

THE MIDLAND CHEMIST

A publication of the Midland Section of the American Chemical Society

December 2023, Vol. 60, No. 12

Contents

| | |
|--|----|
| 2023 Midland Section ACS Volunteer Appreciation Event, December 18..... | 1 |
| Day in the Life of an Industrial Scientist, January 27 | 2 |
| An Environmental Summit: Student Research Exposure..... | 3 |
| A Sustainability Event: How WE Can Make a Difference | 4 |
| Autumn Activities – Food and Fun | 5 |
| ACS Awards Won by Midland Section ACS for Outstanding Performance by a Local Section | 7 |
| Midland Section ACS Scholarship Fund Update and Encouragement to Give | 9 |
| Upcoming Dates, Events, and Other Updates | 10 |

2023 Midland Section ACS Volunteer Appreciation Event, December 18

Hunter Woodward, Chair, Midland Section ACS

Editor's note: This article is reprinted, in part, from Hunter Woodward's Chair Column in the November 2023 issue of *The Midland Chemist* (<https://midlandacs.org/newsletter/>).

To recognize and honor your volunteer spirit and commitment toward making the Midland local section the great section that it is, I'd like to invite you to a special "2023 Midland Section ACS Volunteer Appreciation Event" on Monday evening, December 18, beginning at 7:00 PM. This event will be held at Creative 360, located at 5501 Jefferson Avenue, in Midland, and will kick off just after the conclusion of our monthly Board meeting for December 2023 that evening.

This celebration event is a "thank you" from the Midland local section to everyone who volunteered in any role for the Midland ACS in 2023. There will be food and drink plus plenty of happy stories shared. To help us plan for the appropriate quantity of food and refreshments, please click on [2023 Midland ACS Volunteer Appreciation Event](#) to sign up ahead of time. For any questions, you may contact me at WWoodward@dow.com. Thank you, and I hope to see many of you, the evening of Monday, December 18, at Creative 360.



Day in the Life of an Industrial Scientist, January 27
Kim Dinh, Diversity & Inclusion Committee, Midland Section ACS



Day in the life of an industrial scientist

2nd edition



Problem solving challenge, poster session, and networking!

| | | |
|--|--|---|
| Who: Students pursuing a STEM major | When: Saturday January 27 th , 2024 9 AM – 3 PM | Where: Midland Center for the Arts <small>1801 W St Andrews Rd, Midland, MI 48640</small> |
|--|--|---|



Free Event!

Breakfast, lunch and snacks provided
Local transportation subsidized or provided
Registration required (use QR code)



Volunteers Needed!

Be a mentor at Day in the Life of an Industrial Scientist

Network, collaborate on a problem-solving challenge, and discuss your career.

Saturday, January 27, 2024, 9 am – 3 pm

Midland Center for the Arts

Sign up or questions: diversity@midlandacs.org



An Environmental Summit: Student Research Exposure

Gina Malczewski, Director and Outreach Committee, Midland Section ACS

On November 18, local middle and high school students, along with a few parents and teachers/advisors, were welcomed into labs at MSU-St. Andrews to learn about research into sustainable materials, renewable energy and pollinators. Students rotated among four different labs, each demonstrating different aspects of current activities in “green” science, and then gathered at program’s end to discuss what they learned and enjoy snacks.

Dr. Edmund Stark introduced students to biopolymers as well as research on pollen to improve understanding of bee territories, and miticides to prevent bee disease; Drs. Jack Kruper and Bahar Aliakbarian presented on rechargeable redox battery systems, and the development of practical processes for re-purposing food waste into commercial products, respectively. 3-D printing, which can be used to make materials with less waste and less weight (which can save fuel) was demonstrated and discussed by Ivan Lysenko.

Many of the attendees were already members of school “Green” clubs; documented feedback indicated that almost all were more interested in environmental chemistry and volunteering for eco-friendly activities as a result of their experience.

This summit was organized as part of our “Earth Day and a Half” initiative to keep “natural”/environmental topics front of mind all year long—other ACS activities in this suite included the October Sustainability Event and the “Scrumptious Seaweed” Food Science Café (algae were the focus of this year’s Chemists Celebrate Earth Week).



Dr. Jack Kruper shows apparatuses involved in purifying phenothiazine derivatives for energy applications.

Photo: Clare Light



Dr. Aliakbarian discusses food waste with apples as an example; students compared weights for starting materials with those post-peeling and core removal.

Photo: Clare Light

A Sustainability Event: How WE Can Make a Difference

Erin Vogel, Chair-elect, Midland Section ACS



On October 21, “Earth Day and a Half,” a sustainability event focused on personal environmental stewardship was hosted by Midland ACS. The goal was to inform and inspire attendees, by explaining local recycling and waste-reduction efforts and suggesting ways that everyone can participate. Attendees could attend any or all of the day — a panel discussion with experts, a pizza lunch, and two hours of volunteering at a local recycling center. This event started by having a conversation about sustainability – what the word means, how to be more sustainable, and response to audience questions related to these topics. The panel of experts included Esther Williams (Midland Recycling

Center), Cyndie Roberts (adviser to the award-winning Dow High Go Green Club), Chelsea Butcher (Northwood Sustainability co-chair), Aurelian Balan (Physics & Astronomy, Delta College), Chris Thurber (Research Scientist, Dow), and Teagan O'Bryan (Northwood University Student, Recycling Program coordinator and representative of small business, FILL). After the discussion the audience was invited to a free zero waste pizza lunch, which also included whole apples and cut raw vegetables. Pizza was purchased from a local business that uses pizza liners to ensure the pizza box would be relatively grease free and therefore, recyclable. Participants were asked to bring their own reusable drink container or water bottles (recyclable cups were available for those who forgot) and apple cores and napkins were composted. After the lunch, attendees (and new participants) proceeded to Midland Recyclers, a non-profit recycling center in Midland, to volunteer by cleaning up outside and sorting recyclables for two hours. For youngsters especially, this was an eye-opening experience relative to the amounts and types of waste (from



cans to paper to batteries and more) that pass through the recycling center, which relies significantly on volunteer assistance.



Photos: Erin Vogel, Hunter Woodward, and Wendy Flory

Autumn Activities – Food and Fun

Gina Malczewski, Director and Outreach Committee, Midland Section ACS

October and November 2023 brought some long-term efforts to a close, and saw new as well as annual outreach events scattered throughout the calendar. The ACS garden at the new location on Jefferson Avenue has ended a successful season where the Teaching Garden from Bayliss was re-established, and more produce than ever before (>500 lbs.) was collected from a number of plots. Produce



was donated to Care Giving network, S.A.M.S. Emergency Food Pantry, the Bridge Store, the Arnold Center “fresh truck” and to a chef at Café Zn for use by restaurant employees. The garden’s late start (due to the timing of the Creative 360 move) along with the long list of improvements that were needed, made it too difficult to sponsor all of the usual garden-related programs, but a Pumpkin Party was held On October 24, offering free pumpkins to the first 25 attendees. (These were generously donated by the Midland Walmart.) Decorating, science, “hot pumpkin” games, and pumpkin trivia were offered, as well as cider, donuts, and pumpkin seed snacks.



A collaborative herb garden was done at Bay City Western Middle School, in connection with the new Green/Science Club (started with ACS help). Dried (and live) herbs are being offered for sale through the school office, with proceeds going to the Club.



Additional fall events included the free “Scrumptious Seaweed” science café held at Bay City Western cafeteria October 12, featuring chef presenters from the Detroit Institute of Gastronomy. The evening included cooking demonstrations (samples provided) in tandem with science activities related to specific culinary concepts. On October 27, electrical science

was on display at Central Michigan University, along with the chemistry of medicine (including stitches and stitch tattoos!) for Frankenstein Friday.

On October 28, medicine again was featured (the National Chemistry Week theme was “The Healing Power of Chemistry”) including lotion making, clotting treatments, and Alka Seltzer demos. At both events the ACS station included live spiders and hissing cockroaches courtesy of Lacey Brissette.

The “Environmental Summit” held November 18 is featured in another article. All these events received high marks for content and presentation, as recorded by written surveys.

If you are interested in helping with events such as these (presenting or assisting with publicity for example), please contact Gina Malczewski at reginamalczewski@gmail.com.

ACS garden and Frankenstein Friday photos: Gina Malczewski
Pumpkin Party photo: Dave Stickles



ACS Awards Won by Midland Section ACS for Outstanding Performance by a Local Section

Wendell Dilling, Historian, Midland Section ACS

Editor's note: This article replaces what appears on pages 7 and 8 of the November 2023 issue of the *Midland Chemist* under the same title. The information in the table in the November issue is incorrect. Our apologies to Wendell Dilling and to our readers for any confusion this misprinting error may have caused.

The Midland Section ACS has won 28 "Outstanding Performance by a Local Section" awards to date, 50% of the awards available to a single section since the program began in 1968. These awards recognize ACS local sections that have demonstrated excellent overall achievement by offering multiple programs for their members and outreach activities to their communities at large. Local sections are grouped according to their size from small to very large. One Outstanding Performance Award is given in each of the six size categories.

The table below shows the Midland Section ACS Chairs in the years for which the Outstanding Performance Awards were won. Also shown are the Midland Section ACS Chairs for the activity years that were the bases for determining the award winners, as best as can be determined. The Midland Local Section annual reports were the basis for determining the activity year winners of the awards. Of course, many local section members contribute to the substance of what goes into each year's annual report.

| Number | Activity Year | Section Chair in Activity Year | Award Year | Report Year on Which Award Was Based | Section Chair in Year on Which Award Was Based |
|--------|---------------|--------------------------------|------------|--------------------------------------|--|
| 1 | 1973 | Donald R. Petersen | 1974 | 1973 | Donald R. Petersen |
| 2 | 1990 | William C. Pike | 1991 (1) | 1990 | William C. Pike |
| 3 | 1991 | M. Peter Dreyfuss | 1991 (2) | 1990 | William C. Pike |
| 4 | 1992 | Vicky S. Cobb | 1992 | 1991 | M. Peter Dreyfuss |
| 5 | 1993 | Gretchen S. Kohl | 1993 | 1992 | Vicky S. Cobb |
| 6 | 1994 | Robert E. Kohrman | 1994 | 1993 | Gretchen S. Kohl |
| 7 | 1999 | Debora F. Bergstrom | 1999 | 1998 | Arthur G. Smith |
| 8 | 2000 | Wendell L. Dilling | 2000 | 1999 | Debora F. Bergstrom |
| 9 | 2001 | George W. Eastland, Jr. | 2001 | 2000 | Wendell L. Dilling |
| 10 | 2003 | Michael J. Owen | 2003 | 2002 | J. Patrick Cannady |
| 11 | 2005 | Patrick B. Smith | 2005 | 2004 | Joseph M. Ceraso |
| 12 | 2006 | Buford Lemon | 2006 | 2005 | Patrick B. Smith |
| 13 | 2007 | Dee A. Strand | 2007 | 2006 | Buford Lemon |
| 14 | 2008 | Dorie Yontz | 2008 | 2007 | Dee A. Strand |
| 15 | 2010 | John D. Blizzard | 2010 | 2009 | Angelo Cassar |
| 16 | 2011 | J. Patrick Cannady | 2011 | 2010 | John D. Blizzard |
| 17 | 2012 | Regina M. Malczewski | 2012 | 2011 | J. Patrick Cannady |
| 18 | 2013 | Wayde V. Konze | 2013 | 2012 | Regina M. Malczewski |
| 19 | 2014 | Michelle R. Cummings | 2014 | 2013 | Wayde V. Konze |
| 20 | 2015 | Regina M. Malczewski | 2015 | 2014 | Michelle R. Cummings |
| 21 | 2016 | Jaime Curtis-Fisk | 2016 | 2015 | Regina M. Malczewski |
| 22 | 2017 | Anne M. Kelly-Rowley | 2017 | 2016 | Jaime Curtis-Fisk |
| 23 | 2018 | Wenyi Huang | 2018 | 2017 | Anne M. Kelly-Rowley |
| 24 | 2019 | Amanda M. Palumbo | 2019 | 2018 | Wenyi Huang |
| 25 | 2020 | Mark E. Jones | 2020 | 2019 | Amanda M. Palumbo |
| 26 | 2021 | Robbyn Prange | 2021 | 2020 | Mark E. Jones |
| 27 | 2022 | Joel McDonald | 2022 | 2021 | Robbyn Prange |
| 28 | 2023 | W.H. Hunter Woodward | 2023 | 2022 | Joel McDonald |

The timing of the awards was changed in 1991 from giving the awards the year after the activity year to the same year as the activity year, thus doubling the number of awards in 1991.

The Midland Section ACS was categorized within the medium-large size category (500-1,000 members) in 1973 to 2001, the medium category (400-799 members) in 2003 to 2022, and the medium-small category (200-399 members) in 2023.

Comparison of the data in this article with data reported previously (*The Midland Chemist*, **2021**, 58, No. 5 (May), 3-5) shows some differences. Part of the differences are due to additional references being available for the present article (*C&EN*, National ACS website). Some discrepancies were found in various sources. Further analysis of the data in some sources led to different conclusions. The years that some awards were presented were ambiguous. The data given in the present article are believed to be accurate but further research may lead to slightly different conclusions.



Midland Section ACS “Outstanding Performance” award plaques and trophies shown at the recent 2023 Fall Scientific Meeting held at Central Michigan University on Friday, November 3, 2023. (Photo credit: Patty Esch, Department of Chemistry and Biochemistry, Central Michigan University)



Midland Section ACS Scholarship Fund Update and Encouragement to Give

Gina Malczewski, Director and Scholarship Committee, Midland Section ACS

In May of 2021, Dr. Wendell and Marcia Dilling issued a challenge relative to growing the Midland Section ACS Scholarship Fund. At that time, they committed \$18,000 of matching money to grow the fund to \$100,000 by matching dollar for dollar all contributions made to the fund until it reached the target goal.

To date, there have been seven contributions amounting to \$2,080.76, and Wendell and Marcia honored their matching donation commitment by submitting a check in the amount of \$2,000 (matching contributions made through September 19, 2022) to the Midland Area Community Foundation, the entity that holds and manages the Midland Section ACS Scholarship Fund.

Wendell and Marcia have recommitted to their original pledge and will continue to provide matching money until their contribution reaches \$18,000, or perhaps a little more upon future reflection. The long-rang goal remains the same, to increase the Midland Section ACS Scholarship Fund principal balance to \$100,000 to enable offering additional and perhaps larger year-by-year scholarships to well-deserving students across the greater Midland Section ACS region.

The Midland Section ACS has been proud to offer scholarships to deserving undergraduate students majoring in a chemical science since 2002. Annually, two to four scholarships are awarded to candidates who have graduated from a high school in one of the Section's five counties (Bay, Midland, Saginaw, Isabella, and Gratiot), are studying at a Michigan university, and are ideally intending to pursue a career in some aspect of chemistry or chemical engineering. Selections are made by a committee and are based on academics, service and extracurricular contributions, and an essay on the student's sources of motivation as well as future plans. Past scholarship recipients are often highlighted in issues of the *Midland Chemist*.

Awards usually range from \$1,000-2,000, depending on the financial performance of the Midland ACS Scholarship Fund (#399) administered through the Midland Area Community Foundation. A long-standing goal of the Midland Section ACS has been to raise the base amount to \$100,000 to serve more students.

Wendell and Marcia Dilling, both chemists and long-time supporters of the Midland Section ACS, are prepared to continue to help us reach that goal by donating up to \$18,000 as part of a challenge grant to the scholarship fund. **They will match 1:1 any new contributions to the fund at the Midland Area Community Foundation over the next couple years.**

Please consider contributing to this worthwhile cause. **Your donations will help shape the future of chemistry!** If you have any questions about contributing to the Midland Section ACS Scholarship Fund, please call the Midland Area Community Foundation at 989-839-9661. Thank you.

An online donation form can be found through the following link:

[Midland Section American Chemical Society Endowed Scholarship Fund #399](#)



Upcoming Dates, Events, and Other Updates

- December 18 (6:00 – 7:00 PM) – Hybrid Midland Section ACS Board meeting, Creative 360, 5501 Jefferson Avenue, Midland (in person), and via a Microsoft Teams videoconference call connection at [December 2023 ACS Board Meeting Teams Link](#), Meeting ID: 932 403 387 548 8, Passcode: Rc3B8e. **Please note: This Board meeting is being held on a different Monday of the month, at a different time (an hour earlier), and at a different venue than our usual monthly Board meeting arrangements throughout 2023 to accommodate the Volunteer Appreciation Event being held directly following the December 2023 Board meeting.**
- December 18 (7:00 – 9:00 PM) – 2023 Midland Section ACS Volunteer Appreciation Event, Creative 360, 5501 Jefferson Avenue, Midland. This celebration event is a “thank you” from the Midland local section to everyone who volunteered in any role for the Midland ACS in 2023. There will be food and drink plus plenty of happy stories shared. To help us plan for the appropriate quantity of food and refreshments, please click on [2023 Midland ACS Volunteer Appreciation Event](#) to sign up ahead of time. For any questions, please contact Hunter Woodward at VWoodward@dow.com.
- January 8 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [January 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT. **Please note: This Board meeting is being held on the second Monday of January, not the usual first Monday of most months due to the New Year’s Day holiday.**
- January 27 (9:00 AM – 3:00 PM) – *Day in the Life of an Industrial Scientist*. Midland Center for the Arts, 1801 W St Andrews Rd, Midland. FREE event for STEM students and mentors. Registration required. For more information, please see flyer in this newsletter. To sign up or for questions, contact diversity@midlandacs.org.
- February 5 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [February 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT.
- March 4 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [March 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT.
- March 17-21 (Save the Date) – ACS Spring 2024 National Meeting & Exposition, New Orleans, LA, hybrid meeting (in-person and virtual). Meeting theme: *Many Flavors of Chemistry*. For more information, please see [ACS Spring 2024](#).
- April 1 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [April 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT.
- May 6 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [May 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT.
- June 3 (Tentative Date) (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at [June 2024 ACS Board Meeting Teams Link](#), Meeting ID: 939 576 147 515 1, Passcode: A52hAT.

The Midland Chemist is published twelve times a year by the Midland Section of the American Chemical Society, P.O. Box 2695, Midland, MI 48641-2695, <http://www.midlandacs.org>. Current and past issues are available at midlandchemist.org.

Volunteer Staff

Vickie Langer
Steve Keinath
Mike Malczewski

Editor (vlanger@dow.com)
Editor (skeinath54@charter.net)
Webmaster (web@midlandacs.org)

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

© Copyright 2023 Midland Section of the American Chemical Society

The Midland Chemist is available online with publication notification through an email alert to its readership. If you have any questions or comments about the content of or submissions to *The Midland Chemist*, please contact the editor at newseditor@midlandacs.org.