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### Chair Column Michelle Cummings, Chair, Midland Section ACS



How many hours per day, or hours per week do you work at your job? Do you think it is too much? According to Leo Widrich,<sup>[1]</sup> history tells us that in the late 18<sup>th</sup> century companies started to maximize the output of their factories, requiring people to work 10-16 hours per day as a norm. This was not sustainable, and Robert Owen campaigned to have people work no more than 8 hours per day with the slogan, "8 hours labour, 8 hours recreation, 8 hours rest". In 1914 this was adopted by the Ford Motor Company, cutting the work day to 8 hours, and doubling their worker's pay. Ford's productivity increased significantly and their profit margins doubled within two years of the program's initiation. This is where the idea of an 8 hour work day originated. So, what has changed this thinking, again?

Sara Robinson<sup>[2]</sup> reported on three identified pivotal events that the initiation of a longer work day/week can be attributed to. The first was the emergence of Silicon Valley in 1970s. The "scitech personality" type, equated with behaviors similar to Asperger's Syndrome (as now diagnosed), were recruited at top companies like HP and Apple. More flexibility in working hours and dress code was accepted along with the eccentric personality. This was the birth of the geek stereotype, which was comprised of a group of people that were so passionate about their work and with their personalities, they were willing to spend 12-16 hours a day at work.<sup>[2]</sup> This work ethic was then promoted as a sign of company excellence. Just look at the how successful these tech companies have been. The second was that managers started measuring passion for your work by one metric: how willing you were to spend your life at work? Thus, the emergence of fitness centers, gourmet cafeterias, child care centers, and many of the other "benefits" provided to employees now, with companies led to making work feel more like home. The third was the initiation of the "churn'em and burn'em" corporate ethic, whereby companies hire young geeks right out of school, work them 70 hours a week, and then fire them when they are unwilling to continue with such a grueling schedule.<sup>[2]</sup> This way of thinking reached every industry in every part of the world.

Are companies really gaining by their employees working so many hours? Studies on productivity are interesting. Knowledge workers have fewer good hours of work in a day than manual laborers do, about six verse eight hours. In general, a knowledgeable worker has about five to six hours of productive hard mental work, and the rest is spent responding to e-mails, phone calls, follow-up communications, and other related activities. Going much past six hours, the brain is checked out, and productivity is significantly decreased. It is estimated that we would have had the Macintosh computer one whole year earlier, had the development team worked half as many hours per week.<sup>[2]</sup> The other interesting finding is, knowledgeable workers are much more sensitive to disruptions in their sleep schedules, causing a lack of cognitive performance "equivalent to a 0.10 blood alcohol level". This can lead to catastrophic accidents, disabling workers, damage to property, and production shutdowns. "In both the Exxon Valdez disaster and the Challenger explosion, investigators found that severely overworked, overtired decision makers played significant roles in bringing about these disasters."<sup>[2]</sup>

What can we do about it as workers? Make a decision to maximize your energy, not your time. Focus on your physical energy, emotional energy, mental energy, and spiritual energy. Ask yourself the following questions: How healthy are you? How happy are you? How well can you focus on something? Why are you doing all of this? What is your purpose? As humans our minds can focus on a given task for 90-120 minutes, and then we require a 20-30 minute break. This is known as the Ultradian Rhythm.<sup>[1]</sup> The theory is to think about what you can get done in 90-minute periods, rather than an 8 hour work day. This helps to create focus, which enhances productivity. Set your own deadlines, and add a reward, increasing the importance of a task. Create a no alerts/notifications environment, turn off all digital alerts, reduce the distractions and stop multitasking. Finally, plan your rest, a time for a nap, rest, mediation, or a snack.<sup>[1]</sup> Increased productivity can be looked at in two different ways: getting more done in the same amount of time, or maintaining the amount of work, but accomplishing it in less time. Which path will you choose?

For more information please check out these very interesting reads:

[1] Widrich, Leo, <u>http://blog.bufferapp.com/optimal-work-time-how-long-should-we-work-every-day-the-science-of-mental-strength</u>.

[2] Robinson, Sara, <u>http://www.alternet.org/story/154518/why we have to go back to a 40-hour work week to keep our sanity</u>.

#### Why My Family and I Volunteer with ACS Michelle Rivard, MMTG Chair, Sci-Fest Co-chair, Outreach & Publicity Committees

Recently, Gina Malczewski gave a talk at the local section ACS Spring Awards banquet on the advantages and disadvantages of volunteering. Her list of advantages far outweighed the disadvantages and I couldn't have agreed more with her.

For me, volunteering with the ACS is truly a family affair. My kids tag along to most of the Kids and Chemistry events we do. They either help before, during, or after each and every event that I am involved in – which is a

lot of events! My husband gets roped into a lot of the behind the scenes aspects which includes packing and loading supplies and sometimes fabricating things for me. Recently, he machined a new part for the ACS banner when it broke. Yes, my dining room table is currently covered with ACS related stuff and a portion of my basement is dedicated to storing ACS related gear, but the benefits of volunteering are enormous and far outweigh these little disadvantages!

**Volunteering connects you to others.** Networking is such an important aspect of our current culture and volunteering can greatly increase your support system. When I went back to school to finish my degree, I used my network of friends and colleagues to proofread and edit papers, help with homework, and refresh skills that were rusty due to non-use. A huge shout out to those I have bugged and continue to bug while I finish my degree – Thank You!

**Volunteering increases your social and relationship skills.** Volunteering gives you opportunities to develop and polish your important "soft" skills, such as organization, initiative, communication, and teamwork. Let's be honest, it never hurts to hone and polish our "soft" skills.

**Volunteering increases self-confidence.** I have been dragging my kids to different Kids and Chemistry events for years. At first, my oldest would only stand around and get me things (sometimes reluctantly) when I asked. Now she is more apt to take an active role whether it is taking pictures or taking the lead on the "fun" parts (as she calls them) of the demos. On a more personal note, taking the lead on demos, being the 2014 Chair of MMTG and an associate to the ACS National Project Seed Committee has given me confidence in my leadership and public speaking skills.

**Volunteering can teach you valuable skills and expand your knowledge.** We recently had a birthday in our family and I caught my seven year old sucking the helium out of her sister's Mylar balloon and explaining to the neighbor girls why her voice went up several octaves. This explanation is a small part of one of our more popular demos – Diet Coke and Mentos. In this demo we talk about gases, density, surface tension, surfactants, acids and bases, and the effect of temperature. That my seven year old learned something and passed that knowledge along really reinforces why I find it so much fun and beneficial to volunteer with ACS.

**Volunteering helps you stay both mentally and physically healthy.** I have read statistics that helping others through volunteering kindles happiness. They say that people who volunteer on a weekly basis are both mentally and physically healthier and happier individuals. For more information on this effect, please see the benefits of volunteering.

I have personally seen and experienced the benefits of volunteering and hope to pass along my passion of science outreach to my kids and others. If you would also like to benefit from volunteering, there are three opportunities in July to help support your award winning local section with its science outreach activities in the greater Midland area, as follows:

(1) Creative 360 and Possible Dream Art Camp, at Creative 360 in Midland, Monday, July 14, 12:30-3:30 PM. Art and the Forces of Nature Demos. We need 6-8 volunteers to act as a "supervisor" at each of the six stations. Your role will be to walk through the science and focus the students. For more information or to sign up, go to www.SignUpGenius.com/go/70A054BADAA2EA20-creative.

(2) Fizz, Boom, Read Summer Program at the Coleman Area Library, Wednesday, July 16, 6:30-8:00 PM. Carbon Dioxide is CO2L Demos. We need 3 volunteers to help with walk by demos. For more information or to sign up, go to <a href="https://www.SignUpGenius.com/go/70A054BADAA2EA20-fizz1">www.SignUpGenius.com/go/70A054BADAA2EA20-fizz1</a>.

(3) River Days at the Tridge in Midland, Saturday, July 19, 11:00 AM – 4:00 PM ( $2\frac{1}{2}$  hour shifts). Carbon Dioxide is CO2L Demos. We need 6 volunteers to help with walk by demos. For more information or to sign up, go to <u>www.SignUpGenius.com/go/70A054BADAA2EA20-river</u>.



Upper left, Michelle Rivard, lower left, Alyssa Rivard and her best friend Cierra, upper right, Matthew Rivard, and lower right Kayla Psenski at various ACS outreach demos. Photos courtesy of Michelle Rivard and Kayla Psenski.

## Call for Volunteers – 2014 Great Lakes Bay Region NOBCChE Science Enrichment Camp Domonique Downing, NOBCChE

Saturdays, July 19 & 26 and August 2 & 9, 7:30 AM – 12:00 PM Thompson Middle School, 3021 Court Street, Saginaw



The annual Great Lakes Bay Region NOBCChE Science Enrichment Camp will provide middle school students an opportunity to explore and understand the scientific method by posing scientific questions in an experimental design while guiding the students through hypothesis formation, hypothesis testing and data analysis. The students will work in small groups alongside a volunteer and prizes will be awarded for demonstration of comprehension and to winners of selected experimental challenges.

Please help us make this event a success by volunteering for one or all of the Saturdays during which the program lasts. TRAINING WILL BE PROVIDED for each experiment. Please contact Vennesa Williams at

<u>vowilliams@dow.com</u> or 989-633-4354 for additional information and to indicate your volunteer week(s) preference.



### Michigan Green Labs Initiative Workshop, August 12 Jennifer Acevedo, Office of Environmental Assistance, Michigan Department of Environmental Quality

Join the discussion at the second annual Michigan Green Labs Initiative (MGLI) workshop, *Making Labs Safer and More Sustainable*, graciously hosted by Michigan State University at the Molecular Plant Sciences Building in East Lansing on August 12, as we continue building a network of green lab professional partners in Michigan. Presentations will be given by MSU on HVAC controls, energy conservation, and reducing chemical hazards without hindering research. We will also share additional case studies and best practices and distribute MGLI materials that can serve as the basis of a program for implementation at your institution.

The registration fee of \$25 includes all materials, a catered lunch, and a lab tour of MSU facilities. For more information or to register, see <u>Michigan Green Labs Initiative Workshop</u>. For registration questions, contact Alana Berthold at 517-284-6854 or <u>bertholda@michigan.gov</u>. Program questions should be addressed to Chris Affeldt at <u>affeldtc@michigan.gov</u>.

### 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 <u>hljuzwa@shimadzu.com</u> or to her cell phone at 617-293-8279.

## ACS Day at the Midland County Fair, August 14 Michelle Rivard, MMTG Chair, Sci-Fest Co-chair, Outreach & Publicity Committees

This year's event will be held Thursday, August 14, 4:30-7:30 PM in the tan picnic building located at the north end of the Grandstand. Once again, tickets for discounted ride bands will be available for purchase. They will be just \$14 a piece and good for all day (1:00-11:00 PM).

New this year, we will be giving out food tickets to help facilitate how much food is needed. We will have free hot dogs, chips, popcorn, cotton candy and drinks. Food tickets will be good for one trip through the food line. Science demos and possibly face painting will also be available during this event.

Advance ride and food tickets will be available beginning in early August. For more information and advance ride and food tickets please contact Gina Malczewski at <u>reginamalczewski@gmail.com</u>, Cassie Hale at <u>cassandra.hale@dowcorning.com</u>, or Sue Perz at <u>sue.perz@dowcorning.com</u>.



# Edison's Lab to Be Recognized as National Historic Chemical Landmark in Michigan, September 20 *Keith Lindblom, National ACS Office of Public Affairs*

Chemical research and developments of American inventor and businessman, Thomas Alva Edison, will be recognized as a National Historic Chemical Landmark in Dearborn on Saturday, September 20, 2014. Thomas Edison developed an interest in chemistry as a boy in Michigan, and applications of chemistry were a common theme in many of his inventions including carbon filaments used in light bulbs, development of the nickel-iron alkaline electric storage battery, and research into domestic sources of rubber.

Edison's legendary "invention factory" in Menlo Park, NJ, was moved from its original site to Dearborn in 1928 when it was reconstructed by Edison's close personal friend Henry Ford. The family-friendly event will begin at 11:00 AM with tours of the laboratory and presentations, and Edison himself may make an appearance. The American Chemical Society, ACS Detroit Local Section, and The Henry Ford are sponsoring the event. For updates and information, visit www.acs.org/landmarks.

The Menlo Park Laboratory at The Henry Ford (Greenfield Village) will join two existing National Historic Chemical Landmarks in Michigan: the commercial production of bromine by Herbert H. Dow in Midland, and the discovery of organic free radicals by Moses Gomberg at the University of Michigan.



Portrait of Thomas Edison in 1922. Courtesy Library of Congress.

The American Chemical Society established the National Historic Chemical Landmarks program in 1992 to recognize important achievements in the

history of the chemical sciences. Subjects recognized through this program have included Bakelite, the world's first synthetic plastic; the discovery and development of penicillin; and the work of historical figures such as Joseph Priestley, George Washington Carver and Rachel Carson. More information is available online at www.acs.org/landmarks.

# Women Chemists Committee (WCC) Update Jaime Curtis-Fisk, Chair, Midland WCC

The Women Chemists Committee has been busy planning several upcoming events. As everyone is returning from summer vacations and settling into fall there will be a series of great activities to look forward to. Our three key focus areas of outreach, career development, and networking are reflected well in this mix, offering everyone the opportunity to take part in the areas that are of most interest to them. Be sure to save the dates and contact the organizers if you have any questions or would like to volunteer.

**Connecting STEM and American Girl:** Midland WCC is proud to announce that we will be partnering with the Alpha Kappa Alpha Sorority and the Midland Center for the Arts to integrate a STEM experience into the upcoming American Girl Fashion Show<sup>®</sup>. Three sessions of the event will take place on October 11 and 12 at the Midland Center for the Arts and are expected to draw in an attendance of 1,500 to 2,000. Girls participate in the event as models for American Girl character outfits and through this activity they learn the historical connection to each of the dolls and more importantly gain confidence and self-esteem from participating.



WCC has the unique opportunity of bridging fashion and science by working with the girls on hands-on activities while they are not on stage and reaching their entire families with activities in the lobby before and after the show. Our intent is to develop a program of activities related to the chemistry of art or fashion so that the girls and their families will experience that science is around them everywhere, even at a fashion show. We need plenty of volunteers to help generate ideas, plan the activities, prepare the demonstrations, and facilitate the program at the shows. If you would like more information on the fashion show, please visit <a href="http://www.mcfta.org/event/american-girl/">http://www.mcfta.org/event/american-girl/</a>. For questions on WCC involvement or volunteer options, please contact Jaime Curtis-Fisk at <a href="http://www.mcfta.org/event/american-girl">jlcurtisfisk@dow.com</a>.

WCC at the Fall Scientific Meeting: The local section ACS Fall Scientific Meeting will be held at Delta College on Saturday, September 27<sup>th</sup>. Midland WCC is committed to having a presence at this event. The WCC steering committee is considering options for programming that will strengthen the overall content of the meeting while addressing topics of interest to the WCC community. This is a great leadership opportunity to be involved with selecting and coordinating these activities. If you are interested in volunteering or have suggestions on program ideas, please contact Wendy Flory at wcflory@dow.com.

**Fall Networking Event:** Save the date for a "Networking Event and Seminar" with Carol Williams on the evening of October 28. Please contact Beata Kilos at <u>bakilos@dow.com</u> for more information or to join the event planning committee.

### 2014 Michigan Green Chemistry and Engineering Conference, November 12 Jennifer Acevedo, Office of Environmental Assistance, Michigan Department of Environmental Quality

The Michigan Department of Environmental Quality and Michigan State University are hosting the 2014 Michigan Green Chemistry and Engineering Conference, otherwise known as the 6<sup>th</sup> "<u>GreenUp Conference</u>", on November 12 at the Kellogg Center in East Lansing. This year's theme is *Cultivating Next Generation Solutions*. Green chemistry and engineering are all about designing, innovating, and manufacturing what's next and developing less hazardous, more effective materials, processes, and products. Green chemistry and engineering context, reduce costs, increase safety, and gain a competitive edge.

The conference will offer an excellent opportunity for ACS Michigan local section members to network and learn about cutting edge technologies in green chemistry and engineering. Your members can participate by submitting a paper, applying for a Governor's Award, securing a sponsorship, or attending. Contact Jennifer Acevedo at <u>acevedoj@michigan.gov</u> if you have any questions.

### **Call for Volunteers for ACS Science Coaches Program** Gina Malczewski, Outreach Committee and Secretary

The ACS Science Coaches program is open again and looking for volunteers for the 2014-2015 school year! Please see the information below for more details. The mentioned "surprise" will probably be the initial contact you have with the teacher about the opportunity. He or she will actually be contacted by ACS, too, before approval, so you need to get the teacher on board first. The Midland Section ACS was actually one of the pilot sections for this National ACS program, and we have many current and former participants who can share their experiences with you and answer any questions. You can begin by contacting Michelle Rivard at michelle.rivard@dowcorning.com or 989-496-5399, or Gina Malczewski at reginamalczewski@gmail.com or 989-631-4038 if you think we can help, or for any questions. Thank you.



at a school near you and the American Chemical Society will donate \$500 to the school.

Make it happen: 1. Select an elementary, middle or high school teacher. 2. Decide together what you will do to help.

program by October 30. Questions?

#### Find out more and sign up at

Contact ACS staff at ncecoaches@acs.org.



### ACS Hosts MSU Expert for Seminar on Honey Bees Amy Tesolin-Gee, Publicity Chair / Gavin Lu, Program Committee

More than 60 people attended the science café "Honey Bees and Colony Collapse Disorder" organized by the Midland Section of the American Chemical Society the evening of June 17, 2014 at Creative 360 in Midland. The event, free and open to the public, featured Professor Zachary Huang of Michigan State University, an entomologist who has studied honey bees for over 30 years.

According to the U.S. Department of Agriculture, there has been a 20-30% decline in the population of honey bees over the past 10 years, a condition called colony collapse disorder (CCD). It is a serious issue as honey bees are the only reliable pollinator for vast acres of crops. In Michigan alone, bees pollinate approximately one billion dollars' worth of crops each year, including blueberries, tomatoes, asparagus, cherries, apples and more. Nationally, 130 crops—worth an estimated \$15 billion annually—are pollinated by honey bees. If the current CCD trend continues, American agriculture will face devastation in the coming decades.

Professor Huang explained that there are several threats to honey bees, including diseases and pests such as varroa mites, bee viruses, tracheal mites, American foulbrood (caused by a bacterial pathogen) and *Nosema*, a pathogenic gut fungus causing dysentery in its host. Insecticides sprayed onto plants and internal pesticides used by bee keepers—mainly for mites—also cause problems, as does a lack of genetic diversity and increased transportation of colonies by migratory beekeepers.

High-fructose corn syrup used as feed becomes toxic to bees at high temperature, and possibly impacts their ability to cope with pesticides. In addition, general "stressors" also create adverse effects. For example, says Dr. Huang, "Consider being one of 40,000 individuals packed inside a hive, in total darkness, and unable to fly while being trucked for 3 days across the country."

A major issue, according to Dr. Huang, is the varroa mite, an external parasite on honey bees. A relatively large mite, it would be analogous to a fist-sized tick sucking blood on a human. Often there are multiple mites on one bee. This parasite attaches to the bee, sucking its blood, until it transfers to another bee or returns to the brood for reproduction. Several viruses detrimental to bees, such as deformed wing virus, are also transmitted by varroa mites.

It is notable that in countries where honey bees don't have to be moved frequently on highways, such as Canada, Mexico, and Turkey, CCD is essentially absent, which implies there could be links between long distance transportation of bees and colony health. Professor Huang is the first to study the impact of transportation stress on honey bees. In the US, commercial and hobbyist bee keepers haul their bees around the country, depending on the seasons and what plants are in bloom. His study revealed that bees spending a few days on the highway suffered from higher stress than the control group, as indicated by physiological parameters, such as juvenile hormone level. Meanwhile, the glands secreting royal jelly in the worker bees, used in the nutrition of larvae as well as adult queens, are smaller in the stressed bees. Consequently, the colony is weakened.

They've also observed differences in susceptibility of bees in North America versus Spanish bees with respect to *Nosema ceranae* infection. The prevalence of infection rates for bees with *Nosema* increased after transportation and pollination. They still must investigate the different components of this complex process to help identify possible causes such as vibration, different flower availability once hives are moved, or other environmental factors.

Dr. Huang's research shows that pesticides affect homing efficiency. In studies, bees were treated with different pesticides and evaluated. Approximately 20% more bees were lost (i.e., unable to find their way back to their hive) after exposure to two pesticides versus exposure to just one.

While the European Union has banned two pesticides, Dr. Huang says "a decision like this in the US is still being debated—the main problem is whether there are alternatives safer to honey bees if we ban the neonicotinoids." Pesticide use by itself is probably not causing CCD, as symptoms have been recorded as early as 1897. Most scientists believe many factors combined are responsible for causing CCD, such as varroa mites, plus pesticides, plus nutrition issues, for example. This finding may have important ramifications in the practice of beekeeping and policy making at the state and federal levels.

Among the audience were many hobbyists and professional beekeepers from the Tri-City area. A lively discussion ensued after the lecture. For more information, or to view Dr. Huang's bee-related photography, please visit his websites at <u>cyberbee.net</u> and <u>www.beetography.com</u>, or e-mail him at <u>bees@msu.edu</u>.



# Past and Present Editors of *The Midland Chemist* Attend Recognition Event *Wendell L. Dilling, Director and Historian*

Past and present editors of *The Midland Chemist* were recognized at the June 2, 2014, Midland Section ACS Board of Directors meeting and dinner at the Tuscany Banquet Hall, in Midland, Michigan.

*The Midland Chemist*, the official publication of the Midland Section of the American Chemical Society, was first published 50 years ago in April 1964.



Those attending the celebration event were (left to right, with dates of service as editor or co-editor) Marcia L. Dilling (Sep 1969 - May 1973), Wendell L. Dilling (Sep 1969 - May 1973), Richard L. McKellar (Sep 1973 - Nov 1975), Susan I.F. Weitz (Apr 1980 - Nov 1981), Alexander Weitz (Apr 1980 - Nov 1981), Gretchen S. Kohl (Jan 1982 - Nov 1985), Steven E. Keinath (Aug 1984 - Aug 1987 and Oct 2012 - present), C. Kenneth Bjork (Jan 1988 - May 1990), David Selley (Feb 1994 - Oct 1998), Vicki S. Sible (Mar 1998 - Oct 1999), and Scott Rettelle (Feb 2010 - Oct 2011). Photo courtesy of Kay Rogers.

The complete list of editors with their dates of service was published in the April 2014 issue of *The Midland Chemist*, pages 10-11.

## Sign Up for the New Midland ACS Photo Share Site Michelle Rivard, MMTG Chair, Sci-Fest Co-chair, Outreach & Publicity Committees

The Midland Section of the ACS has a new photo share site! It is a private site where ACS-related pictures are uploaded for sharing with members. Come check out what your ACS local section is up to. Follow the link (<u>https://midlandacs.shutterfly.com/</u>) and ask to join today! By joining you will be able to keep up with upcoming events and see exactly what the Midland Section ACS is doing in your community.



### Upcoming Dates, Events, and Other Updates

- July 19 & 26 (7:30 AM 12:00 PM) Great Lakes Bay Region NOBCChE Science Enrichment Camp sessions, Thompson Middle School, 3021 Court Street, Saginaw. For more information or to volunteer, contact Vennesa Williams at <u>vowilliams@dow.com</u> or 989-633-4354.
- August 2 & 9 (7:30 AM 12:00 PM) Great Lakes Bay Region NOBCChE Science Enrichment Camp sessions, Thompson Middle School, 3021 Court Street, Saginaw. For more information or to volunteer, contact Vennesa Williams at <u>vowilliams@dow.com</u> or 989-633-4354.
- 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 10–14 248<sup>th</sup> ACS National Meeting & Exposition, San Francisco, CA. For more information, see <a href="http://www.acs.org/content/acs/en/meetings/fall-2014.html">http://www.acs.org/content/acs/en/meetings/fall-2014.html</a>.

- August 12 (9:00 AM 3:00 PM) Second annual Michigan Green Labs Initiative Workshop, *Making Labs Safer and More Sustainable*. Molecular Plant Sciences Building, Michigan State University, East Lansing. For more information or to register, see <u>Michigan Green Labs Initiative Workshop</u>.
- August 14 (4:30-7:30 PM) ACS Day at the Midland County Fair. Discounted ride bands, free food tickets, and science demos at the tan building north of the grandstand. For more information and advance ride and food tickets, please contact Gina Malczewski (reginamalczewski@gmail.com), Cassie Hale (cassandra.hale@dowcorning.com), or Sue Perz (sue.perz@dowcorning.com).
- August 25 (5:30-9:00 PM) Midland Section ACS 3rd Quarter Committee updates and dinner meeting. Venue to be determined. Contact Michelle Cummings (<u>michelle.cummings@dowcorning.com</u>) 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 <u>hljuzwa@shimadzu.com</u> or by phone at 617-293-8279.
- September 20 (11:00 AM) Recognition of Edison's Lab as a National Historic Chemical Landmark, Menlo Park Laboratory at The Henry Ford, Greenfield Village, Dearborn. For more information and updates, visit www.acs.org/landmarks.
- September 27 (save the date) 2014 Midland Section ACS Fall Scientific Meeting, Delta College.
- October 1–4 45<sup>th</sup> ACS Central Regional Meeting (CERM 2014), Pittsburgh, PA. For more information, see <u>www.acscerm2014.org</u>.
- October 6 (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#.
- October 11 (12:00 PM & 4:00 PM) Connecting STEM and American Girl, Women Chemists Committee volunteer event, Midland Center for the Arts. For more information on the American Girl Fashion Show<sup>®</sup>, please visit <u>http://www.mcfta.org/event/american-girl/</u>. For questions on Women Chemists Committee involvement and volunteer opportunities related to this event, please contact Jaime Curtis-Fisk at <u>jlcurtisfisk@dow.com</u>.
- October 12 (2:00 PM) Connecting STEM and American Girl, Women Chemists Committee volunteer event, Midland Center for the Arts. For more information on the American Girl Fashion Show<sup>®</sup>, please visit <u>http://www.mcfta.org/event/american-girl/</u>. For questions on Women Chemists Committee involvement and volunteer opportunities related to this event, please contact Jaime Curtis-Fisk at jlcurtisfisk@dow.com.
- October 28 (evening event, save the date) Women Chemists Committee "Networking Event and Seminar" with Carol Williams. Venue to be determined. For more information, please contact Beata Kilos at <u>bakilos@dow.com</u>.
- October 30 Deadline for enrollment in the 2014-2015 ACS Science Coaches Program. For more information, or to sign up, see <u>www.acs.org/sciencecoaches</u>.
- November 3 (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#.
- November 12 (save the date) 2014 Michigan Green Chemistry and Engineering Conference (the 6<sup>th</sup> "<u>GreenUp Conference</u>"), *Cultivating Next Generation Solutions*, Kellogg Center, Michigan State University, East Lansing. Contact Jennifer Acevedo at <u>acevedoj@michigan.gov</u> if you have any questions.

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#### **Volunteer Staff**

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