

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

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# 2018 Midland Section ACS Leadership Wenyi Huang, Chair, Midland Section ACS

**Board of Directors:** The Board of Directors consists of the officers of the Section (Chair, Chair-Elect, Secretary, and Treasurer), the immediate Past Chair, the Councilors, the Alternate Councilors, the Chair of the Nominations and Elections Committee, and nine Directors, all of whom are voting members. The Councilors, Alternate Councilors, and Directors are elected to three-year terms. All others are elected to one-year terms. The number in parentheses in the list below indicates the final year in office. The asterisks indicate members of the Executive Committee.

**Committee Chairs:** There are four standing committees: nominations and elections, membership, program, and publicity. All other committees are established by the Board of Directors with Committee Chairs appointed by the Chair of the Midland local section. Below is also a list of the current committee chairs.

Elected (Voting) Board Members				
Chair*	Wenyi Huang	whuang1@dow.com		
Chair-Elect*	Amanda Palumbo	amanda.palumbo@dowcorning.com		
Secretary*	Kshitish Patankar	secretary@midlandacs.org		
Treasurer*	Michelle Rivard	treasurer@midlandacs.org		
Past Chair*	Anne Kelly-Rowley	amkelly-rowley@dow.com		
Councilor (19)	Dale LeCaptain	dale.lecaptain@cmich.edu		
Councilor (20)	Tina Leaym	tina.leaym@dowcorning.com		
Alternate Councilor (19)	Steve Keinath	skeinath54@charter.net		
Alternate Councilor (20)	Jessica Huang	jhuang12@dow.com		
Chair, Nominations & Elections	Wendy Flory	elections@midlandacs.org		

Committee		
Director (18)*	Kevin Wier	kevin.wier@dowcorning.com
Director (18)*	Michelle Cummings	michelle.cummings@dowcorning.com
Director (18)	Pat Smith	smithp62@msu.edu
Director (19)	Wendell Dilling	dilli1wl@cmich.edu
Director (19)*	Regina Malczewski	reginamalczewski@gmail.com
Director (19)	Aswini Dash	a.dash@dowcorning.com
Director (20)	Tami Sivy	tsivy@svsu.edu
Director (20)	Janice Tomasik	tomas1jh@cmich.edu
Director (20)	Bryan Stubbert	BDStubbert@dow.com
Committee Chairs (Non-Voting B	oard Members)	
2019 Central Regional Meeting	Dimi Katsoulis	dimi.katsoulis@dowcorning.com
Awards	Diana Deese	awards@midlandacs.org
Chemistry Olympiad	Michael Tulchinsky	tulchimi@dow.com
Ex Officio Director	Tom Lane	maingeek1@gmail.com
Fall Scientific Meeting	Jennifer Larimer	j.larimer@dowcorning.com
ran Scientific Meeting	Eve Suthiwangcharoen	nisaraporn.suthiwangcharoen@dowcorning.com
Finance	Wendy Flory	WCFlory@dow.com
Historian	Wendell Dilling	history@midlandacs.org
Lana Barana Blannina Caranaithea	Gina Malczewski	reginamalczewski@gmail.com
Long Range Planning Committee	Anne Kelly-Rowley	amkelly-rowley@dow.com
Membership	Wendy Flory (interim)	membership@midlandacs.org
Midland Chemist Newsletter	Vickie Langer	newseditor@midlandacs.org
	Steve Keinath	newseditor@midlandacs.org
MMTG	Kyle Krauseneck	kyle.krauseneck@dowcorning.com
IVIIVITG	Jake Remacle	j.remacle@dowcorning.com
Multicultural & Diversity Committee	Open	
Outreach/Kids and Chemistry	Gina Malczewski	outreach@midlandacs.org
Outreacily kids and Chemistry	Michelle Rivard	michelle.rivard@dowcorning.com
Program	Amanda Palumbo	amanda.palumbo@dowcorning.com
Project SEED	Bernadette Harkness	bernadetteharkness@delta.edu
Public Affairs	Open	
Publicity	Open	
Safety	Kevin Wier	safety@midlandacs.org
Sci-Fest/NCW	Dave Stickles	dstick44@chartermi.net
	Michelle Rivard	michelle.rivard@dowcorning.com
Silver Circle/Senior Chemists	Joan Sabourin	imsabour2@gmail.com
	Gretchen Kohl	gretchen.kohl@att.net

Teacher Support	Gina Malczewski	reginamalczewski@gmail.com
Webmaster	Greg Cushing	web@midlandacs.org
Women Chemists Committee	Lauren McCullough	LRMcCullough@dow.com
	Tina Leaym	tina.leaym@dowcorning.com
Younger Chemists Committee	Michael Vagnini	MTVagnini@dow.com

# **Dow High Pair Finish Third in National Science Event**

Editor's notes: Original source of this article is Roger Bryant for *Midland Daily News*, December 6, 2017. Brendan Zhu's parents are Di Lou and Rocky Zhu; Daniel's parents are Tracy Zhang and Fagen Zhang.

Two H.H. Dow High School seniors tied for third place in the nation's most prestigious science competition for high school students.

Brandon Zhu and Daniel Zhang, both of Midland, were awarded a \$25,000 scholarship at the finals of the Siemens Competition in Math, Science & Technology at George Washington University in Washington, D.C. They were among four teams to win \$25,000 prizes. The top prize was a \$100,000 scholarship, and the second-place award was a \$50,000 scholarship. Scholarship prizes of the same amounts also were given to individual winners.

The Dow High students made it to the finals after winning a regional phase of the competition (and a \$6,000 scholarship) at the University of Notre Dame in November.

The two initially were reluctant to enter the Siemens Competition -- and waited until almost the last minute -- but were encouraged to enter during a summer internship at Michigan State University's STEM center on St. Andrews Road in Midland, also known as MSU-St. Andrews.



Brandon Zhu, left, and Daniel Zhang (Photo from Midland Daily News)

"We were a little reluctant," Daniel said. "We decided to do the medical field platform because there would be tangible results that could be applied to humans in the future."

"We turned it in with only six minutes to spare."

Brandon and Daniel worked together on "Release of Active Pharmaceuticals Using Capped Hyperbranched Polyesters," a project aimed at developing controlled-release drug therapies. Such therapies could increase the effectiveness and reduce the side effects of pharmaceuticals.

While at the finals in Washington, which included presenting their work to a panel of judges, the students had promising informal conversations about the project's possibilities.

"We talked to a couple of industry professionals. ... They were impressed," Brandon said. "I'm thinking that this is a very viable method in the future."

The students' research involves an early-stage method using "polymer drug conjugates" to regulate the release of certain pharmaceutical compounds. Brandon and Daniel are interested in how this method "could be applied using common medications such as: naproxen for pain relief; salicylic acid, a common acne treatment; and hydrocortisone, used to treat a variety of skin conditions," according to the Siemens Competition website.

In addition to discussing their project and how they felt when they learned they were finalists, the students also praised their mentor, Patrick Smith of MSU-St. Andrews.

Smith had words of praise for the team Tuesday, noting that they will share more than \$30,000 in scholarship money from the regional and national competitions.

"They did just a phenomenal job," he said.

He also noted the high caliber of all students in the finals.

"These are some of the brightest high school kids in the country," he said.

Brandon and Daniel both had summer internships last year at Michigan State University's STEM center on St. Andrews Road in Midland.

Neither Brandon nor Daniel has decided where to attend college, but Brandon is interested in studying biochemistry while Daniel is considering a possible double major in computer engineering and biology.

The competition started with more than 2,500 students and 1,800 research project submissions, and involved more than two months and five rounds of judging by scientific experts. Twenty-one high school students were selected as national finalists.

"All of the competitors' depth of knowledge and ability to grasp complex concepts gives us hope for the next generation of scientists," said Emilia Entcheva, lead judge at the finals competition and professor in the Department of Biomedical Engineering at George Washington University, during the awards ceremony.

# Lead-up to our 100th Anniversary: Midland ACS Historical Highlights Gina Malczewski, 100th Anniversary Committee, Midland Section ACS

#### Science on Radio and TV!

In the days before Facebook, Twitter or anything on the internet, and in fact before cable television was even available, Midland ACS was supporting use of current media to share science with its local community. WMDN, a station owned by *Midland Daily News* at 1490 AM began broadcasting in 1948, and by the 1950s, 15-minute programs were provided once a week by ACS. The content alternated, with presentation of "Men and Molecules" taped by National ACS two weeks a month, and a live presentation of ACS programs and activities on the other weeks. WMDN became WMPX in 1971. An example of the National content broadcast can be heard at <a href="https://archive.org/details/tobacco-vgv93b00">https://archive.org/details/tobacco-vgv93b00</a>, where a recording of a presentation on the dangers of nitrosamines can be found. A book based on "Men and Molecules" was published in 1966 and is available at <a href="https://archive.org/details/menmolecules00hena">https://archive.org/details/menmolecules00hena</a>.

Midland ACS ventured into the television age with the broadcast of "Science Quiz", which was introduced in 1957. In 1958, the Science Quiz Committee reported that two Midland, four Bay City, three Saginaw, and one Beaverton schools were involved, with the addition of two Vassar schools that spring. Taped programs also were broadcast on WMDN and WBCM, the latter of which was Bay City-based and offered the first FM station in the region (WBCM AM became WMAX in 1992). In the spring of 1958, the winners were the Cyclotrons of Northeast Intermediate School in Midland. WCMU currently broadcasts a "Quiz Bowl" show that covers topics from pop culture to literature, history and science, but it has no link to the Section's "Science Quiz".

If you have fond memories of any of these programs, or of participating in the "Science Quiz", please contact us and share your recollections (<a href="mailto:exhibit@midlandacs.org">exhibit@midlandacs.org</a>). Any other artifacts or anecdotes are also welcome, as we gear up to celebrate our centennial in 2019!

# 2018 Spring Awards Banquet Reminder Diana Deese, Awards Committee Chair, Midland Section ACS

Just a reminder that we are taking nominations for the following:

- 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 in the Promotion of Diversity in Chemistry, Related Sciences, and Engineering
- Outstanding Achievement and Promotion of the Chemical Sciences
- Outstanding Service to the American Chemical Society
- Outstanding Chemical Technician
- Outstanding High School / College Chemistry Students

A more detailed write up can be found in the January issue of *The Midland Chemist*. The 2018 awards banquet will be held May 2<sup>nd</sup> at the Great Hall and Banquet Center in Midland.

Nominations are due by April 1, 2018 to Diana at dkdeese@dow.com. Please contact her with any questions!

# Upcoming Lectures Sponsored by the Mid-Michigan Section of AIChE Ron Leng, Program Chair, Mid-Michigan AIChE

All Midland Section ACS members are cordially invited to attend any of several invited-speaker events hosted by the Mid-Michigan Section of the American Institute of Chemical Engineers (AIChE). The evening meetings will be held at the Grand Traverse Pie Company, 2600 North Saginaw Road, Midland. Admission is free and complimentary sandwiches will be available, first come, first served at 6:00 PM with the presentations starting around 6:30 PM. Meeting times and locations are subject to change, so please check the Mid-Michigan AIChE Events website for updates to the schedule. For more information or questions, contact Ron Leng at 989-636-6158 or rbleng@dow.com, or Ted Calverley at 989-636-2881 or emcalverly@dow.com.

- Leo Chiang, Associate Tech Director, Chemometrics and Data Analytics, Analytical Tech Center Big Data Analytics
   Wednesday, February 21, 2018, 6:00 PM dinner (optional), 6:30 PM presentation
- Paul Vosejpka, Dow Automotive R&D Director
   The Future of Transportation
   Wednesday, March 21, 2018, 6:00 PM dinner (optional), 6:30 PM presentation
- Open
   Wednesday, April 25, 2018, 6:00 PM dinner (optional), 6:30 PM presentation
- Mark Weick, Dow Global Sustainability Director Keynote Speaker, Annual Spring Banquet
   Sustainability: The Chemical Engineer's Role in the Future
   Tuesday, May 22, 2018, 5:30-9:00 PM, Great Hall Banquet & Convention Center, 5121 Bay City
   Road, Midland

# In Past Issues of The Midland Chemist Wendell L. Dilling, Director and Historian, Midland Section ACS

### **50 Years Ago**, *The Midland Chemist* **1968**, *4*, No. 9 (Mar), 6.

In A Most Valuable Tool for Scientists and Engineers by Dr. Noland Poffenberger: "Last fall I received, as did all other members of the American Chemical Society, a little one hundred twenty-five page paper bound book with the title "handbook for authors." One evening I started to browse through it. I found it so interesting that I went through it from cover to cover. Since then I have used it on many occasions. It is truly a most valuable tool for a chemist, or any scientist or engineer, to have available when he has writing to do. In the past few months I have been "selling" it to anyone who would listen to me. Surprisingly, I found many A.C.S. members hardly knew they had the book, and did not know what was in it."

#### **40 Years Ago**, *The Midland* Chemist **1978**, *15*, No. 1, 7.

In *To the Editor* by Wendell L. Dilling: "During 1977, seven regular board (business) meetings were held. At the last six meetings, for which I have attendance records, a quorum was present at only one meeting, although each meeting was adequately announced in advance. A quorum, 11 board members, is required in order to carry out official business of the Section.

In recent years the board often has discussed ways of increasing participation by Section members and attendance at Society affairs. How can the board expect Section members to attend local ACS functions when board members themselves do not attend the board meetings where plans are made for the Section's activities? The Section chairman and other officers have endeavored to formulate a program of value to the Section members for the board to act on, but the lack of a quorum at most board meetings has precluded or delayed some of the necessary action. This situation has resulted in inefficient operation of some Society functions."

# **30 Years Ago**, The Midland Chemist **1988**, 25, No. 2, 4.

In *Chairman's Column* by Billy M. Williams, ACS Midland Section, 1988: "I have talked with quite a few individuals over the past few months about ACS activities. I was surprised to learn that many of the nonmembers did not know what we do and thus saw little or no benefit from joining. We have a lot of educating to do – not just to the public at large, but amongst ourselves as well. The point here has little to do with increasing membership. It has a lot to do with us investing in our profession, thus our future, and our encouraging others to do likewise."

## **20 Years Ago**, The Midland Chemist **1998**, 35, No. 1, 3.

In From the Chair by Art Smith, Chair, ACS Midland Section: "In this, my first "From the Chair" column, I'd like to do two things: First, I want to express my great appreciation for all the officers and committee chairs who served our Section so effectively during the past year. I especially want to thank Joan Sabourin who did such an outstanding job as Chair in spite of relatively short notice between her nomination and election, and who guided us smoothly through a rather extraordinary year that included our hosting the 29th Central Regional Meeting here as well as all the special events combining Dow's Centennial Celebration and the Section's many activities."

## 10 Years Ago, The Midland Chemist 2008, 45, No. 1, 10.

In About our Members, Dorman Featured in Historical Exhibit by Midland Daily News: "Lin Dorman, a member of ACS and the Midland Section since 1957, is one of the Midland-area individuals featured in a six-week exhibit at the Midland County Historical Society titled "Midland African-American Pioneers: Legacy for a New Generation." Lin was hired as Dow Chemical's first African-American chemist at a time when there were very few black families. Lin and other African-American pioneers created a life in Midland in which they became prominent business owners, students, teachers, community leaders, and other professionals."

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

- February 5 (7:00 8:00 PM) ACS Board meeting, Midland Center for the Arts Board Room (in person), or via a WebEx conference call connection at Midland Section WebEx Board Meeting February 2018, meeting number/access code: 710 602 469 (does not require a passcode), phone number: 989-633-1166.
- February 21 (6:00 8:00 PM) MMAIChE sponsored lecture, Big Data Analytics, presented by Leo Chiang, Associate Tech Director, Chemometrics and Data Analytics, Analytical Tech Center. Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 6:30 PM presentation. Meeting times and locations are subject to change, so please check the Mid-Michigan AIChE Events website for updates to the schedule. For more information or questions, contact Ron Leng at 989-636-6158 or rbleng@dow.com, or Ted Calverley at 989-636-2881 or emcalverly@dow.com.

- March 5 (7:00 8:00 PM) ACS Board meeting, Midland Center for the Arts Board Room (in person), or via a WebEx conference call connection at <u>Midland Section WebEx Board Meeting March 2018</u>, meeting number/access code: 712 725 291 (does not require a passcode), phone number: 989-633-1166.
- March 18-22 255th ACS National Meeting & Exposition, New Orleans, LA. For more information, see https://www.acs.org/content/acs/en/meetings/national-meeting.html.
- March 21 (6:00 8:00 PM) MMAIChE sponsored lecture, The Future of Transportation, presented by Paul Vosejpka, Dow Automotive R&D Director. Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 6:30 PM presentation. Meeting times and locations are subject to change, so please check the Mid-Michigan AIChE Events website for updates to the schedule. For more information or questions, contact Ron Leng at 989-636-6158 or <a href="mailto:rbleng@dow.com">rbleng@dow.com</a>, or Ted Calverley at 989-636-2881 or <a href="mailto:emcalverly@dow.com">emcalverly@dow.com</a>.
- April 1 Deadline for Midland Section ACS Spring Awards nominations to honor outstanding educators, volunteers, and colleagues. For more information, contact Diana Deese, Midland Section ACS Awards Committee Chair, at dkdeese@dow.com or 989-636-9915.
- April 9 (7:00 8:00 PM) ACS Board meeting, CMU Chemistry Department, Mount Pleasant, MI (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166. Please note the change of venue from MCFTA to CMU.
- April 25 (6:00 8:00 PM) MMAIChE sponsored lecture, Open Topic (TBD). Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 6:30 PM presentation. Meeting times and locations are subject to change, so please check the Mid-Michigan AIChE Events website for updates to the schedule. For more information or questions, contact Ron Leng at 989-636-6158 or rbleng@dow.com, or Ted Calverley at 989-636-2881 or emcalverly@dow.com.
- May 2 (save the date, evening program) Midland Section ACS Spring Awards Banquet, Great Hall Banquet & Convention Center, 5121 Bay City Road, Midland. For more information, contact Diana Deese, Midland Section ACS Awards Committee Chair, at <a href="mailto:dkdeese@dow.com">dkdeese@dow.com</a> or 989-636-9915.
- May 7 (7:00 8:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- May 22 (5:30 9:00 PM) MMAIChE Annual Spring Banquet, Keynote Lecture Sustainability: The Chemical Engineer's Role in the Future, presented by Mark Weick, Dow Global Sustainability Director. Location: Great Hall Banquet & Convention Center, 5121 Bay City Road, Midland. Meeting times and locations are subject to change, so please check the Mid-Michigan AIChE Events website for updates to the schedule. For more information or questions, contact Ron Leng at 989-636-6158 or rbleng@dow.com, or Ted Calverley at 989-636-2881 or emcalverly@dow.com.
- June 4 (7:00 8:00 PM) ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- June 13-16 49th ACS Central Regional Meeting (CERM 2018), Seagate Centre, Toledo, OH. For more information, see <a href="https://www.cerm2018.org/">https://www.cerm2018.org/</a>.
- August 19-23 256th ACS National Meeting & Exposition, Boston, MA. For more information, see <a href="https://global.acs.org/events/256th-acs-national-meeting-exposition/">https://global.acs.org/events/256th-acs-national-meeting-exposition/</a>.

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#### **Volunteer Staff**

Vickie LangerEditor (vllanger@dow.com)Steve KeinathEditor (skeinath54@charter.net)Greg CushingWebmaster, electronic distribution(Open Position)Membership roster, hardcopy mailings

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

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