

## A publication of the Midland Section of the American Chemical Society

## February 2013, Vol. 50, No. 2

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# Engineers Week Dinner/Program Eldon Graham, Secretary, Saginaw Valley Engineering Council

Please mark your calendars for Thursday, February 21, 2013 for the National Engineers Week Program. This will be hosted by the Mid-Michigan Chapter of the Society of Automotive Engineers and will be held at the Bavarian Inn Conference Center in Frankenmuth.

Please contact Bernard Santavy (810-635-7948) for tickets, by Feb. 18. Tickets may also be purchased online at <a href="http://www.midmichigansae.org/index.shtml">http://www.midmichigansae.org/index.shtml</a>. Tickets are \$20 for retirees (and guests), \$25 for members (and guests), \$18 for students (and guests), and \$30 for non-members. All members (and guests) of Saginaw Valley Engineering Council (SVEC) member societies qualify for the SAE member rate. FYI, the Midland Section ACS is a member society of SVEC.

The Engineers Week program, besides the awards, will consist of presentations by Student SAE Project Members from Baker College, Central Michigan University, Kettering University, and Saginaw Valley State University. The event begins at 6:00 p.m. (social hour), 7:00 p.m. (dinner) and 8:00 p.m. (program).

# Midland Section ACS Town Hall - Open House

Monday, **March 25**<sup>th</sup> 2013 Midland Center for the Arts - Main Lobby

Networking Mixer 5:30 - 7:00pm

Committee Photo Opportunity 6:30 - 7:00pm

Open Board/Town Hall Meeting 7:00 - 9:00pm

Networking!

Friends!

Refreshments!!

The Midland Section ACS is hosting an open house to allow members and non-members alike to interact with local section leadership and members while learning about the many opportunities and services associated with our local ACS Section. Refreshments will be provided during a family friendly networking/open house prior to an open town hall meeting with the Local Section leadership. A photographer will be on hand to take committee/group photos during the networking mixer. Invite your friends, family, colleagues, and potential ACS members to this informative and entertaining Section event!



Photo Opportunity!





The Midland Section of the American Chemical Society

Serving the Michigan counties of Midland, Gratiot, Bay, Saginaw and Isabella

Questions? Contact Section Secretary: grandboismatthew@gmail.com

# Call for ACS Fellow Nominations Wayde Konze, Chair, and Matt Grandbois, Secretary

The Midland Section ACS leadership is requesting nominations for the 2013 class of American Chemical Society (ACS) Fellows. The ACS Fellows Program was created by the ACS Board of Directors in December 2008 to recognize members of ACS for outstanding achievements in, and contributions to, science, the profession, and the Society.

ACS Fellows must be current members in good standing with the Society and have documented excellence and leadership in both science and volunteer service in the ACS community. Scientific experience may include technical, educational, professional, and/or managerial impact that has a lasting benefit on one of the chemical sciences. Volunteer service in the ACS community includes any action/position that resulted in significant enhancements to the ACS, its products, or services.

Fellows are selected by a broadly representative Selection Committee appointed by the Board Committee on Grants & Awards, which has governance oversight for the program.

Nominations may be submitted individually through a self-nomination process, or by technical divisions, local sections, or national committees. The Midland Section is limited to two ACS Fellow nominations, so please contact any Midland Section Board member if you would like to nominate yourself or a colleague for this prestigious award by March 4, 2013.

Additional information regarding this award, eligibility, and nominations can be found at the following link:

http://portal.acs.org/portal/acs/corg/content? nfpb=true& pageLabel=PP SUPERARTICLE&node id=2246&u se sec=false&sec url var=region1& uuid=9544c0c8-22bd-4612-b64f-a0d07e12aedd#P43 3244

## Announcing the 2013 Spring Science Awards Banquet and Call for Nominations Lauren Huffman, Awards Committee Chair

It is that time of year again when we have the opportunity to recognize outstanding educators, volunteers and colleagues. I am asking that you take the time and nominate that outstanding person to be recognized at the American Chemical Society-Midland Section Awards Banquet which will be held on Tuesday, April 23, at the Great Hall Banquet and Convention Center in Midland. This promises to be an exciting event. The awards banquet is a great way to connect with others in the industry, those who have gone before us, those who teach the next generation, and those who will be following in our footsteps.

The process of nominating can be fun and easy. Consider getting your colleagues together for lunch and putting together a packet. If you are in a managerial role and are worried about favoritism, consider nominating 2-3 qualified persons (you will remain anonymous). If you feel you deserve an award but everyone is just too busy to notice, consider leaving suggestions or have an outright discussion with your manager. If you are a parent: Does your child have a great science teacher? If so, consider nominating him/her. From personal experience, if you know the deserving person, it only takes 30 minutes to put together an award winning letter and an additional 15 minutes soliciting supporting letters and following up on them. Think of what it will mean to that person and how good you will feel about your good deed.

When you realize how exciting it is to nominate someone at the local level and you want to do more, I invite you to peruse the veritable cornucopia of awards the American Chemical Society offers at the national level. I have listed these at the end of the call for nominations along with a web address where you can find out more information (see below).

Nomination packets for all awards (except outstanding high school and collegiate awards) must, at a minimum, consist of a current resume or equivalent, and **one** supporting letter in addition to your letter of nomination, all stating why the nominee is deserving of the award with specific examples of professional involvement, growth, contributions to industry, and outside affiliations. It is highly recommended that the nomination include a publications and patent list where applicable and additional letters of support which can come from students, parents, community members, and/or administrators. A nomination letter example can be requested from the Awards Committee Chair, Lauren Huffman (<a href="mailto:lmhuffman@dow.com">lmhuffman@dow.com</a>). Nominations not meeting the minimum requirements, and submissions received after the March 29 deadline, will not be considered.

For those of you sequestered in labs who feel you might not be able to attend unless you nominate someone, I say save the date and come on out for a night of food, fun, and fraternization! Watch for more detailed information on the speaker, time and price right here in *The Midland Chemist* in the coming months!

Contact me if you have any questions, Lauren Huffman, Midland Section ACS Awards Committee Chair (Imhuffman@dow.com).

## Call for Nominations: 2013 Science Teaching, Volunteer, Education, and Chemical Sciences Awards Lauren Huffman, Awards Committee Chair

Each year, the Midland Section of the American Chemical Society presents awards to recognize outstanding achievement in the chemical sciences. Nominations for the 2013 awards are invited for the following areas:

- Outstanding Elementary Level Science Teaching
- Outstanding Middle Level Science Teaching
- Outstanding High School Chemistry Teaching
- Outstanding College Chemistry Teaching
- Science Education Volunteer of the Year
- Outstanding Achievement and Promotion of the Chemical Sciences
- Outstanding Service to the American Chemical Society
- Outstanding Achievement in the Promotion of Diversity in Chemistry, Related Sciences and Engineering
- Outstanding Chemical Technician
- Outstanding High School/College Chemistry Students

## **Outstanding Science/Chemistry Teaching Awards**

Candidates for the teaching awards must be educators at schools in the five-county geographical area of the Midland Section: Bay, Gratiot, Isabella, Midland and Saginaw Counties. One candidate will be recognized for their teaching contributions in each of the following categories: Elementary, Middle Level, High School, and College.

#### Science Education Volunteer of the Year

The Science Education Volunteer of the Year award is presented to an individual who makes a substantial contribution to science learning in the Midland Section through voluntary efforts.

## **Outstanding Achievement and Promotion of the Chemical Sciences**

Each year the Midland Section honors an individual residing within the Section's geographical area who has demonstrated outstanding achievement and promotion of the chemical sciences. This award recognizes dedication and service to the chemical profession, but the recipient need not be an ACS member.

## **Outstanding Service to the American Chemical Society**

The Section sponsors an annual award to recognize outstanding service to the Midland Section of the ACS. This award recognizes achievement in the promotion of the goals and objectives of the Society. Nominees shall be members of the Midland Section. Nominations should include a history of service to the Midland Section, and supporting letters from fellow ACS members.

## Outstanding Achievement in the Promotion of Diversity in Chemistry, Related Sciences and Engineering

This award is presented biannually to a person or group residing in Midland, Bay, Saginaw, Isabella or Gratiot County for outstanding achievement in enhancing the participation of underrepresented groups in the study of chemistry, related sciences and engineering. Members of the Midland Section Minority Affairs Committee are ineligible to receive this award.

## **Outstanding Chemical Technician**

The Section presents an annual Outstanding Chemical Technician Award to an individual who has demonstrated an extremely high degree of professionalism as a chemical technician. Nominees must have worked for five years as a chemical technician or related field and whose primary job includes conducting experimentation or correlating information to help solve chemical problems or discover new chemical knowledge. Nominees must have successfully completed a two-year post-high school level chemistry curriculum leading to an Associate Degree, the equivalent course in a Baccalaureate Program, or equivalent experience. Chemical technicians do not need to be an ACS member to be eligible for this award. Nominations should include outside affiliations. Request the National ACS nomination form from the Awards Committee Chair to nominate in this category.

#### **Outstanding Chemistry Students**

The Awards Committee also recognizes outstanding chemistry students at the high school and collegiate levels. Those students should be selected by the respective departments and their names forwarded to the Awards Committee using the form attached to this call for nominations. One selection per school and no supporting letters needed.

Recipients of all awards will be selected by the Awards Committee with the exception of the Outstanding Achievement and Promotion of the Chemical Sciences award which is submitted for approval by the Executive Committee. Nominators should write a letter indicating the award and describing the attributes of the candidate. Nomination packets for all awards (except outstanding high school and collegiate awards) must, at a minimum, consist of a current resume or equivalent, and at least one additional supporting letter included with your nomination all stating why the nominee is deserving of the award. Specific examples should be given in areas such as professional involvement/growth, contributions to industry, and outside affiliations. It is highly recommended that the nomination include a publications and patent list where applicable. Additional letters of support can come from students, parents, community members, and/or administrators. Nominations not meeting the minimum requirements and submissions received after the March 29 deadline will not be

considered. The deadline for nominations is March 29, 2013. Mail or Fax submissions are acceptable; *electronic (e-mail) submissions are preferred*. All submissions must be accompanied by the name, position, address and phone number of the nominator.

Award recipients as well as Chemistry Olympiad winners and Fifty/Sixty Year ACS Members will be honored at the 2013 ACS Recognition Dinner on April 23.

The Awards Committee greatly appreciates the efforts involved in nominating someone and wishes to thank you for helping to recognize deserving educators in our section. Please pass this information along to anyone involved in our local science programs! For example nominations or more detail on any award, please contact Lauren Huffman.

*Electronic submissions are acceptable and preferred,* or via U.S. mail to:

Lauren M. Huffman ACS Awards Committee Chair, Midland Section The Dow Chemical Company Michigan Operations Building 1710, Lab 40 Midland, MI 48674

Phone: (989) 636-7371; Fax: (989) 638-6619

E-mail: <a href="mailto:lmhuffman@dow.com">lmhuffman@dow.com</a> or <a href="mailto:awards@midlandacs.org">awards@midlandacs.org</a>



## **American Chemical Society – Midland Section**

## **Previous Recipients of Midland Section ACS Awards**

Eleme	ntary Level Science Education	Middle	e Level Science Education	High S	chool Chemistry Teaching
1992	Karen Ziemelis	1992	Derrell Steffen	1989	Robert Wallace
1993	Lela Wade	1993	Laurie Hepinstall	1990	Gary Ronk
1994	Constance A. Dullock	1994	JoAnn Kraut	1991	No Recipient
1995	Joan Klopcic	1995	No Recipient	1992	John Clark, Edna Konwinski
1996	Mark Hackbarth	1996	Barbara J. Bibbee	1993	Mary Irons
1997	Denise Koppleberger, Cheryl Ruthig	1997	Gary J. Johnson	1994	Jo Ann Pelkki
1998	Barbara McGivern	1998	No Recipient	1995	No Recipient
1999	John Clark	1999	No Recipient	1996	Sandra Schafer
2000	Sue Burtch, Robin Harshman-Rogers,	2000	No Recipient	1997	Mary Fredell
	Vicki Richard, Clare Jorgensen	2001	No Recipient	1998	Dale Ressler
2001	Cathy Egerer, Amy Hindbaugh-Marr	2002	Joel Mikusko	1999	Robert Enszer
2002	Maureen Becker	2003	No Recipient	2000	Steven Kelly
2003	Leon Katzinger	2004	Christine Brillhart	2001	William Stokes
2004	Joan Roels	2005	No Recipient	2002	Robert Hansen
2005	Curt Moses	2006	Matthew Miller	2003	No Recipient
2006	Robin Allen	2007	John Hoving	2004	Doug Grezeszak
2007	Diane Huckins	2008	Mark Koschmann	2005	Pamela Thompson
2008	Rachel Pappas	2009	Carla Piazza	2006	Daniel Sealy
2009	No Recipient	2010	Melinda Coyle	2007	No Recipient
2010	No Recipient	2011	Jennifer Lenon	2008	No Recipient
2011	Beth Quimby	2012	Jayme Swanson	2009	Nancy Vossen
2012	No Recipient			2010	Sandra Schafer
				2011	David Allan
				2012	David Bruessow

## **College Chemistry Teaching**

1989	Joan Sabourin	2001	Sandra Smith
1990	Bob Howell	2002	Margaret Hill
1991	Robert Kohrman	2003	Dale Meier
1992	Scott Hill	2004	Katherine Blystone
1993	Ajit Sharma	2005	Ronald Sharp
1994	Laura Vosejpka	2006	Arthur G. Smith
1995	George Eastland	2007	Cynthia N. Peck
1996	Martin Spartz	2008	No Recipient
1997	Philip Squattrito	2009	No Recipient
1998	Thomas Delia	2010	Anton Jenson
1999	Steven Keinath	2011	No Recipient
2000	James Hutchison	2012	David S. Karpovich

## **Science Education Volunteer**

1992	Gregg Young	1999	William Albe	2007	Teri Bickmore
1993	Peter Bonk	2000	Karol Childs		Cal Goeders
1994	Peter Moehs	2001	Donald Petersen	2008	Tim Drier
1995	Gretchen Kohl	2002	Joan McMahon	2009	Dave Stickles
1996	John Blizzard	2003	John Blizzard	2010	Lisa Thackery
	Richard Van Effen	2004	Jan Zanyk	2011	Charles & Barbara Roth
1997	Marvin Tegen	2005	Eldon Graham	2012	Estelle Lebeau
1998	Carlton Beyer	2006	Tom Chamberlin		

## Outstanding Achievement in the Promotion of Diversity in Chemistry, Related Sciences, and Engineering

(Awarded every other year)

2002	George Gant, Richard Stringfield	2008	Sandra Parker
2004	Smallwood Holoman, Jr.	2010	Theophilus Leapheart
2006	Joan Sabourin	2012	Linneaus Dorman

## **Outstanding Chemical Technician**

1997	Connie J. Murphy	2004	Sherry Allen	2011	Amy Tesolin-Gee
1998	David Stickles	2005	Bill Rievert	2012	Amber Wallace
1999	Ronald L. Good	2006	Margo McIvor		
2000	Kurt A. Bell	2007	Debbie Bailey		
2001	Gordon R. Roof	2008	Sue Perz		
2002	Cynthia J. Gould	2009	Diana Deese		
2003	Robert Krystosek	2010	No Recipient-Spring Awar	d	

## **Outstanding Achievement and Promotion of the Chemical Sciences**

1976	Dr. Turner Alfrey, Jr.	1990	Dr. Joseph E. Dunbar	2004	Herbert D. (Ted) Doan
1977	Dr. Etcyl H. Blair	1991	Dr. Thomas H. Lane	2005	Dr. Michael J. Owen
1978	Dr. David C. Young	1992	Dr. Donald A. Tomalia	2006	Dr. Robert E. Kohrman
1979	Dr. Vernon A. Stenger	1993	Dr. Dale J. Meier	2007	Dr. Petar R. Dvornic
1980	Dr. Daniel R. Stull	1994	Dr. Philip T. Delassus	2008	Dr. Jack Kruper
1981	Dr. Bob A. Howell	1995	Dr. Duane B. Priddy	2009	No Recipient
1982	Dr. Wendell L. Dilling	1996	Dr. Hans G. Elias	2010	No Recipient-Spring Awards
1983	Dr. Donald R. Weyenberg	1997	Dr. Ludo K. Frevel	2011	Dr. James Falender
1984	Dr. Edwin P. Plueddemann	1998	Dr. Patrick B. Smith	2012	No Recipient
1985	Dr. Raymond P. Boyer	1999	Dr. David E. Henton		
1986	Stanley P. Klesney	2000	Dr. Steven J. Martin		
1987	Dr. Warren B. Crummett	2001	Dr. Edwin C. Steiner		
1988	Dr. A. Lee Smith	2002	Dr. Thomas J. Delia		
1989	Dr. Do Ik Lee	2003	Dr. Robert M. Nowak		

## **Outstanding Service to the American Chemical Society**

1989	Dr. David C. Young	2000	Dr. Peter & Dr. Patricia Dreyfuss	2011	No Recipient
1990	Dr. Linneaus C. Dorman	2001	Dr. George W. Eastland, Jr.		
1991	Dr. Donald R. Petersen	2002	Joan Sabourin		
1992	Dr. Wendell L. Dilling	2003	John Blizzard		
1993	Dr. Bob A. Howell	2004	Dr. Steve Keinath		
1994	Eldon L. Graham	2005	Ann Birch		
1995	Gretchen S. Kohl	2006	Dr. Philip Squattrito		
1996	Fran K. Voci	2007	David L. Stickles		
1997	Dr. Thomas H. Lane	2008	Connie Murphy		
1998	Vicky S. Cobb	2009	No Recipient		
1999	Dr. Theodore E. Tabor	2010	No Recipient-Spring Awards		

## **Thomas H. Lane Science Education Award**

2009	lan Harrier
2010	No Recipient
2011	No Recipient



## **American Chemical Society – Midland Section**

## Nomination Form for 2013 Outstanding High School/Collegiate Chemistry Student

ept. Chair or other Nominator:
elephone number:
mail address (required):
chool:
************************************
cudent's name: (Mr./Ms.) (Indicate) (Please print legibly)
ome address:
elephone number:
-mail address (required):
cudent's career/postgraduate plans (if known):
lease return this form to the following address no later than March 29, 2013:

Please return this form to the following address
Lauren M. Huffman
ACS Awards Committee Chair, Midland Section
The Dow Chemical Company
Michigan Operations
Building 1710, Lab 40
Midland, MI 48674

Phone: (989) 636-7371; Fax: (989) 638-6619

E-mail: <a href="mailto:lmhuffman@dow.com">lmhuffman@dow.com</a>

#### **ACS National Awards**

ACS Award for Achievement in Research for the Teaching and Learning of Chemistry

**ACS Award for Affordable Green Chemistry** 

ACS Award for Computers in Chemical and Pharmaceutical Research

ACS Award for Creative Advances in Environmental Science and Technology

**ACS Award for Creative Invention** 

ACS Award for Creative Research and Applications of Iodine Chemistry

ACS Award for Creative Work in Fluorine Chemistry

ACS Award for Creative Work in Synthetic Organic Chemistry

ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry

ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences

ACS Award for Encouraging Women into Careers in the Chemical Sciences

ACS Award for Research at an Undergraduate Institution

**ACS** Award for Team Innovation

**ACS Award in Analytical Chemistry** 

ACS Award in Applied Polymer Science

ACS Award in Chromatography

**ACS Award in Colloid and Surface Chemistry** 

**ACS Award in Industrial Chemistry** 

**ACS** Award in Inorganic Chemistry

**ACS Award in Organometallic Chemistry** 

**ACS Award in Polymer Chemistry** 

**ACS** Award in Pure Chemistry

**ACS** Award in Separations Science and Technology

ACS Award in the Chemistry of Materials

**ACS Award in Theoretical Chemistry** 

Award for Volunteer Service to the American Chemical Society

Roger Adams Award in Organic Chemistry

Arthur W. Adamson Award for Distinguished Service in the Advancement of Surface Chemistry

Alfred Bader Award in Bioinorganic or Bioorganic Chemistry

Earle B. Barnes Award for Leadership in Chemical Research Management

Ronald Breslow Award for Achievement in Biomimetic Chemistry

Herbert C. Brown Award for Creative Research in Synthetic Methods

James Bryant Conant Award in High School Chemistry Teaching

Arthur C. Cope Award (Organic Chemistry)

Arthur C. Cope Scholar Awards

Elias J. Corey Award for Outstanding Original Contribution in Organic Synthesis by a Young Investigator

F. Albert Cotton Award in Synthetic Inorganic Chemistry

Peter Debye Award in Physical Chemistry

Frank H. Field and Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry

Francis P. Garvan - John M. Olin Medal (service to chemistry by women chemists)

James T. Grady - James H. Stack Award for Interpreting Chemistry for the Public

Ernest Guenther Award in the Chemistry of Natural Products

E. B. Hershberg Award for Important Discoveries in Medicinally Active Substances

Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids

**Ipatieff Prize** 

Ralph F. Hirschmann Award in Peptide Chemistry

E. V. Murphree Award in Industrial and Engineering Chemistry

Nobel Laureate Signature Award for Graduate Education in Chemistry

James Flack Norris Award in Physical Organic Chemistry

George A. Olah Award in Hydrocarbon or Petroleum Chemistry

George C. Pimentel Award in Chemical Education

Priestley Medal (distinguished services to chemistry)

Glenn T. Seaborg Award for Nuclear Chemistry

Gabor A. Somorjai Award for Creative Research in Catalysis

E. Bright Wilson Award in Spectroscopy

The Ahmed Zewail Award in Ultrafast Science and Technology

Recognizing our Heroes of Chemistry

Criteria and deadlines for the National ACS awards and other grants and considerations can be found at: <a href="http://webapps.acs.org/findawards/detail.jsp?ContentId=CNBP\_022409">http://webapps.acs.org/findawards/detail.jsp?ContentId=CNBP\_022409</a>

## APPLY NOW for an ACS Scholarship Through the Midland Area Community Foundation Gina Malczewski, Past Chair

The Local Section supports \$1000 scholarships to qualified area students who wish to pursue education in the chemical sciences. The ACS Scholarship is described at: <a href="http://www.midlandfoundation.org/scholarship-search/2012/8/31/midland-section-american-chemical-society-scholarship-1000.html">http://www.midlandfoundation.org/scholarship-search/2012/8/31/midland-section-american-chemical-society-scholarship-1000.html</a>

Some of the requirements are:

- Applicant must be entering sophomore, junior or senior year in a chemical field (examples: chemistry, biochemistry, environmental chemistry, medicinal chemistry, chemical engineering).
- Applicant must be a resident of Midland, Bay, Saginaw, Isabella, or Gratiot Counties who attends a college in one of those counties.
- Other information required is described at: <a href="http://www.midlandfoundation.org/scholarship-guidelines/">http://www.midlandfoundation.org/scholarship-guidelines/</a>
- Scholarships are based on academic achievement and the candidate's potential for making a contribution to the chemical sciences.
- e-application due Friday, March 1, 2013.

MULTIPLE scholarships are available: Apply now!

# National ACS Scholarships, Climate Science Kits, and 2013 Flame Challenge National ACS

Tell high school counselors and students: Apply by March 1 for Minority Scholarships in Chemistry. African American, American Indian and Hispanic students planning to major in a chemistry-related field can apply for scholarships of \$2,500–\$5,000 per year through the ACS Scholars program. Apply by March 1 at www.acs.org/scholars.

## Considering Teaching as a Second Career? ACS Scholarships Available

The ACS-Hach Second Career Teacher Scholarship is awarded to professionals in the chemistry field pursuing a Master's degree in education or becoming certified as a chemistry/science teacher. Up to \$6,000 per year. Apply by April 1 at www.acs.org/hach.

## Know Any Chemistry Undergrad Students Interested in Teaching? This Will Help:

The ACS-Hach Land Grant Undergraduate Scholarship is awarded to undergraduate chemistry majors who attend one of our 72 partner institutions and are interested in teaching high school chemistry. Scholars receive \$6,000 per academic year for up to six years. Contact the partner institution for application and renewal details: www.acs.org/hach.

## ACS-Hach High School Chemistry Grants for School Teachers in Your Community

Grants of up to \$1,500 are available to chemistry teachers with innovative ideas that transform classroom learning. Apply by April 1 at www.acs.org/hach.

## **Educate Your Community on Climate Science**

Grants of up to \$3000 are available to ACS Local Sections and Divisions for proposing and implementing innovative ways to use the ACS Climate Science Toolkit to engage a variety of audiences in dialogue on issues of climate science. Up to 15 grants will be made in 2013. Proposals are due March 8. Awards will be announced April 7 at the ACS Spring Meeting in New Orleans.

#### 2013 Flame Challenge

"What is time?" That's the question for this year's Flame Challenge, an international contest sponsored in part by ACS that asks scientists to communicate complex science in ways that interest and inform an 11-year-old. Don't let the chemistry perspective go missing! Apply by March 1.

## Experienced a Recent Job Separation? Michelle Cummings, Chair-Elect

The Midland Section would like to assist our members who recently experienced a job separation. There are several resources available to you as members found on the National ACS website (www.acs.org; careers). A team of volunteer ACS experts are standing by to assist you via e-mail and/or phone with almost any career questions you might have:

- Résumé preparation
- Job search strategies
- Interviewing techniques
- Making a career transition
- Salary negotiation techniques
- And more . . .

To ensure that you receive the most up-to-date information, please take the opportunity to update your contact information on www.acs.org.

A trained, local ACS Career Consultant, Gerard Nowaczyk (gerard.s.nowaczyk@dowcorning.com ), is available for you to contact regarding your personal situation. The Local Section is pulling together a training class that

will be open to you as ACS members that will also cover these aspects of career transition. Look for updates and more specifics in the next couple of months.

# Midland Section to Host 44<sup>th</sup> ACS Central Regional Meeting (CERM), May 2013 *Phil Squattrito, Meeting Chair*



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

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

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

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

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

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

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

## Bob Howell Receives 2012 NATAS Award for Outstanding Achievement Lauren Johnson, CMU Chemistry Department

Professor Bob A. Howell of Central Michigan University is the 2012 recipient of the North American Thermal



Analysis Society (NATAS) award for outstanding achievement. This award recognizes distinguished achievement in the field of thermal analysis of generally wide interest and impact. This award represents the highest honor bestowed by the Society.

Professor Howell has long been active in the field of thermal analysis. His many contributions include demonstration of a clear understanding of the mode of degradation of vinylidene chloride barrier polymers (he is a recognized expert in this area) and the detection of the key event responsible for the degradation of general purpose polystyrene. The latter is particularly noteworthy.

The thermal degradation of polystyrene has been variously studied over the years. However, most studies were carried out as a function of increasing temperature or at high temperature (> 300°C). As a consequence, multiple products of decomposition and modes of degradation have been reported. Professor Howell was able to show that at 280°C polystyrene undergoes smooth degradation to evolve only styrene monomer. This reflects initial cleavage of a head-to-head unit present in the polymer mainchain as a consequence of polymerization termination by radical coupling. The macro radicals produced by this cleavage simply unzip to evolve styrene monomer. At high temperatures the decomposition is more complex – random chain scission, intramolecular chain transfer, and other processes occur so that more complex product mixtures (dimers, trimers, etc.) are formed. This observation now forms the basis for a method of recycling polystyrene.

Howell joined the faculty of the Department of Chemistry at Central Michigan University (CMU) in 1976. His research interests have included polymer-supported organoplatinum antitumor agents, permeation of gases in barrier plastic packaging, degradation/stabilization of vinylidene chloride copolymers, nitroxyl-mediated radical polymerization, stability of styrene polymers, development of polymer additives, and thermal methods of analysis. A current research focus is the development of non-halogen flame retardants based on renewable biosources.

Professor Howell was instrumental in the founding of the polymer science program at CMU and also was almost single-handedly responsible for the establishment of the thermal analysis lab at CMU. He has trained dozens of students, many of whom have gone on to prominent careers. His students have regularly presented papers at prominent professional meetings. Most of his publications contain students as coauthors.

Howell's work has been widely recognized. He is Fellow of both NATAS and the American Chemical Society (ACS). He has served both as president of NATAS and as chair of the Midland Section ACS. He is currently a member of the NATAS Executive Board and a councilor of the Midland Section ACS. He is also a member of several prominent ACS committees at the national level.

## MMI Announces 2013 TAVP Program and Visit Dates Steve Keinath, Director and TAVP Program Coordinator

The Michigan Molecular Institute (MMI) is pleased to announce that Professor Kenneth Shull from Northwestern University will be the 2013 Turner Alfrey Visiting Professor (TAVP). His Northwestern website (<a href="http://shullgroup.northwestern.edu">http://shullgroup.northwestern.edu</a>) will give you a feel for his current R&D activities and interests, since the

specific details about Prof. Shull's TAVP course lecture topic and various stand-alone seminar topics aren't in hand yet.

Prof. Shull will be in residence at MMI from Monday, June 17, through Wednesday, June 26. The first week (June 17–21) will be the week in which he will give a series of five afternoon course lectures, plus make quick visits to MSU and SVSU, and participate in an opening reception at MMI, and a joint technical society evening dinner meeting (June 19). The second week (June 24–26) will be dedicated to full-day site visits to Dow, Dow Corning, and CMU. Please mark your calendars with the 2013 TAVP visit dates now, and stay tuned as more information becomes available.

# Drilling for Brine: The Dow Chemical Plant in Mount Pleasant 1903–1930 *Wendell Dilling, Director and Historian*

The Clarke Historical Library will open the exhibit, *Drilling for Brine: The Dow Chemical Plant in Mount Pleasant 1903–1930*, on February 11. The exhibit will run through the summer. Dr. Robert Kohrman, who curated the exhibit, will speak about it at 7:00 p.m. on the evening of March 13 in the Park Library Auditorium on the campus of Central Michigan University.

Although Dow Chemical's Midland operations are well known, the Clarke exhibit opening in February will tell the story of the Dow Chemical facilities in Mt. Pleasant. In 1903 Dow drilled brine wells and built a bromide plant in Mt. Pleasant. By early 1904, bromide was being shipped from Mt. Pleasant to Midland. In 1907 chemical operations in Mt. Pleasant expanded when Dow began to sell waste brine—which formerly had simply been dumped into the Chippewa River—to Robert Van Schaack. Van Schaack built a new "calcium" plant adjoining Dow's, where calcium chloride and sodium chloride were extracted from the brine. The Calcium plant operated until approximately 1918.

In the mid to late 1920s, a huge increase in the demand for bromide, spurred in part by "ethyl" gasoline which required bromide in its creation, led to the belief that 100 new brine wells might be drilled in Isabella County. Major new equipment was installed in the Dow Mt. Pleasant plant in 1929. Despite this, in 1930 the doors of the plant were closed.

In addition to documenting the history of Dow in Mt. Pleasant, the exhibit also celebrates the accomplishments of the American Chemical Society's Midland Section, which was organized in 1919, with the support of H.H. Dow. The Section has not only promoted the growth of science in mid-Michigan, but has also served as an important catalyst for promoting innovative education about the chemical sciences in schools and among the general public.

Dr. Robert Kohrman, who curated the exhibit, spent a 38 year career at Central Michigan University, serving as a member of the Chemistry Department faculty, chair of the Chemistry Department, Dean of the College of Science and Technology, and Interim University Provost. He has published 22 journal articles and presented at more than 30 conferences. In addition Dr. Kohrman is an active member of the American Chemical Society's Midland Section and is a past chair of that organization. Dr. Kohrman holds degrees from a number of institutions including a doctorate in Organic Chemistry from the Massachusetts Institute of Technology.

For more information about the exhibit or Dr. Kohrman's presentation, please contact Frank Boles, 989-774-3352 or via email, boles1fj@cmich.edu.

# In Past Issues of *The Midland Chemist Wendell Dilling, Director and Historian*

## 40 Years Ago

In *Professors in Midland – April 5, 6* by Frank Stewart: "On April 5 and 6, 1973 the Midland Section is planning to present its Eleventh Annual E. C. Britton Symposium on Industrial Chemistry. This year's symposium is quite different from our previous symposia in that the program is non-technical. This year's subject is 'What Can a Chemist Do in Industry" and will feature speakers from Dow and Dow Corning."

## 30 Years Ago

In *Chairman's Corner* by David Watson, Midland ACS Chairman 1983: "There are many definitions and meanings of professionalism. I think one way that someone can demonstrate their professionalism is to provide a service that benefits the members of a group, without thought of personal gain. We have numerous examples of this in the Midland ACS section such as faculty advisors to student affiliate chapters, officers of ACS Divisions and membership on national ACS committees."

## 20 Years Ago

In Teacher Affiliates Team Up with Center for the Arts Hall of Ideas by Carol Hoag: "Recently, the ACS Teacher Affiliates teamed up with the Midland Center for the Arts Hall of Ideas to help make some chemistry between students and science. The Teacher Affiliates, chaired by Paula Geller, met at the Hall in February to learn about the exciting tools available for teaching students about science. From inflatable planetariums that can be brought into the schools to wave and bubble demonstrations that are displayed at the Center, the Hall of Ideas offers a wide variety of options for teachers to use to interest kids in science."

#### 10 Years Ago

In *ACS Tour Speaker Comes to CMU* by Ann Birch: "Fred Wudl, Courtaulds Professor in the Department of Chemistry and Biochemistry, UCLA, and ACS tour speaker, will present "Solid-State Synthesis of a Doped Conducting Polymer" at Central Michigan University. The presentation will take place in Dow 175 on March 31 at 7:00 p.m. Dr. Wudl obtained his B.S. degree in chemistry from UCLA in 1964 and Ph.D. in 1967. From 1968-1969 he attended Harvard University in a postdoctoral program on vitamin B-23 synthesis."

## **Upcoming Dates, Events, and Other Updates**

- February 21 (6:00-9:00 PM) Engineers Week Dinner/Program, Bavarian Inn Conference Center, Frankenmuth. Contact Bernard Santavy (810-635-7948) for tickets, by Feb. 18. For more information, or to purchase tickets online (http://www.midmichigansae.org/index.shtml).
- March 1 Application deadline for Midland Area Community Foundation scholarships: http://www.midlandfoundation.org/scholarships/
- March 1 Application deadline for ACS Scholars program: www.acs.org/scholars
- March 4 Deadline for ACS Fellow nominations. Contact any Midland Section Board member.
- March 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#.
- March 13 (7:00 PM) Dr. Robert Kohrman, curator of the Clarke Historical Library exhibit, *Drilling for Brine: The Dow Chemical Plant in Mount Pleasant 1903–1930*, will speak about the exhibit in the Park Library Auditorium on the campus of Central Michigan University.

- March 20 Abstract submission deadline for CERM. Abstracts may be submitted online at: http://abstracts.acs.org.
- March 25 (5:30 PM) Midland Section ACS Open House, Midland Center for the Arts Main Lobby. Town Hall meeting to follow in MCFTA Board Room (7:00 PM).
- March 25 (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#.
- March 29 Deadline for 2013 Science Teaching, Volunteer, Education, and Chemical Sciences Awards nominations. Contact Lauren Huffman (Imhuffman@dow.com), Awards Committee Chair, for questions.
- April 1 Application deadline for ACS-Hach Second Career Teacher Scholarship and grants. Contact hach@acs.org.
- April 23 (Evening, specific time TBD) Midland Section ACS Spring Science Awards Banquet, Great Hall Banquet and Convention Center, Midland. Contact Lauren Huffman (<a href="mailto:lmhuffman@dow.com">lmhuffman@dow.com</a>), Awards Committee Chair, for questions.
- May 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#.
- May 15–17 (Wednesday-Friday) 44<sup>th</sup> ACS Central Regional Meeting (CERM)
   (<a href="http://2013cerm.sites.acs.org/">http://2013cerm.sites.acs.org/</a>), Central Michigan University, Mount Pleasant, MI. For more information, contact the 44<sup>th</sup> CERM Meeting Chair, Phil Squattrito, at <a href="mailto:p.squattrito@cmich.edu">p.squattrito@cmich.edu</a> or by phone at 989-774-4407.
- June 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#.
- June 17–21 (3:00-6:00 PM, each day) 2013 TAVP course lectures, featuring Prof. Kenneth Shull of Northwestern University, MMI Auditorium, Midland. Contact Steve Keinath (<u>keinath@mmi.org</u>) for questions.
- June 19 (6:30-9:00 PM) TAVP joint technical society dinner meeting, lecturer Prof. Kenneth Shull of Northwestern University, venue TBD. Contact Steve Keinath (keinath@mmi.org) for questions.