I found it very interesting to compare how I spend my down time to the suggestions that were listed. These included: make time for family and friends, exercise, pursue a passion, vacation, disconnect, volunteer, avoid chores, plan, socialize, hobbies, network, reflect, meditate, and recharge. Laura Vanderkam, author of "What the Most Successful People Do Before Breakfast" and "What the Most Successful People Do on the Weekend", concludes that time is precious, too precious to be overly leisurely about what you do in your down time.

I would like to take the opportunity to point out a few of the elements within the list of 14 that being a member of the American Chemical Society can bring, especially when you are connected with the local section. The first behavior that

struck me was **Pursue a Passion**. Many of us are in our career due to a passion that we discovered during our educational years. The Midland Section provides many opportunities for outlets for you to pursue your passion of the chemical sciences through a different perspective than your day to day job. The next behavior that stood out for me was **Volunteer**. There are many ways to volunteer in our local section. Some of these include activities such as event planning, career consulting, mentoring, and science demonstrations (design through implementation). Please e-mail web@midlandacs.org to connect with members to discuss volunteer opportunities. Then there is **Socializing** and **Networking**, both of which are designed into many of the technical and member events that the local section hosts. Recently we had a Women Chemists Committee event and a technical program entitled *Early Stage Technology Assessment: Sorting the Wheat from the Chaff*

by Michael F. Doherty from the University of California, Santa Barbara. These events were attended by current and potential members of the ACS and provided a great place to make new connections.

I feel the pull in many different directions for my time out of work. With a family, professional society involvements, and community involvement there are many choices to make based on priority. As I look at many of the opportunities that are available to me, I view being involved with the Midland Section ACS as a big "bang for my buck", knocking out 4 out of the 14 items on the list of down time behaviors of successful people.

The Science and Technology of Fighting Fraud, June 3 Amy Tesolin-Gee, Publicity Chair

The Midland Section of the American Chemical Society is pleased to offer *The Science and Technology of Fighting Fraud*, at the Bay City Western High School Cafeteria (500 West Midland Road, Auburn) on June 3, 2014, 7:00-8:30 PM. From news reports of melamine-tainted foods, to counterfeit drugs and U.S. currency, consumers know that perpetrators of fraudulent activity are hard at work in our nation and abroad. Counterfeit products cost us many lives and dollars every year. Come and find out what the U.S. government, corporations, and people like you are doing to fight back!

Special guest speakers, Brian Lambert of the U.S. Secret Service, and Jeff Tazelaar of The Dow Chemical Company, will share their expertise, Brian with counterfeit currency, and Jeff with food, medicine, and commercial product fraud. Learn about the science used in various schemes to counterfeit U.S. currency and how the Secret Service protects our nation's money supply. Experience hands-on the technologies enabling global track and trace at various packaging levels that industry utilizes to combat counterfeiting and provide real-time in transit visibility. A multitude of overt, covert and forensic label technologies will be displayed to allow attendees to authenticate products similar to how it is done in the real world. There will be hands-on activities where you can see the difference between counterfeit and real money, and do some testing for food contaminants.

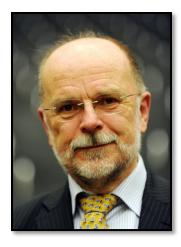
This event is free and open to the public. Contact Gina Malczewski at 989-496-4158 or reginamalczewski@gmail.com for more information or any questions.

CERM 2014 – Registration and Call for Papers Heather Juzwa, General Co-Chair, CERM 2014

The registration form for the CERM 2014 meeting is now available online at <u>CERM 2014 Registration Form</u>. The abstract submission process is now open and ready to accept papers as well at <u>abstracts.acs.org</u>. Please note that the deadline date for the call for papers is Friday, August 29. General information about anything you may wish to know about CERM 2014 can be found at <u>www.acscerm2014.org</u>.

Thank you for your consideration. We look forward to seeing you at CERM 2014! Any questions or concerns should be addressed to Heather Juzwa, General Co-Chair, CERM 2014, via e-mail to <a href="https://hittage.nih.gov/hitt

MMI Announces 2014 TAVP Program and Visit Dates Steve Keinath, Director and TAVP Program Coordinator



The Michigan Molecular Institute (MMI) is pleased to announce that Professor Axel H. E. Mueller from Johannes Gutenberg University, Mainz, Germany will be the 2014 Turner Alfrey Visiting Professor (TAVP). The full details for the 2014 TAVP course, *Complex Polymer and Hybrid Architectures* (preregistration required no later than one week in advance, June 2), and for the joint technical society dinner meeting, *A Zoo and Garden of Nanoparticles: Tales of Worms, Caterpillars, Bamboo, and Clover* (RSVP deadline one week in advance, June 11), is available at http://www.mmi.org/about-us/turner-alfrey-visiting-professorship/.

Professor Mueller's former (University of Bayreuth) website (http://www.chemie.uni-bayreuth.de/mcii/?lang=en) will also give you a more thorough view of the breadth and depth of his current R&D activities and interests.

Professor Mueller will be in residence at MMI from Monday, June 9, through Wednesday, June 18. The first week (June 9–13) will be the week in which he will give a series of five afternoon course lectures (3:00-6:00 PM, each day), plus make quick visits to a couple of the TAVP program sponsors, and participate in an opening reception at MMI, and a joint technical society dinner meeting (June 11, 6:30 PM). The second week (June 16–18) will be dedicated to full-day site visits to additional TAVP program sponsors.

Turner Alfrey Visiting Professor Course – Complex Polymer and Hybrid Architectures, June 9–13 Steve Keinath, Director and TAVP Program Coordinator

Course 1041: COMPLEX POLYMER AND HYBRID ARCHITECTURES

Lecturer

Professor Axel H. E. Mueller, Professor and Fellow of the Gutenberg Research College, Institute of Organic Chemistry, Johannes Gutenberg University, Mainz, Germany

Location

Lecture Hall, Michigan Molecular Institute, 1910 West St. Andrews Road, Midland, MI 48640

Date and Time

Formal lectures: Monday-Friday, June 9–13, 2014, 3:00-6:00 PM

Course Fee

There is no fee for auditors if they belong to organizations that are financial sponsors of the Turner Alfrey Visiting Professor program: The Dow Chemical Company, Dow Corning Corporation, Central Michigan University, Michigan State University, Saginaw Valley State University, Detroit Section of the SPE, and Midland Section of the ACS. For all others, a course fee of \$400 will be required at registration. All participants, however, must pre-register.

Registration

Pre-registration is required no less than one week in advance with the Registrar by visiting http://www.mmi.org/about-us/turner-alfrey-visiting-professorship/, e-mailing registrar@mmi.org, or by calling (989) 832-5555.

Course Description:

The series of lectures in this course deals with the synthesis, properties, and applications of various complex polymer and hybrid structures. The first and shorter part will cover the general techniques of living/controlled polymerizations with a focus on anionic and radical polymerizations. The second and longer part will show how we can use "macromolecular engineering" to synthesize complex architectures, including block copolymers, and polymers with non-linear topologies, e.g., stars, brushes, or hyperbranched polymers. Finally, we will show how these polymers can be converted into organic or organic-inorganic nanoparticles. All examples will be complemented by the properties and applications of these structures. Applications cover a large number of fields, e.g., dispersants, thermoplastic elastomers, adhesives, nanoporous and stimuli-responsive membranes, bottom-up nanolithography, drug and gene delivery, plastic electronics, medical implants, catalysts, etc.

Lecture Topics Outline:

Introduction

Definition of polymer architecture: Topology, placement of comonomer and functional groups, molecular weight distribution, microstructure

Relevant literature

Mechanisms of Living/Controlled Polymerizations

Basics of living/controlled polymerizations
Anionic and group transfer polymerization
Cationic polymerization
Ring-opening polymerization (anionic, cationic, ROMP)
Controlled/living radical polymerization
Similarities and differences of mechanisms

Selected Architectures: Synthetic Strategies, Properties, and Applications

Polymers with functional end groups, macrocyclic polymers

Random, gradient, and block copolymers

- Synthesis
- Self-assembly in bulk: Morphologies
- Self-assembly in solution: Micelles and vesicles
- Applications

Branched polymers

- Star-shaped polymers
- Comb-shaped polymers and graft copolymers
- Planar, spherical, and cylindrical polymer brushes
- Hyperbranched polymers

Organic nanoparticles

- Core-shell particles
- Multicompartment micelles

Janus particles

Organic-inorganic hybrid structures

- Inorganic nanoparticles within polymer brushes
- Sol-gel reactions to convert organic material into inorganic material
- Polymers grafted from inorganic nanoparticles

TAVP Program Joint Technical Society Dinner Meeting, June 11 Steve Keinath, Director and TAVP Program Coordinator

A Zoo and Garden of Nanoparticles: Tales of Worms, Caterpillars, Bamboo, and Clover



Professor Axel H. E. Mueller, Professor and Fellow of the Gutenberg Research College, Institute of Organic Chemistry, Johannes Gutenberg University, Mainz, Germany

Abstract

This lecture will cover the synthesis, properties, and applications of a number of nanoparticles, both soft (organic) and hybrid (organic-inorganic). These nanoparticles resemble natural objects and are made either from molecular brushes or by self-assembly of block copolymers. They have a large number of interesting properties, such as stabilizers for emulsion polymerization, compatibilizers for polymer blends, or transport vehicles for multiple different types of payloads, such as drugs, DNA, or fluorescent dyes.

Date Wednesday, June 11, 2014

Time

Social 6:30 p.m. • Dinner 7:00 p.m. • Program 8:00 p.m.

Location

NADA Center, Northwood University, 4000 Whiting Drive, Midland, MI 48640, Phone: (989) 837-4277

Cost

\$25 for SPE and ACS members (or members of other professional societies such as AlChE, ASM, etc.) and guests, \$15 for students. Note: Individuals who make reservations for the dinner meeting and do not attend will be charged the same as if they had attended the meeting.

Reservations

Reservations can be made via phone, fax, or e-mail to Molly Warren-Haycock at MMI. Reservations must be received no later than Wednesday, June 4, 2014. Phone: (989) 832-5555, ext. 554, Fax: (989) 832-5560, or E-mail: warren-haycock@mmi.org

Honey Bees and the Colony Collapse Disorder, June 17 Matt Grandbois, Chair-Elect and Program Committee Chair

The Midland Section of the American Chemical Society invites you to a special evening lecture with Professor Zachary Huang of Michigan State University. Prof. Huang's lecture will be held Tuesday evening, June 17, 7:00-9:00 PM at Creative 360 (1517 Bayliss Street, Midland). The event is free and open to the public.

Dr. Huang will discuss honey bees and the colony collapse disorder (CCD). Honey bees are the only reliable pollinator for providing pollination to large acreages of agricultural crops. In Michigan alone, the value of crops that depend on honey bees for pollination is nearly one billion dollars per year. Yet, honey bees face attacks from multiple fronts including parasites, pathogens, loss of habitat, lack of good nutrition, dwindling genetic diversity, stresses due to transportation, increasing population, and finally, man-made pesticides sprayed into the environment, which often contact hives directly. Which, if any, of these factors are responsible for causing the infamous CCD? We hope to shed new insights on this topic in the lecture.

Professor Zachary Huang is an associate professor in entomology at Michigan State University. He grew up in a small village in Hunan, China, and attended an agricultural college in China. In the early 1980s, he obtained a national scholarship to study honey bees in Canada. In 1998 he joined MSU as an assistant professor. He became tenured and was promoted to associate professor in October 2004. Dr. Huang received the J. I. Hambleton Award for Outstanding Research by the Eastern Apicultural Society of North America in August 2008. He also serves as the president of the American Association of Professional Apiculturists.

For more information or questions, contact Matt Grandbois, Program Committee Chair, at 989-636-1687 or grandboismatthew@gmail.com, or Gavin Lu at 989-496-512 or g.lu@dowcorning.com.

Jeff Seifferly Selected as the 2014 Outstanding Chemical Technologist of the Year *Michelle Rivard, Chair, Mid-Michigan Technicians Group*

Jeff Seifferly began his career at Dow Corning in 1981 in the Electrical Research and Development Laboratory. Since then, he has held numerous positions as an R&D technician, working on front-end technology that has gone on to form profitable businesses for Dow Corning. Jeff currently works in Materials Science and Research, where he is a principal S&T technician working on materials that will hopefully become the "next big thing". Jeff's hands-on approach, attention to detail, and communication skills are keys to this program's current and future success.

As a 33 year employee of Dow Corning, Jeff has been involved in many employee development efforts. In 1991, he was a founding member of the Mid-Michigan Technicians Group (affiliated with the Midland Section of the American Chemical Society). This organization provides leadership training and mentoring opportunities for technical professionals at Dow Corning, Dow Chemical, and other area businesses. It has received numerous local and national ACS awards for excellence. In addition to being a founding member, he just completed two years as Chair, ending in December 2012. Jeff has had a very successful career at Dow Corning. He has been awarded one Technical Achievement award, two US Patents, and has had 11 patent invention disclosures issued. Jeff has authored 17 external publications, and 31 internal publications. At Dow Corning, he was a member of the Science and Technology Environmental Committee and is a past Board Member of the Michigan Chapter of the American Vacuum Society. He is currently a member of the Dow Corning Technical Exchange Society and an ISO 9001 trained auditor.

In addition to his accomplishments at work, Jeff is involved in numerous student scholarship and recognition committees. He has served on an employee funded, Dow Corning Bay Area Employees Scholarship Committee since 1993 and has been its Chair for eleven years. He also has served on the Executive Committee of the Community Excellence Award program since 1999, recognizing exemplary service to the community by area youth.

Jeff is also very active and visible in the community. He is a 2004 Leadership Bay County graduate and recently completed a three year term as a Bay Area Chamber of Commerce Ambassador Club member. He was a founding member and past-President of the Bay Concert Band, president of the Valley Aero Club, and was a long time member of the Bay Arts Council Board of Directors, serving as Secretary and Event Programming Chair. Jeff currently is the Chair of the Bangor Township Brownfield Redevelopment Authority, a member of the Michigan Historical Henry Dora Hanger Restoration Committee at James Clements Memorial Airport, and a Bay County Historical Society member. He is a Knights of Columbus Third Degree member and has served on the Board of Directors of the Bay Area Soccer Association and is a certified soccer referee and soccer coach.

Jeff has spent much time with the youth of our community. He is a member of the American Chemical Society, Midland Chapter Science Outreach committee and was one of 11 charter member of the ACS Chemistry Ambassador Program. He was an invited speaker / demonstrator at the 2012 Pittcon Conference, where he spent a week leading instructional sessions on "Bringing Science to Life in the Classroom" for high school teachers and K-12 students. Jeff is also a Delta College Foundation certified scholarship application rater for their annual scholarship awards. He is a member of the Bangor Township Schools' curriculum advisory and school improvement teams and a member of the Bangor Township SR2S Safe Routes to School committee. One of his most significant community service efforts was as Chair of the Citizen's Committee for Bangor



Township schools. Under Jeff's leadership, this committee successfully developed and passed both a school maintenance "sinking fund" and a technology improvement millage. For this effort he was awarded the Dow Corning Public Service Award.

Congratulations, Jeff. Very well deserved!

Photo: Jeff Seifferly receives the 2014 Midland Section ACS Chemical Technologist of the Year Award from Lauren Huffman. Photo courtesy of Jason Suhr.

Women Chemists Committee Kickoff Event a Success Jaime Curtis-Fisk, Chair, Midland WCC

The Midland Section of the Women Chemists Committee (WCC) celebrated a successful kickoff, highlighted in a recent *C&EN* news story: http://cen.acs.org/articles/92/web/2014/04/Women-Chemists-Committee-Takes-Off.html.

The kickoff consisted of a series of events held on April 24 and 25, welcoming A. Maureen Rouhi as the guest of honor. Maureen is the Director of Editorial and Business Development for *C&EN* Asia, and formerly Editorin-Chief of *C&EN*. The main event of the kickoff series was an evening of networking and a motivating presentation by Maureen held at Whiting Forest in Midland. This event was attended by over 50 people, both

men and women, who came out to support the new committee. Maureen's presentation told the story of her interesting career path from living in Iran, to arriving in the United States with no connections, and her success with *C&EN*. She emphasized the traits needed for success and tied those to her personal experiences.

The discussion, moderated by Jamie Cohen, R&D Strategy Leader at Dow Chemical, was very lively with Maureen giving excellent tips for success gained from her vast experience and broad global background. "This high-quality event had it all; the speaker was excellent, and the discussion was thought-provoking. I will definitely be attending future events," commented Tina Leaym.



L to R: Jamie Curtis-Fisk, Wendell Dilling, and Michelle Cummings



L to R: Jamie Curtis-Fisk, A. Maureen Rouhi, and Wendy Flory





WCC networking event at Whiting Forest



A. Maureen Rouhi's presentation at Whiting Forest

Several students from Central Michigan University (CMU) attended the event at Whiting Forest as well and were the focus of a social mixer with Maureen later that evening at Oscar's Bar and Grill in Midland. This event was well received by all. Professor Janice Tomasik of CMU was instrumental in building enthusiasm with the students. We look forward to hosting future programs to continue to foster the partnership of students with chemical professionals.





Social event at Oscar's with A. Maureen Rouhi

In an effort to provide more opportunities to meet with Maureen during the work day, she was also hosted at both Dow Chemical and Dow Corning during her visit to Midland. At both site visits she took part in open conversations with employees about topics such as work/life balance, how to tell the story of fundamental science, and unexpected career paths. She also met with R&D leaders and Media Relations to expand her own network and build connections between *C&EN* and scientists in the Midland community.

This successful kick-off will be followed soon by other WCC events. Be sure to contact Jaime Curtis-Fisk, Chair of the Midland Section WCC to be added to the WCC distribution list (ilcurtisfisk@dow.com). And don't forget to visit and like the Midland Section Facebook page for up-to-date information on WCC and other events.

Join the Midland Women Chemists Committee (WCC) Jaime Curtis-Fisk, Chair, Midland WCC

The Midland Women Chemists Committee (WCC) is now up and running to supplement the existing efforts within our local section and provide a unique focus on women in science. A key objective of the Midland WCC group is networking, and fostering connections between organizations with a strong emphasis on including students from our local universities. The intent of this group is to create a community with the specific mission of supporting women scientists in our community.



We have identified three areas where our team can provide a unique contribution: outreach, networking, and career development. Our local section is very active in outreach activities to ignite a love for science in the next generation and we saw the opportunity to supplement that with events that specifically target girls and highlight the roles of women in science. In regard to networking, the Midland Section is a unique place in that we have several chemical companies and universities within a relatively small community. We saw the need for more networking opportunities for women to build connections across organizations,

specifically between university students and professionals to help initiate mentoring relationships for women. The third key area is career development. Each of the companies/universities has their own career

development programs and this group will serve as a forum to share about topics that were well received within each organization and coordinate training sessions or seminars when the topic is broad enough to be of interest to women across our entire scientific community.

If you are interested in helping us to implement efforts in any of these areas, or have suggestions on how we can make the greatest impact, please contact Jaime Curtis-Fisk (Midland WCC Chair) at jlcurtisfisk@dow.com or talk with any of the steering committee members. We have opportunities for involvement at all levels to fit your schedule and the time that you have available to share. You may also contact us to be added to our distribution list to stay informed about upcoming events.

Initiating the Midland Women Chemists Committee and coordinating such a wonderful series of kickoff events would not have been possible without the support, time, and effort from our dedicated steering committee. It has been a true pleasure working with this team, and I look forward to all that we will do in the future. The next time you see one of these women, be sure to express your gratitude for the great work they are doing in our community!

Midland WCC Steering Committee members: Samina Azad (Savant), Michelle Cummings (Dow Corning), Jaime Curtis-Fisk (Dow), Domonique Downing (Dow), Roja Ergun (Dow), Wendy Flory (Dow), Anne Kelly-Rowley (Dow), Beata Kilos (Dow), Tina Leaym (Dow Corning), Chloe Lu (Dow), Leslie O'Leary (Dow), Patricia Peart (Dow), Lissette Perez (Independent Scientific Editor), Janet Smith (Dow Corning), Janice Tomasik (CMU), and Vennesa Williams (Dow).

Midland Section ACS Outreach Update Gina Malczewski, Outreach Committee and Secretary

Science Coaches have been visiting classrooms this past semester, with Midland High School benefiting from "Charged Up about Energy" and "Diet Coke and Mentos Mania" activities. The sixth and eighth graders at Bay City All Saints have also done hands-on "Energy" and physical property labs, or "Water is Wonderful" and "History of the Earth" (radio dating and atmospheric evolution) activities. On April 10, two successful sessions of "Carnival Science" were offered at the Grace A. Dow Memorial Library in Midland as part of the "Happenings at the Library" month, and we received a \$50 donation for our participation. On June 12, the Midland Library will host us again for a day of outdoor demos, and the Coleman Library will have us in for a similar program on July 17. Both of the follow-up library visits have the theme "Fizz, Boom, Read!" so we will be doing activities involving carbon dioxide. We hope to offer a summer program for senior citizens that connect science and art, so stay tuned for further details!

We are continuing to work on our teacher training program, "Sci Tech: Next Generation", the first six units of which were piloted at the Michigan Science Teachers Association meeting in Lansing in March. The full program will be available and rolled out, with other activities, on November 1 at a workshop at Bay City Western High School.

Please remember that we are always looking for volunteers. Our work involves many stages of effort, and we can also use people of many different age ranges. Contact Gina Malczewski at reginamalczewski@gmail.com with any comments or questions. Thanks!

Upcoming Dates, Events, and Other Updates

- June 2 (5:30-9:00 PM) Midland Section ACS 2nd Quarter Committee updates and dinner meeting, Celebrating 50 Years of The Midland Chemist. Tuscany Banquet Hall (co-located with Villa D'Alessandro), 801 East Wackerly Street, Midland. Individuals will be responsible for the cost of their dinner or any refreshments, but RSVPs are needed for an accurate head count. Please contact Michelle Cummings (michelle.cummings@dowcorning.com) to RSVP or for questions.
- June 9–13 (3:00-6:00 PM, each day) 2014 TAVP course lectures, Complex Polymer and Hybrid Architectures, featuring Prof. Axel H. E. Mueller of Johannes Gutenberg University (Mainz, Germany), MMI Lecture Hall, Midland. For more information and to pre-register for the course, see http://www.mmi.org/about-us/turner-alfrey-visiting-professorship/. Pre-registration is required by June 2. Contact Steve Keinath at keinath@mmi.org or 989-832-5555 x 588 for any questions.
- June 11 (6:30-9:00 PM) TAVP program joint technical society dinner meeting, NADA Center, Northwood University. Prof. Axel H. E. Mueller will give an interesting lecture entitled A Zoo and Garden of Nanoparticles: Tales of Worms, Caterpillars, Bamboo, and Clover. The RSVP deadline is June 4 to Molly Warren-Haycock at warren-haycock@mmi.org. Contact Steve Keinath at keinath@mmi.org or 989-832-5555 x 588 for any questions.
- June 17 (7:00-9:00 PM) Special evening lecture on the topic of *Honey Bees and the Colony Collapse Disorder*, Creative 360, 1517 Bayliss Street, Midland. This event is free and open to the public. For more information or questions, contact Matt Grandbois at 989-636-1687 or grandboismatthew@gmail.com, or Gavin Lu at 989-496-5512 or glu@dowcorning.com.
- July 7 (7:00-9:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via conference call at phone number: 866-299-7945, participant code: 9837036#.
- August 4 (7:00-9:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via conference call at phone number: 866-299-7945, participant code: 9837036#.
- August 10–14 248th ACS National Meeting & Exposition, San Francisco, CA. For more information, see http://www.acs.org/content/acs/en/meetings/fall-2014.html.
- August 25 (5:30-9:00 PM) Midland Section ACS 3rd Quarter Committee updates and dinner meeting.
 Venue to be determined. Contact Michelle Cummings (michelle.cummings@dowcorning.com) for questions.
- August 29 Call for papers abstracts deadline for CERM 2014. Questions or concerns should be directed
 to Heather Juzwa, General Co-Chair, CERM 2014, via e-mail to <a href="https://hltp
- October 1–4 45th ACS Central Regional Meeting (CERM 2014), Pittsburgh, PA. For more information, see www.acscerm2014.org.

The Midland Chemist is published twelve times a year by the Midland Section of the American Chemical Society, P.O. Box 2695, Midland, MI 48641-2695, http://www.midlandacs.org.

Volunteer Staff

Amy Tesolin-Gee Editor (newseditor@midlandacs.org)

Steve Keinath Editor (keinath@mmi.org)

Greg Cushing Webmaster, electronic distribution
Paige Krzyskowski Membership roster, hardcopy mailings

Please submit all articles and photographs to the editor. Neither *The Midland Chemist*, nor the Midland Section, nor the American Chemical Society assumes any responsibility for the statements and opinions advanced by contributors of or to *The Midland Chemist*.

© Copyright 2014 Midland Section of the American Chemical Society

The Midland Chemist is now primarily available online with publication notification by e-mail. If you are currently receiving *The Midland Chemist* as a hardcopy, this means that we do not have an e-mail address for you. If you do have e-mail and would prefer to get the publication electronically, please notify the editor at newseditor@midlandacs.org. However, if you do not have e-mail, we are happy to provide the publication as hardcopy. If you have any questions about events and only electronic communication information is listed, feel free to contact the Midland Section Chair, Michelle Cummings, at 989-496-4672.