

A publication of the Midland Section of the American Chemical Society

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www.midlandacs.org

#### From the Chair

# Your Voice, Vote...and Volunteering!

• ver 50% of our members are over 50, so we need some new recruits! (I, too, contribute to the "graying" of our Section and we value the experience these members represent, but want to ensure continuity of our leadership and activities!) Please approach your colleagues and seek to inform new hires or the uninitiated about the benefits of joining (and taking an active role in) ACS.

We are seriously considering the future of our communications, so if you receive a survey in the coming months, be sure to respond. We are discontinuing the overlap of newsletters with *The Midland Chemist* (in the six months the MC is published), and the Chemist publication (in its current format) will soon be suspended for a period while we work out its future.

We are open to suggestions that encourage members to open and READ our communications. We will also stop paper copy mailings by the end of the year. Format and even titles are up for consideration, so if you care about Section publications, express your thoughts to one of the Board members, to Amy Tesolin-Gee, and/or better yet, volunteer to help!

We are putting together our slate

of candidates for the fall election, so encourage the "leaders" among you to come forward. I am happy to talk to anyone who might be interested in running—it is important that candidates understand their potential responsibilities.



Gina Maiczewski

Do you know someone who loves to do website work? We are looking for a web administrator who is a member; we have been fortunate to have the services of Adrian Merrington of MMI, who would appreciate some help if not a complete turnover of responsibilities. PLEASE give this serious consideration, and contact a Board member if you (or an interested party) have/has questions.

Enjoy the remainder of your summer, and please consider attendance at one of our August Board meetings to learn about or participate in our Section's many activities.

Una Malcyunski

#### In This Issue

Chair Column	.1
SVSU to host FSM, Sci-Fest	.1
ACS Day at the Fair	.1
Outreach Update	.2
Call for Officer Candidates	
Team USA Medals at IChO	.2
CRM Volunteers Needed	.3
MMTG Awards Student	.3
Chemical Conference Poetry	.3
Publicity Help Needed	
Angelotti Research Fund	
National Meeting via ACS Live!	.4
MMTG Update	.5
ACS Webinars <sup>™</sup>	.6
ACS Day at the Fair Flyer	.6
In Past Issues	.7
2012 Board Meeting Schedule	.7

#### Calendar for Aug./Sept.

Aug. 13ACS Day at the FairAug. 27Board Mtg. 7pmSept. 15FSM Abstracts due

Click on the Calendar button at http:// www.midlandacs for more details.

Amy Tesolin-Gee, Publicity

# ACS Day at the Fair August 13

REE hot dogs, chips, snow cones, popcorn and science demos will be available in the tan building near the grandstand for all ACS/MMTG members, their family and friends on August 13 at the Midland County Fair.

Tickets for discounted ride bands are available for \$14. To purchase in advance, contact Michelle Rivard (496-5399) or Amy Tesolin-Gee (636-1903). See page 6 for further details.

David Karpovich, Director, FSM Co-chair / Tami Sivy, FSM Co-chair

## SVSU to Host Fall Scientific Meeting & Sci-Fest October 20

Fall Scientific Meeting and Sci-Fest Saturday, October 20, 2012 Saginaw Valley State University Curtiss Hall

Please mark your calendars! The 68<sup>th</sup> Annual Fall Scientific Meeting of the Midland Section of the ACS "Chemistry from the Nano Scale to the Community Scale" and Sci-Fest fun, family-friendly exhibits and activities—"Nanotechnology: The Smallest Big Idea in Science"

Fall Scientific Meeting "Chemistry from the Nano Scale to the Community Scale" Sign-in & Coffee at 8:30 AM Opening remarks at 8:50 AM Keynote at 9:00 AM Symposia and Posters to follow

#### Sci-Fest

"Nanotechnology: The Smallest Big Idea in Science" Starting time at 10:00 AM Volunteers needed Please tell your friends with kids

#### New this year! Student Members, Parents, and Teachers:

Chemistry Lab and Demo Exchange— Safe, cheap, and easy activities for learning chemistry.

#### **Call for Posters**

Abstracts are due September 15. All chemistry topics and levels are welcome. More details will be coming soon. Please contact David Karpovich (dsk@svsu.edu) with initial questions. Gina Malczewski, Chair / Outreach Group Leader

## Summer Science—and What's Next for Outreach

**S** chool has been out since early June, but we continue to offer science education through Outreach activities. On June 25, we sponsored a "Fire(Work'd) Up!" presentation at the Center for the Arts—our primary guest was Jim Malek (a Certified Pyrotechnician and former Dow Corning employee). We had 85 attendees, with very positive feedback. Gina gave a short presentation on the chemistry of fireworks followed by Jim's very topical discussion of firework types and SAFETY.

We then adjourned to the courtyard for flame tests (to show the relationship between atomic makeup and colors), and demonstrations of simple fireworks. Everyone got free sparklers thanks to Wolverine Fireworks. MCTV recorded this event, which you can now watch at (you may have to CTRL + click to open it; requires Windows Media Player):

mms://mctv.midland-mi.org/

TRMSVOD/6041\_FireworkedUpLecture .wmv

On two weekdays in July, a presentation and activities on water was offered at Camp Iknowme, a group of troubled kids of middle school age. These children learned about water's chemical and physical properties, and had a chance to test several kinds for pH, chlorine, various N-containing substances, bacteria, specific gravity, and total dissolved solids.

Our first appearance ever at Midland's River Days was July 21, 11–4 p.m.; given the venue, we focused on "water" again, and involved visitors in demonstrations of water density, surface tension, conductivity, and purification. In addition, there were craft activities to re-purpose water bottles. Attendance was great—traffic was constant. Thanks to our helpers: Dave Stickles, Michelle Rivard, Sue Perz, Evan Waddell, Maria Rednic and Gina Malczewski.

Remember ACS Day at the Fair is August 13—free food (hot dogs, popcorn, cotton candy, snow cones, drinks) for attendees at our building near the grandstand. ACS Members, volunteers and their families can take advantage of this, as well as the \$14.00 ride bands that allow kids to ride ALL DAY that day (1 p.m. to 11 p.m.). We also have free demos at the building 4 to 7 p.m. If you would like to volunteer or need more info, please contact Michelle Rivard (michelle.rivard@dowcorning.com), or Amy Tesolin-Gee (AMTesolin-Gee@dow.com).

On August 28, we will again do the "back to school" event at Shelterhouse, and we are invited to participate in the Water Conservancy District "fun fair" in Sanford on Sept 8 (the latter most likely focusing again on water). We need your help!

We are in the planning stages of possible science cafes devoted to gems and minerals as well as anticounterfeiting. If you would like to help, have questions, or have activity ideas, please contact Lisa or Gina: lisa.thackery@dowcorning.com gina.malczewski@dowcorning.com

#### Shawn (Xiaoyun) Chen, Chair, Nominations and Elections Committee

# **Call for 2013 Officer Candidates**

ere is your chance to become more involved in your local ACS section. We need candidates to run for the following positions for 2013:

#### *Chair-elect Directors (3 slots open, 3-year term) Secretary Treasurer Chair of Nominations & Elections*

If you are interested in running for any of these positions or know someone who might be interested, please contact Shawn (Xiaoyun) Chen at 989-636-9042 or xchen4@dow.com.

If you have any questions regarding the responsibilities of the positions, please contact the current officers or Shawn Chen, or you are welcome to visit our website at www.midlandacs.org. Our handbook provides further details: http:// midlandacs.org/uploads/images/ a d m i n i s t r a t i o n / ACSMidlandSectionHandbook.pdf.

Nominations from the floor will be accepted at the August 6 and August

27, 2012 board meetings, held at 7:00 p.m. in the Board Room or Auditorium in the basement of the Midland Center for the Arts. Please be aware that any nominees will have to accept the nomination prior to their announcement from the floor.

There are a variety of compelling reasons to take advantage of the chance to become involved as an officer or director in the Midland Section ACS: networking beyond your workplace, opportunity to provide vision and voice to your local scientific community, and to hone your interpersonal and leadership skills.

Please consider getting involved within the Midland Section—if you are not running for a board position, there are still many other great areas for you to serve. Current nomination and election committee members include: Shawn Chen (chair) Pat Smith Kevin Weir Wenjun Du Abhijit Sarkar

#### National ACS

# USA Earns Gold & Silver at IChO

The U.S. National Chemistry Olympiad program would like to proudly announce the success of the Alpha Epsilon Team at the 44th International Chemistry Olympiad (IChO) competition, which concluded July 30, 2012 in Washington, D.C.

#### U.S. Team students:

- Christopher Hillenbrand of Regis High School, NY, won a Gold Medal.
- Sidharth Chand of Detroit Country Day School, MI, received a Silver Medal.
- James Deng of Choate Rosemary Hall, CT earned a Silver Medal.
- Jason Ge of Westview High School, CA won a Silver Medal.

The USA Team students competed against 279 students from 71 countries.

Congratulations to Team USA!

Phil Squattrito, 2013 Central Regional Meeting Chair

# Volunteers Needed for 2013 Central Regional Meeting in Mt. Pleasant

The 44th Central Regional ACS Meeting is being hosted by the Midland Section and will take place in Mount Pleasant, on the campus of Central Michigan University May 15– 18, 2013. The Midland Section last hosted the Central Regional meeting in 2006 (in Frankenmuth).

In recent years 600–1000 people have attended Central Regional meetings. Attendees are able to interact with a large number of other chemists from the region, which includes parts of Michigan, Indiana, Ohio, Kentucky, West Virginia, and Pennsylvania.

The organizing committee is actively seeking volunteers who are interested in helping with the planning of the 2013 Meeting. Volunteers are welcome in all areas, though we are particularly interested in identifying individuals who would be willing to help recruit vendors for the exposition.

#### **Committees Include:**

- Technical program
- Poster session
- Treasurer
- Program book editor
- Awards
- Fundraising
- Undergraduate program
- Exposition
- Publicity
- Web master
- Education program
- Social activities

Please contact Phil Squattrito (p.squattrito@cmich.edu or 989-774-4407) to volunteer or for more information.

#### Jeff Seifferly, MMTG Chair

# **MMTG Awards Outstanding Student**

The Mid-Michigan Technician Group (MMTG) sponsors an annual award for a local Outstanding Chemical, Process, or Environmental

Technology student. Eight applications were received this year and voted on by the members of the MMTG Board and the delegates.

This year's winner was Jeremy Marchand, an Environmental Technology student at Delta College. Starting winter semester 2013, he plans on attending SVSU and working towards a Bachelors degree in Biochemistry.

Jeremy received an award certificate, a Chemical Technicians' Ready Reference book, and a \$50 gift card. He and two guests also attended the 2012 ACS Spring Awards Banquet and Speaker/Comedian Event at the Great Hall, Midland, where he was presented with his award by Chair, Jeff Seifferly. Jeremy has subsequently joined MMTG and is one of our more active members.



and Speaker/Comedian Jeff Seifferly presents Jeremy Marchand with the 2012 Outstanding Event at the Great Hall, Chemical, Process, or Environmental Technology Student Award on Midland, where he was behalf of MMTG at the May 3, 2012 Awards Banquet.

MC Editor

# PhD Poem Shared at Conference

The following poem may resonate with many *Midland Chemist* readers. It was written and submitted by Dr. Pasquale Di Raddo, Department of Physical Science, Ferris State University (PasqualeDiRaddo@ferris.edu).

The style of poetry is that of an alliteration. Dr. Di Raddo presented this creative work at the July 2012 International Conference on Chemical Education held in Rome, Italy. Many thanks to him for submitting it for MC readers' enjoyment.

#### Pronounce PhD.

Pleasant prospect Provoke problems Pursue puzzles Pointed perspectives Propose postulates

Prolonged program Pitiful pay Purgatorial penitence Postpone personals Patient progress Prevent plagiarism

*Perhaps publish... Plus perish?* 

#### Gina Malczewski, Chair

# **Publicity, Anyone?**

njoy doing public relations? Photography? Journalism? Getting the word out about our great events is a challenge, and our current publicists (Amy Tesolin-Gee and Eva Li) need assistance. The more who help, the easier the tasks for each.

You will get the opportunity to work with local press and media, and collaborators such as the Midland Center for the Arts.

Designing wonderful activities is not time well spent, unless people know about them and come to enjoy them. We also can use assistance from those who like to write stories about events after they occur. Please contact Amy or Eva, or one of the officers: amtesolin-gee@dow.com; eva.li@dowcorning.com

#### Dave Angelotti, Hemlock Semiconductor

### Angelotti Undergraduate Research Fund Launched

• n April 20, 2012, friends and family of the late Nicholas C. Angelotti gathered at the University of Notre Dame to launch the Nicholas C. Angelotti Undergraduate Research Fund in Analytical Chemistry. The Angelotti family established the Nicholas C. Angelotti Endowment for Excellence in 2005 in order to continue Nick's passion for learning, education and chemistry.

A 1950 graduate of the University, Nicholas C. Angelotti achieved a Bachelor of Science degree in Chemistry and then furthered his education with a Master of Science degree in Analytical Chemistry at the Case Institute of Technology in 1952. Following, a short career at Diamond Alkali and a two-year stint in the U.S. Army, Nick then began his 42-year career with the Dow Corning Corporation, rising through the ranks, retiring as an Associate Analytical Scientist.

As part of the events, Dr. Timothy P. Angelotti (MD, PhD), a 1985 graduate of the University, presented portions of his research from Stanford University School of Medicine where he is a researcher and associate professor. The title of his talk was "Molecular Pharmacology: A Biochemical Analysis of Receptor and ion Channel Function." David M. Angelotti, also a 1985 graduate of the University, gave a brief overview of Nick's life including his 42-year career at Dow Corning Corporation where he was esteemed by his colleagues and given a "guru-like" status for his analytical prowess.

"The undergraduate research experience is often a critical point in the development and career aspirations of students. It takes into practice what is developed in the classroom and brings the subject alive to students," said Dr. Ken Henderson, Chair of the Department of Chemistry and Biochemistry at Notre Dame. "It is with the support from the Angelotti family that we are able to provide the best education to our undergraduate students. As we reach our goal of becoming the premier Catholic research university with an unsurpassed undergraduate education, support for undergraduate research is one of my highest priorities. This gift will have a great impact on so many students and the research they participate in."

The family met the first recipient of the endowment, Revathi Kollipara, a Chemistry major from Fort Wayne, IN who works in Dr. Marya Lieberman's laboratory. Dr. Lieberman is working to develop analytical devices to detect fake pharmaceuticals and perform other analytical tasks. Several different tests are run simultaneously on a single sample.

The devices are paper based, contain all necessary reagents, do not need electricity, and can be read by taking a picture with a cell phone and sending it to a web site. The overall goal of the project is to "crowdsource" chemical analysis, revealing spatial and temporal information that will be useful for public health, forensic, and environmental applications.

Funds from the Angelotti Undergraduate Research Fund will allow Revathi to continue her work through the summer as she completes the undergraduate research portion of her Honor's Program.



Back Row (I to r): Dr. Dominic Chaloner, Director of Undergraduate Research; Steve Angelotti; Dr. Tim Angelotti; Jennifer Angelotti; Linda Chatfield. Middle Row: Dr. Sean Kassen, Academic Advancement Director for Science; Dr. Ken Henderson, Chair of Chemistry and Biochemistry; Dave Angelotti; Debbie Angelotti; Dominic Angelotti. Front Row: Mary Lou Angelotti

#### National ACS

## **ACS Live! Broadcasts National Meeting Events Globally**

CS Live! events produced by ACS Webinars<sup>™</sup> are an important facet of the ACS National Meeting. By allowing a virtual audience front row seats to live events from Philadelphia, ACS Live! connects a global audience with subject matter experts.

This week, ACS Live! events are

scheduled daily and feature speakers including Dr. Cesar Vega on the chemistry of making buttery coffee ice cream, Dr. Judith Giordan sharing tips for success for the shy guys and gals, and David Wolf on an off-the-bench career as a forensic scientist in the Philadelphia Police Department.

Live broadcast and recording is available on the ACS Webinars<sup>™</sup> Tune in: www.acswebinars.org/phillylive-2012 to catch broadcasts of live events from the ACS National Meeting in Philadelphia from August 19h through the 21st.

#### Jeff Seifferly, MMTG Chair

# **MMTG Stays Active With Educational Events**

M id-Michigan Technician Group (MMTG) continued to stay active during the second quarter of 2012 by presenting various educational events. 2012 Chair, Jeff Seifferly, presented an overview of MMTG at the ACS "Meet and Munch" membership drive, discussing the mission of the MMTG and future activities. We had two new members join at the event.

We held our first ever

"Dinner and Learn" event, a Financial Planning Seminar, sponsored by representatives of the Hantz Financial Group. Twenty five members / spouses were in attendance and enjoyed dinner at China Palace. The seminar covered financial planning, retirement planning, and some planning for college costs.

Later that month MMTG hosted our first "Lunch and Learn" of 2012, a DVD presentation entitled "Mastering Excel® Functions and Formulas." Twenty four members attended and learned about many of the power tips and timesaving functions that no one should do without.

Covered were topics such as gaining "what-if" capability with IF, AND, OR, and CHOOSE functions; specialized rounding functions; statistical and financial functions; SUMIF and COUNTIF functions; powerful array functions; and learning to use the frequently overlooked TEXT functions.

The following month we hosted a tour of the Midland Waste Water Treatment Facility for 23 of our members. The Plant Operations Supervisor conducted the tour and described the history of the plant, additional improvements made to the facility and major upgrades made recently. We toured the process control and analysis laboratory and also viewed the preliminary and secondary treatment areas, storage basins, and the trickling filter plant.

The last stop on our tour was the activated sludge system, consisting of both an aeration tank and settling tank. We learned how this system introduces oxygen into the wastewater; the billions of microorganisms created use most of the suspended and dissolved material as their food source. Following the very interesting tour, we went to Captain Dave's Wheelhouse for lunch and camaraderie.

For more information about MMTG, to join, or get information about upcoming events, please contact 2012 Chair, Jeff Seifferly, at 989-496-4239 o r e m a i l h i m a t jeff.seifferly@dowcorning.com



saving functions that no Above: MMTG members and spouses attended a financial planning seminar, including dinner at China Palace. The event was hosted by Hantz Financial Group. Below: MMTG members were given a tour of Midland Waste Water Treatment Facility, including process control, treatment, storage, and analytical lab areas.



#### National ACS

## **ACS Webinars<sup>™</sup> Offer Convenient Way to Learn, Network**

CS Webinars<sup>™</sup> is provided by the American Chemical Society as your chemistry source for Live weekly discussions and presentations that connect you with subject matter experts and global thought leaders in the chemical sciences, management, and business, concerning today's relevant professional issues.

#### ACS Live! One Size Does Not Fit All—Five Tips to Make the Right Career Choice

Monday, August 20 10:30–11:30 PM ET Live From Philly—An ACS Webinar's Special Event

Are small companies hiring more scientists? Are you better suited as a big fish in a small pond or a small fish in a big pond? Differences abound in what small vs. large companies look for; there should also be differences in your job search strategies!

Join our speaker, Kara Allen from AEGIS Sciences and Dr. Dave Harwell from ACS Careers, to learn how to evaluate your fit and to tailor your job hunting techniques to secure the right job. Join Virtually. Or, if you are attending ACS National Meeting, join inperson at the Pennsylvania Convention Center, Lobby A Bridge, next to Hall A/ B.

#### **Tasty Culinary Chemistry**

Thursday, September 20, 2012 2:00-3:00 PM ET

Learn how your knowledge of chemistry can enhance your cooking. Join Guy Crosby—back by popular demand as he enthralls us with chemical reactions that occur during the preparation of food which determine how flavors develop.

Guy will explore the chemical reactions behind three sources of flavors: those created by enzymes, the caramelization of sugars and the Maillard reaction in browning proteins. He will also explore how storage affects food flavor. Come and equip yourself with the knowledge that will make you a titan in the kitchen. Ready to cook?

For further details, to register, view past webinars, or to see the full list of upcoming webinars, please visit: http://acswebinars.org/.



#### Wendell Dilling, Director and Historian

### In Past Issues of The Midland Chemist

#### 40 Years Ago This Month

In MMI Dedication Ceremonies: "The Dedication Ceremonies for Midland Macromolecular Institute have been slated for September 28 and 29, 1972. On the 28th at 2:00 p.m., the official Dedication Ceremony will take place in the Main Auditorium of the Midland Center for the Arts. A prelude by the Cleveland Chamber Music Quartette will be followed by short speeches by Mr. H. D. (Ted) Doan (President, Michigan Foundation for Advanced Research), Dr. H.-G. Elias (Director, MMI), Dr. Melvin Calvin (Past President, ACS), and Dr. C. Overberger (Macromolecular Division, International Union of Pure and Applied Chemistry). Dr. P. J. Flory, Stanford University, will be the featured speaker."

#### 30 Years Ago This Month

In *High Score: 14th CRM* by Wendell L. Dilling, General Chairman, 14th Central Regional Meeting: "The 14th Central Regional American Chemical Society Meeting, the first such meeting held in Midland, was hosted by the Midland Section of the ACS on June 16-18. The meeting was a great success primarily because of the hard work of the organizing committee chairpersons and their committee members. I would like to thank each of them for jobs well done, especially the chairpersons who included Donald R. Petersen, finance; Christian T. Goralski, technical program; Marion H. Whittaker, activities; Eldon L. Graham, social program; Wilhelm E. Walles, exhibits; Harold G. Fravel, publicity; Joseph E. Dunbar, printing; Neal R. Langley, registration; Linneaus C. Dorman, meeting facilities; Abel Mendoza, housing and meals; Charles E. Reineke, transportation; and two special symposia organizers, Cecil L. Frye, organosilicon symposium; and Hans-G. Elias, polymer symposium."

#### 20 Years Ago This Month

In TECH TALK, News and Views of the MidMichigan Technician Affiliate Group by Jeff Seifferly: "Mark your calendars now for our 1992 Membership Dinner! It will be held on October 13, 1992 at the Great Hall at Valley Plaza in Midland. Keith McKennon, Dow Corning Corporation Chairman and CEO will be our Keynote speaker. Details will be mailed to all current MMTAG members. Other interested parties may call Ed Phillipson, MMTAG chair, 517-636-3698, or Mike Dineen, Banquet Chair, 517-636-4008."

#### 10 Years Ago This Month

In Lessons Learned: Facing Potential Job Loss by Deb Bergstrom: "As a new member of the unemployed, I have gained key insights which might be valuable to share with others. Although most of us would not choose to be downsized, right-sized, reengineered, reorganized out of a job, with our eyes wide open we might be able to see it coming and not be caught completely off-guard. There are many reasons why we may or may not be selected for separation from our employers. Although we may never completely understand the decisions, the ability to anticipate job loss will allow one to better prepare."

#### Gina Malczewski, Chair

# **Board Meetings Open to All: In person or Conference Call**

e are now meeting (mostly) on the FIRST MONDAY of the month at MCFTA, in the Board Room, at 7 p.m. Our new schedule allows us to avoid National meetings, spring break, and holidays.

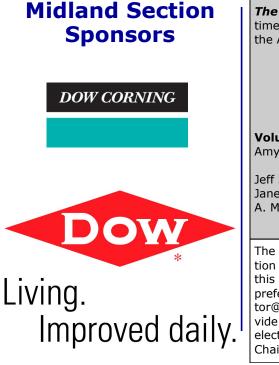
The few exceptions for location will be held in the Lecture Room (downstairs, right across the hall from the Board Room). I am introducing conference calling, so PLEASE FEEL WELCOME to participate in any meeting, whether you can come in person or not. We will try to send any slides ahead if we know who's interested.

Conference call phone number (toll free): 866-299-7945

Participant code (you will hear a prompt): 9837036#

Board Meetings 2012								
Date	Start	End	Room	Status				
1/9/2012 Mon	7:00 PM	9:00 PM	LECTURE RM	Confirmed				
2/6/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	All meetings will be			
3/5/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	at MCFTA. <b>7 pm will be the</b>			
4/9/2012 Mon	7:00 PM	9:00 PM	LECTURE RM	Confirmed				
6/4/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	start of the standard			
8/6/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	meeting.			
8/27/2012 M on	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	Conference calling arrangements will be			
10/1/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	publicized ahead of			
11/5/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	timecall-in will be to a specified TOLL			
12/3/2012 Mon	7:00 PM	9:00 PM	BOARD ROOM	Confirmed	FREE number.			

NOTE: May 7 is tentatively at the same time in the Board room—not yet confirmed. "Special" pre-Board meetings will take place as needed 6-7 pm in the same location.



times a year by the Midland Section of graphs to the editor. An editorial calenthe American Chemical Society. American Chemical Society Midland Section P.O. Box 2695 Midland, MI 48641-2695 http://www.midlandacs.org

#### Volunteer Staff

Amy Tesolin-Gee ..... Editor newseditor@midlandacs.org Jeff Seifferly .....Assistant Editor Janet Smith ..... Hardcopy Distribution A. Merrington... Electronic Distribution

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