

THE MIDLAND CHEMIST

A publication of the Midland Section of the American Chemical Society

October 2019, Vol. 56, No. 10

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American Chemical Society Midland Section
FALL SCIENTIFIC MEETING
CALL FOR ABSTRACTS
Oral & Poster Presentations

MARVELOUS METALS

26 October 2019 | SVSU

Registration • Follow the Sign Up Genius Link at <http://www.midlandacs.org/> • Deadline: 7 October 2019
Submission • Please Submit Title & 300 Word Abstracts to acsfalls submits@gmail.com • Deadline: 30 September 2019

Sponsored by ACS Midland Section and SVSU Chemistry Club

2019 Fall Scientific Meeting

Elizabeth Santos, 2019 Fall Scientific Meeting Committee, Midland Section ACS

2019 Fall Scientific Meeting

Saturday, October 26, 2019, 8:00 AM – 5:00 PM, Curtiss Hall, Saginaw Valley State University

Check-in starting at 7:30 AM. Meeting theme: *Marvelous Metals*

The Midland Section of the ACS and the SVSU Chemistry Club cordially invite you to participate in this year's Fall Scientific Meeting and explore our theme of *Marvelous Metals!* The event will feature morning oral presentations and an afternoon poster session.

Keynote Speaker

Dr. Jerzy Klosin (Fellow, Core R&D) from Dow will present on "Development of Molecular Catalysts for the Production of Ethylene-Based Copolymers"



Additional Featured Speakers

Prof. Ronald Tackett – Kettering University

Prof. Martin Crimp – Michigan State University

Prof. J. Wayne Johns – University of Michigan

Prof. Gabriel Caruntu – Central Michigan University

A complete program and abstract book will follow.

Important Dates

Abstract Submission Deadline for Poster and Oral Presentations was September 30, 2019.

Fall Scientific Meeting Registration Deadline will be October 7, 2019.

Event Cost

This meeting is FREE! All registrants are encouraged to join us in the SVSU Marketplace Café for lunch, where you can purchase your meal directly. The first 100 students to register for the meeting will receive a complimentary meal ticket.

Registration

To ensure that name tags are available for all presenters and attendees, please use the [2019 FSM SignUpGenius](#) page to register. This will also ensure that we have adequate accommodations for all attending. For more information or any questions, contact Elizabeth Santos (emsantos@dow.com) or Tom Bekemeier (tom.bekemeier@dow.com).

Midland Section ACS Board of Directors 2020 Election

Michelle Cummings, Chair, Nominations and Elections Committee

The annual election for the Midland Section ACS Board of Directors will be open starting **October 21, 2019 and will close November 11, 2019**. Watch your email for a ballot.

The positions that are open for election are:

- Chair- Elect
- Treasurer
- Secretary
- Nominations and Elections Chair
- Director - 3 positions

Below is a summary of the descriptions and nominees for each of the open positions.

Chair-Elect: The chair-elect shall serve as Acting Chair of the Section in the absence of the Chair. Additionally, the chair-elect will succeed to the chairmanship of the Section on the following January. They serve on the Board of Directors and the Executive Committee.

Candidate for Chair-Elect:

Robbyn Prange, PhD



Education: Robbyn earned a B.S. in Chemistry from Hope College and a Ph.D. in Chemistry from The Pennsylvania State University. Robbyn is Six Sigma Green Belt certified.

Professional Experience: Robbyn has almost 20 years of industrial experience and has contributed to many R&D projects within Dow Chemical, Honeywell International and Air Products & Chemicals. She is currently an Associate R&D Director at The Dow Chemical Company. Robbyn leads a group of colloidal and interfacial researchers in Formulation Science & Automation, Core R&D that deliver value added solutions to technical problems in a range of application spaces including coatings, industrial solutions, home and personal care.

ACS Activities: 2019 will mark Robbyn's 20th year as an active ACS member. Through the years, she has volunteered for numerous STEM events.

Service Related Activities: Robbyn served in leadership roles for GLAD, Dow’s employee resource group for LGBT and ally employees, from 2012-2016. As the Midland Site Implementation Leader and Global Culture Change Leader, she drove culture change through educational workshops on policies, benefits and inclusive work environments. Robbyn is also an active volunteer and Advisory Board Member for Share A Meal Service Pantry, a ministry of St. John’s Episcopal Church, and has served as a delegate for the church’s annual Diocesan Convention. Finally, Robbyn provides her DIY skills pro-bono to friends and family in need of home repairs, especially the elderly.

Personal Statement: As a first generation college graduate from rural America, I know firsthand the importance of and have benefited from STEM exposure and education. I welcome the opportunity to leverage my collaborative leadership style and passion for community impact to help drive the Midland Section’s ACS strategy.

Treasurer: The treasurer shall assist in the preparation of an annual budget in cooperation with the Chair and Finance Committee. They shall also pay the bills, handle receipts, keep financial records and report to the Board of Directors. Lastly, the treasurer will make out an annual report with the content and format required by National and file the IRS returns.

Candidate for Treasurer:

Lauren McCullough, PhD



Education:

B.S in Chemical Engineering, Minor in Environmental Engineering, Penn State University 2012
Ph.D. in Chemical Engineering, Northwestern University, 2017

Professional Experience:

2017 – Present: Senior Process Engineer in the TES Tech Center, reactor modeling technology expert.

ACS Activities:

January 2018 – Present: Chair of Women Chemists Committee

January 2019 – Present: Director

Personal Statement: For the past two years I have had the privilege of serving the local section through roles as the co-chair of the Women Chemists Committee and Director. Although I have been involved in ACS since

2011 through participation in conferences, I only became involved in local section activities after moving to Midland in 2017. My time as chair of the WCC has been extremely rewarding. Working with section members has enabled me to spend time with many Midland-area chemistry lovers that I otherwise would not have had the chance to meet. The talent and drive in this section impresses me consistently. I am passionate about sharing my love of science with the broader community and WCC and local section have given me many opportunities to do so this year including organizing and running several events:

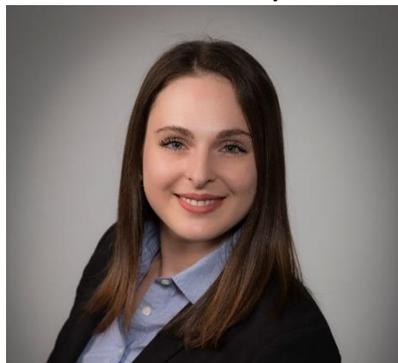
- Skills Beyond the Bench (SBTB) 2018/2019: a half day panel discussion developed in partnership with the Detroit section WCC. The first SBTB (2018) was focused on career paths in industry & the most important non-technical skills. We had great participation, including many university students. The second SBTB (2019) focused on collaboration for career growth. SBTB 2020 is tentatively planned to focus on mentoring.
- Dow Rising Stars & Bourbon Tasting: an evening event where we heard technical talks from the 5 recent recipients of the ACS Rising Star award who work for Dow. The event was held at the country club and included dinner and bourbon samples.
- Connect for H2OQ: WCC has collaborated with the H2OQ team to provide volunteer led, 1-2 hr interactive STEM field trip experiences for middle school students and a teachers workshop. The WCC submitted a winning Dow Engaging for Impact grant for \$10,000 to fund this effort. WCC will be actively engaged in helping the Columbus section prepare to continue the experiment for CERM 2020 through an organizers workshop funded by an ACS Innovative Programs Grant.

I am hoping to be elected to the position of treasurer to continue to learn from section members and give back to this supportive and collaborative chemistry community.

Secretary: The Secretary records the proceedings of the Section and its Executive Committee, maintains a list of members and associates, sends to members and associates such notices as the business of the Section may require, and carries out all other duties outlined in the SOCIETY and Section bylaws.

Candidates for Secretary:

Maude Desroches, PhD



**Senior Chemist
Advanced Elastomers**

Dow Performance Silicones – Product Development

Maude earned her PhD in chemistry from Université Laval in Québec city in May 2018 and has completed a six-months internship at the Massachusetts Institute of Technology in 2016. She is a synthetic organic chemist and has worked with carbon-rich materials. Her expertise ranges from total synthesis of phenylacetylene macrocycles to polycyclic aromatic hydrocarbons structure-property relationship. While at MIT, Maude developed an oxygen sensor for the food packaging industry. Maude holds one patent, has authored one book chapter, and twelve peer-reviewed publications. Maude has joined the sealant RTV group in July 2018. She is currently working on the replacement of weatherseal sealants towards a more sustainable formulation for the high performance building market.

Sohman Dutta, PhD



Professional Experience: Senior Research Engineer at the Dow Chemical Company, Midland MI (July 2018 - present); Process Technology Engineer, Ascend Performance Materials, Huntsville AL

Education: Ph.D. Chemical Engineering, Carnegie Mellon University (2018); M. S. Chemical Engineering, Carnegie Mellon University; B.E. Chemical Engineering, Siddaganga Institute of Technology

Personal Statement: I have served as the Secretary of the Midland ACS Section since January 2019 and I am looking forward to continuing my journey in the local Section. Over the past one year, I have thoroughly enjoyed working with a dedicated group of individuals who are both passionate about Chemistry and about outreach to the local community. I want to continue to leverage my communication and team-building skills acquired through years of experience working in cross-functional teams to contribute to the sizable achievements of the Midland Section. I am passionate about STEM outreach, particularly to those who may not consider STEM as a viable career option. If I am elected, I hope to be able to leverage ACS resources in the Great Lakes Bay Region community to encourage young minds to realize their potential in STEM.

Nominations and Elections Chair: The Nominations and Elections Committee is charged with identifying qualified candidates for leadership positions in the Section.

Candidate for Nominations and Elections Chair:

Michelle Cummings



Michelle Cummings is Research Chemist at Dow Corning Corporation. She earned her Bachelor of Science degree from Central Michigan University. During her career at Dow Corning, Michelle has worked on projects focused on the Electronics Industry, most recently in Lighting resulting in 7 product commercializations and 30+ internal publications and presentations, 10+ internal patent disclosures, and 3 granted patents. Michelle is also a Dow Corning Ambassador and a member of the Donor Advised Committee of the Dow Corning Foundation in which she is tasked with enriching the local community through STEM, access to STEM related activities, community vitality, and sustainability, while being an advocate for the people and technologies of the chemical industry.

Michelle has held several board level positions within the Midland Section including secretary, chair-elect, chair, past chair and director. She also participates as a steering team member of the local Women Chemist Committee, a member of finance committee, strategic planning committee, and long range planning committee. During Michelle's section chair year, the Midland Section was nationally recognized by the granting of three ChemLuminary Awards. In addition to ACS, Michelle is also very active in her community through her local Parent Teacher Organization in which she currently holds the role of president. She has contributed to organizing fundraising activities and implementation of technology and STEM related advances in her local elementary school.

As returning Nominations and Elections Chair of the Midland Section, Michelle will engage the board in succession planning and drive for a highly motivated and qualified candidate list for 2021.

Click [HERE](#) to contact Michelle

Director: Directors are expected to attend Board meetings and to participate in the Board's deliberations. Directors should maintain an interest in local and national ACS affairs so that they can give informed consideration to the Section's issues. They should be alert to the needs and opinions of the Section membership. Three Directors must be elected the Executive Committee, which may require attendance at additional meetings.

Candidates for Director:

Wendell L. Dilling, PhD



Professional Experience: Chemist, The Dow Chemical Company, 1962-1992; Research Associate, Central Michigan University, 1992-present

Education: BA Chemistry, Manchester College, 1958; PhD Organic Chemistry, Purdue University, 1962

ACS Activities: Wendell has been a longstanding member of the ACS since 1959. As a member of the Midland Section since 1962 has held multiple board and committee positions. Additionally, Wendell has been involved at the Regional, Divisional, and National ACS levels. Most recently Wendell has been involved in the 100 year anniversary of the Midland Section to complement his role as Historian.

Awards: Midland Chapter Sigma Xi Award, 1974; Midland Section Award for Outstanding Achievement and Promotion of the Chemical Sciences, 1982; Midland Section Award for Outstanding Service to the ACS, 1992; ACS Fellow, 2010; Midland Section Award for Science Education Volunteer, 2018.

Leanna Foster, PhD



I (Leanna Foster) am new to Midland, and excited to get involved in the local ACS community. I'm a recent graduate from the University of Michigan with a PhD in Macromolecular Science and Engineering, and now work for DuPont in silicone elastomers for healthcare.

Beyond the lab, I am passionate about mentoring, science communication and education. I love to get the public involved with hands on science experiences, be it in a school classroom or museum. My experiences with the University of Michigan student chapter of ACS POLY/PMSE helped shape me as a scientific leader. I'm excited for the opportunity to connect with the network of chemists in the Midland area.

Wenyi Huang, PhD



Professional Experience: Principal Investigator at DuPont; Research Scientist at The Dow Chemical Company; Postdoctoral Research Fellow at The Ohio State University and The University of Akron.

Education: Ph.D. Polymer Engineering, The University of Akron; M. S. Polymer Engineering, Sichuan University; B.E. Plastics Engineering, Sichuan University (China).

ACS Activities: Past Chair (2019), Chair (2018) and Chair-elect (2017), Nominations & Elections Chair (2016) and Secretary (2015) of ACS Midland Section; Chair Polymer Materials Science and Engineering General Paper Section in 252nd ACS National Meeting; present papers in ACS National Meetings; ACS member since 2006.

Other Information: >40 granted patent and pending publications; 55 external publications including 11 book chapters and an edited book entitled “Nanopapers: From Nanochemistry and Nanomanufacturing to Advanced Applications”; Advisory Board Member for Cambridge Scholars Publishing and reviewers for 21 peer-reviewed journals. Certified Six Sigma Black Belt and trained Six Sigma Master Black Belt; Board Director of Society of Plastics Engineers Extrusion Section.

Co-founder of DuPont Michigan Technical Community (MTC, 2019) and Chairs for Dow Young Researcher’s Community (YRC, 2017) and Dow Materials Science & Engineering New Researchers’ Organization (NRO, 2016).

Personal Statement: I am honored to serve as Past Chair, Chair, Chair-elect, Nominations & Elections Chair, and Secretary of ACS Midland Section since 2015, from which I learned a lot of skills and built many competencies outside my job at both DuPont and Dow and I really enjoyed working with Midland Section Board members. In addition, I am the co-founder of DuPont Michigan Technical Community in 2019, Chair of Dow Young Researcher’s Community (YRC) in 2017 and President of Dow Materials Science & Engineering New Researchers’ Organization (NRO) in 2016. Furthermore, I have been serving as the Board of Director for Society of Plastics Engineers Extrusion Division. I am looking forward to continuing to contribute to the ACS Midland Section, and I would like to leverage my extensive experiences in various organizations to promote the growth of local professional chemists and chemical engineers and help them prosper amid the changes of chemical industry. I really love our profession and the broad impact we chemists and chemical engineers have on improving the quality of life. No profession has greater impact than chemistry on health, food, water, energy, environment, and so much more. There is no society that can have greater impact on our profession than ACS. I am interested in the position of Director for 2020.

Steven E. Keinath, PhD



Professional Experience: 37 years career experience, all with the Michigan Molecular Institute (MMI), Midland, MI. Retired in 2015 from the position, Senior Research Scientist and Program Manager. Currently active in non-profit organization leadership, technical editing, and community service volunteer roles.

Education: B.S., Chemistry and Physics, Saginaw Valley State College, 1976; M.S., Polymer Science, University of Massachusetts, 1978; M.B.A., General Business, Saginaw Valley State College, 1981; M.A., Education, Central Michigan University, 1985; Ph.D., Chemistry, Michigan Technological University, 1992.

ACS Activities: Joined the Midland Section in 1977. Have served on and chaired several of the various committees in the Midland local section and have been a long-standing editor/co-editor of the *Midland Chemist*. Additionally, have helped organize ACS regional meetings, many Midland Section Fall Scientific Meetings and many of the Turner Alfrey Visiting Professor (TAVP) lecture series.

Personal Statement: I'm proud of the activities and achievements of the Midland Section ACS and have been actively engaged in a number of ACS officer and committee roles over many years. My feeling is that I can continue to contribute to the future greater good of the local section and would be pleased to continue to serve if elected.

Regina Malczewski, PhD



Personal Statement: I have held many positions within the Midland Section, including Chair, Secretary, Director and Outreach co-chair. I am dedicated to the success of the section and its mission to communicate the benefits of chemistry and to encourage its practice. I am an active Science Coach, an ACS Fellow, and am active on the National Committee for Community Activities. I have a lot of experience in soliciting and establishing partnerships, and getting grants; I was active in CERM 2019 and also led the centennial exhibit effort.

Michelle Rivard



Professional Experience: Started at Dow Corning May 1997. 2004-current Analytical Technologist (hDCC), 2000-2004 Wash/Etch Technician (HSC), 1997-2000 Slimrod Technician (HSC)

Education: B.S. Biochemistry, Central Michigan University

ACS Activities: Since joining the Midland Section in 2005, I have had several roles- MMTG director 2011-2012, chair-elect 2013, Chair 2014, Past Chair 2015. Section's Program Committee from 2013-2015, assisting in the acquisition of technical speakers, and have been the primary organizer of ACS Day at the Midland County Fair from 2010-current. My Outreach activities include leading and developing student programs and helping with teacher workshops. My involvement as an ACS Science Coach began with the inception of the program in 2010. Within this program, I have partnered with 5 different teachers and schools. I serve as a member of the National Project SEED committee, serving both on the ChemLuminary and Scholarship Committee 2013-current. In 2020 I will be taking over as the Project SEED coordinator for our local section.

I was elected as a Section Director in 2015, but served as chair-elect for the Section, after volunteering to fill the empty seat and receiving Board approval. In 2016, I served as the chair for MMTG 25 Year Anniversary committee. In this role, I organized a symposium that ran alongside the Fall Scientific Meeting (FSM) symposium and secured the Key Note speaker for FSM. I was Co-chair for the education/outreach program for the 50th Central Regional Meeting held in Midland earlier this year. I am also currently the Treasurer for our local section (2017-2019).

Other Information: 2015 Midland Section Outreach Volunteer of the Year. Invited guest speaker for CTA 50th Anniversary Symposium at the 248th National Meeting in San Francisco, CA in 2014. MMTG outreach volunteer of the year 2010-2012. Successfully wrote and secured 4 grants for MMTG activities 2015, 2016, 2018, and 2019. 2018 Outstanding National Chemical Technician Award. 2019 E. Ann Nalley Central Region Award for service to the Midland local section, ACS National and the Central Region.

Personal Statement: I hope to continue my service to the Section as Director; I live locally and attend a majority of ACS related activities which allows me to be well-versed with our local section's activities. My experience allows me to work well across committees and activities. In this era of designated funds, I have successfully been able to organize and complete programs within budget. I have secured grants and organized fundraising in order to continue to fund the programs that have helped win numerous awards for our local section. If elected as Director, I will continue to support and maintain the efforts for which we have been recognized nationally.

André Yvon-Bessette, PhD



Dr. André Yvon-Bessette received his Ph.D. in Chemistry from Université de Montréal, Canada, where he established an industrial partnership between the research group of Professor Garry S. Hanan and the R&D

team of Dr. Denis Désilets at PCAS Canada (now Seqens). His graduate work focused on the development and characterization of new organometallic materials for applications in photovoltaic.

In 2016, André moved at the Massachusetts Institute of Technology as a Postdoctoral Fellow with Professor Stephen J. Lippard to develop a reaction-based fluorescent probe platform for near-infrared imaging of biological mobile zinc. In 2017, he completed his fellowship at MIT with Professor Timothy F. Jamison, where his research focused on target-oriented synthesis and methodology development using continuous-flow chemistry.

André is a Senior Research Specialist at Dow in the Research Assignments Program of Core R&D. Since joining the company in 2018, he held roles as Process Chemist in Engineering & Process Science (Core R&D) and as Product Development Chemist (Dow Performance Silicones). His final rotation will be in the Sustainable Chemistry group (EH&S & Sustainability) starting in November 2019.

As an active member of the ACS Midland Local Section, André is the chair of the Younger Chemists Committee since 2019 and was part of the WCC steering committee in 2018. He also organized four sessions at the CERM 2019 focusing on process chemistry and sustainability topics.

Outside of work, André enjoys outdoor activities with his wife and their dogs. He also loves cooking and hosting friends for an evening of entertainment.

FOAM: Facts and Fun!, October 6



FACTS AND FUN!

Sun 10/6/19, 1-2 pm
Herbert D. Doan History Center
3417 W. Main St, Midland

A program with Hands-on STEAM activities

- *What is foam?
- *Solid and Liquid Foam
- *Let's make FLOAM!
- *Art with foam

Family-friendly!
FREE and open to the public

A Century of Science and Service
1919-2019
MIDLAND SECTION
AMERICAN CHEMICAL SOCIETY
100

Exhibit/Education Win-Win

Gina Malczewski, Centennial Committee, Midland Section ACS

CMU Museum Studies students, under supervision from Dr. Jay Martin, have long been involved in the development of the centennial exhibit and the associated website. Our work together began in early 2017, and during the ensuing period, with funding from the Doan Family Foundation, the exhibit budget has provided financial support for three students to research and screen content, attend meetings, and staff the exhibit on summer weekends. They have also been helping us publicize the exhibit in Mount Pleasant. Meanwhile, these students were obtaining important real-world experience in preparation, design, installation, and promotion of a public exhibit.

Now that the time for the exhibit in Midland is drawing down (it will move on in January), additional win-win collaborations are in progress. The students, with Dr. Martin, are developing relationships and timelines related to future display of the exhibit, along with documents and procedures to be used in the transport. A larger group of students has also visited the exhibit to learn about the effort and outcome, and Dr. Martin is using the challenges of re-location as learning exercises for his classes.

The exhibit committee is very pleased that our collaboration with CMU has been so productive, and has afforded so many educational opportunities; in addition, this project has encouraged teamwork between young and old, scientists and non-scientists.

Picture (by Dr. Jay Martin): CMU Museum Studies students with Gina Malczewski at the Centennial Exhibit 9/25/19



National Chemistry Week *Marvelous Metals* Event, October 27



Ni **Cu**
Zn **Si**
Ag **Au**

"HAUNTED MINE" activity
--go for treasure!

Sunday October 27, 2019 12:00-3:30 pm
Doan History Center 3417 W. Main St, MIDLAND

◆ ◆ PHOTO BOOTH ◆ ◆

Visit the ACS centennial exhibit, too!!!

Join us for a
National Chemistry Week
Celebration of
"Marvelous Metals"
and the 150th anniversary of the
Periodic Table

- **FAMILY-FRIENDLY**
- **FREE and open to the public**
- Hands-on science activities
- Alternative Trick or Treating
 - Pumpkin catapults
 - **Hogwarts Wizards!**



Midland Section ACS Continues to Chart New Territory as Outstanding Section in Medium Size Category

Amanda Palumbo, Chair, Midland Section ACS

At the recent 257th National ACS Meeting in San Diego, during the 21st ChemLuminary Awards ceremony, the Midland Section won two ChemLuminary Awards.

The section was awarded with the 7th straight “Outstanding Performance Award” in the Medium Size Category for its 2018 activities. We are honored to be continually recognized for all of our local section activities.

In addition, the Midland Section was awarded for “Outstanding Ongoing Chemists Celebrate Earth Week (CCEW) Event”. Last year, Midland ACS celebrated with an Earth Day Expo at Midland Center for the Arts. For 15 years our section has celebrated Earth Day events.

Thank you to all of the Midland ACS volunteers for your service and commitment to our community and the ACS!



Midland ACS representatives at the 21st ChemLuminary Awards ceremony. From Left to Right: Wenyi Huang - 2018 Chair and 2019 Past-Chair; Dale LeCaptain – Councilor; Michelle Cummings – Nominations & Elections Chair; Janet Smith – Member and Volunteer, Michelle Rivard – Treasurer, co-chair of Outreach and National Chemistry Week, and chair of Project SEED; Gina Malczewski – Director, 2019 ACS Fellow, Chair of teacher support, Co-chair of long-range planning and Outreach; Tina Leaym – Councilor and Co-chair of Women Chemists Committee; and Jeff Seifferly – Member and Volunteer.

Midland Section ACS Centennial Exhibit – Invitation to Visit

A Century of Science and Service
1919-2019
MIDLAND SECTION
AMERICAN CHEMICAL SOCIETY

Commemorating the Centennial of the Midland Section of the American Chemical Society and the local and global impact of its members.

Featuring topical videos, artifacts and interactive elements that highlight chemistry and the 150th anniversary of the Periodic Table.

Go to our website for more information, and details about FREE PROGRAMS.
www.midlandacs100.org

100th ANNIVERSARY EXHIBIT

Herbert D. Doan Midland County History Center
3417 W Main St, Midland, MI 48640
Weekdays 9-5, most weekends 12-4

Open now through the end of 2019

Chemistry: The Study of EVERYTHING!

The universe is made up of atoms—the physical stuff around us. Chemistry is the study of that matter.

Atoms combine, transfer electrons to each other, and rearrange themselves. Chemistry is the study of how these processes happen and how we can use that knowledge to make a better world. This is why chemistry is so important to our lives. It's the science that helps us understand the world around us and how to make it a better place.

Learning about the "how" of chemistry is the first step. Each new discovery leads to new questions. Learning and trying things out are important next steps. The more you know, the more you can do. Chemistry is a science that helps us understand the world around us and how to make it a better place.

At the end of 2019, the Midland Section ACS will be celebrating its 100th anniversary. To mark this special occasion, we have created a special exhibit. The exhibit will be held at the Herbert D. Doan Midland County History Center, 3417 W Main St, Midland, MI 48640. The exhibit will be open from 9:00 a.m. to 5:00 p.m. on weekdays and 12:00 p.m. to 4:00 p.m. on weekends. The exhibit will feature a variety of artifacts, videos, and interactive elements. The exhibit will be a great way to learn about the history of chemistry and the Midland Section ACS. The exhibit will be a great way to celebrate the 100th anniversary of the Midland Section ACS.

QR Code: www.midlandacs100.org

“A Century of Science and Service” – Updates and Prizes!

Gina Malczewski, Centennial Committee, Midland Section ACS

New artifacts are on display at the Midland Section ACS Centennial exhibit – some on loan from the Science History Institute. See H.H. Dow’s personal copy of the ACS bylaws from 1898 and one of Charles Strosacker’s patent packages; medical devices from Dow Corning have also been added. More kids’ activities (with prizes) are also now available, and on-site kiosks allow direct access to the centennial website.

Other programs are coming soon. Please continue to check the “regular” and centennial websites for the latest information.

There is still a contest going on for exhibit visitors. **The first 25 people who send an e-mail with answers to the following questions to reginamalczewski@gmail.com (Centennial committee members ineligible) will be entered in a drawing to win a \$25 Gratzki gift certificate!**

Please answer the following and tell us **where in the exhibit** you saw the answer:

1. What percentage of the human body is hydrogen?
2. What “number” is Ogden Pierce?
3. What happened on April 8, 1946?

The Centennial Exhibit at the Doan History Center on Main Street is open weekdays 9:00 AM to 5:00 PM. We intend to have adjunct educational programs each month that the exhibit is open, through December 2019. There will be different topics for each month, all related to the exhibit, and they will include art projects, hands-on science demos, and a scavenger hunt, among other special things of interest for the broader community. We will also be bringing in a special guest speaker and book author, Sam Kean, on November 5.

The table below outlines a tentative schedule of what to look forward to into November.

Tentative Schedule of Midland Section ACS 2019 Centennial Exhibit Programs		
Date	Hours (all pm)	Activity
October 6	12-4	Exhibit open
	1-2	FREE "Foam: Facts and Fun" program
October 13	12-4	Exhibit open
October 20	12-4	Exhibit open
October 27	12-4	Exhibit open
	12-3:30	FREE NCW/Halloween event: "Marvelous Metals"
November 5	6-8	Sam Kean: " <u>The Disappearing Spoon</u> and other Table Tales", with book-signing
November 10	12-4	Exhibit open
	1-2	FREE "Saran: It's a Wrap!" Program

In addition, we are also planning hands-on science activities for school groups that will be coming to visit the Centennial Exhibit throughout the duration of the museum display. For any questions about the Centennial Exhibit, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.

Sam Kean Presents: *The Disappearing Spoon and Other Table Tales*, November 5
Gina Malczewski and Gretchen Kohl, Centennial Committee, Midland Section ACS

To celebrate the 150th anniversary of the Periodic Table and the Midland Section ACS centennial exhibit, we are hosting best-selling author Sam Kean on November 5 from 6:00 to 8:00 PM in the Solutions Room at the Herbert D. Doan Midland County History Center.

Sam will present and embellish on "elemental" stories from his book *The Disappearing Spoon* and also sign books, including his latest, *The Bastard Brigade*. He is also the author of *Caesar's Last Breath*, and *The Violinist's Thumb*.

Representatives from Barnes and Noble will be present to offer some of his books, and the Grace A. Dow Library will be featuring some of them (along with other popular chemistry titles) before his visit. This event is free and open to the public (see flyer on following page).

The Midland Section of the American Chemical Society
and Midland AIChE

invites you to:

THE DISAPPEARING SPOON

and Other Table Tales

An evening with best-selling author

SAM KEAN



6-8 pm, November 5 2019

Herbert D. Doan History Center

Solutions Room

3417 W. Main St. Midland

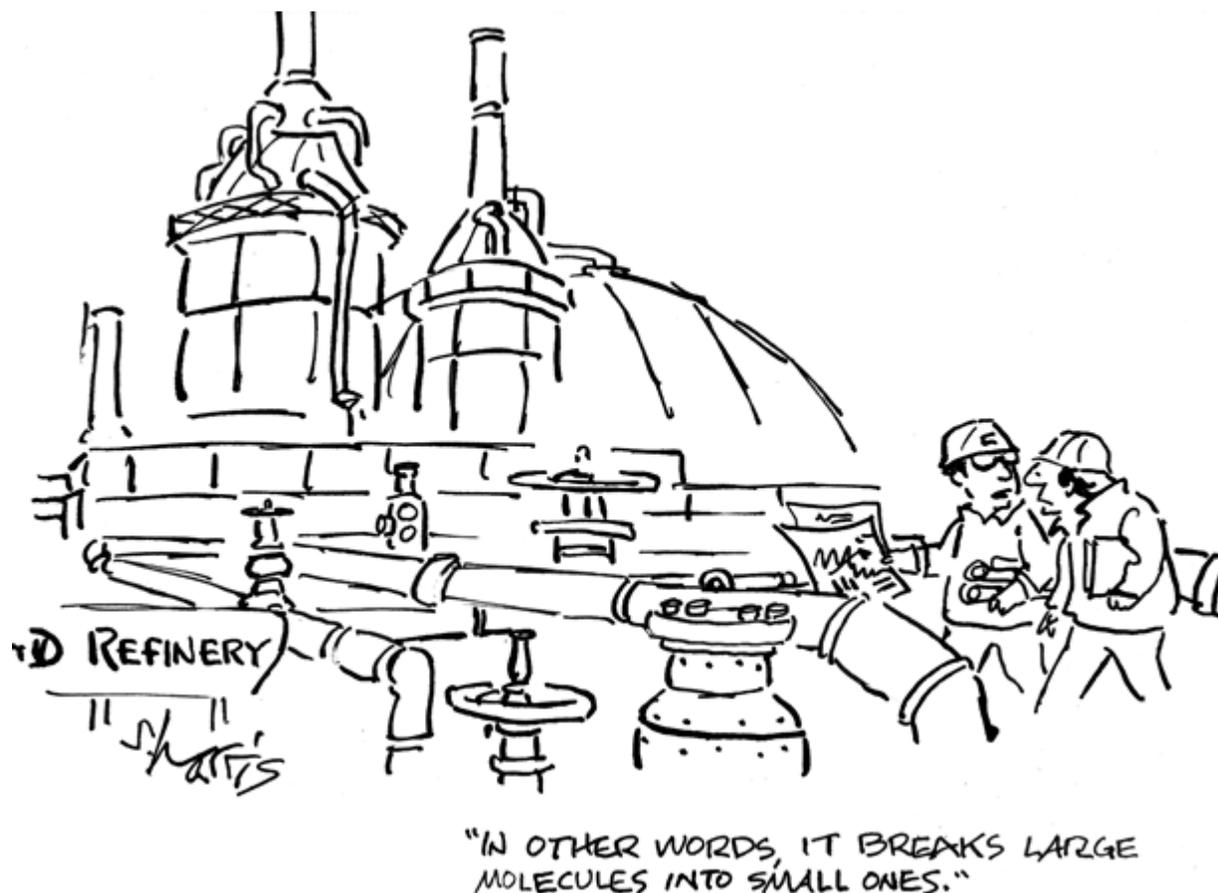
Bring your books for signing,
or get new ones!



Sidney Harris Cartoon

Submitted by Jeff Seeman, Department of Chemistry, University of Richmond

Editor's note: The Division of the History of Chemistry has received an ACS Innovative Grant that will provide 12 free Sidney Harris cartoons to ACS local sections for their use in newsletters or monthly communications or on their website.

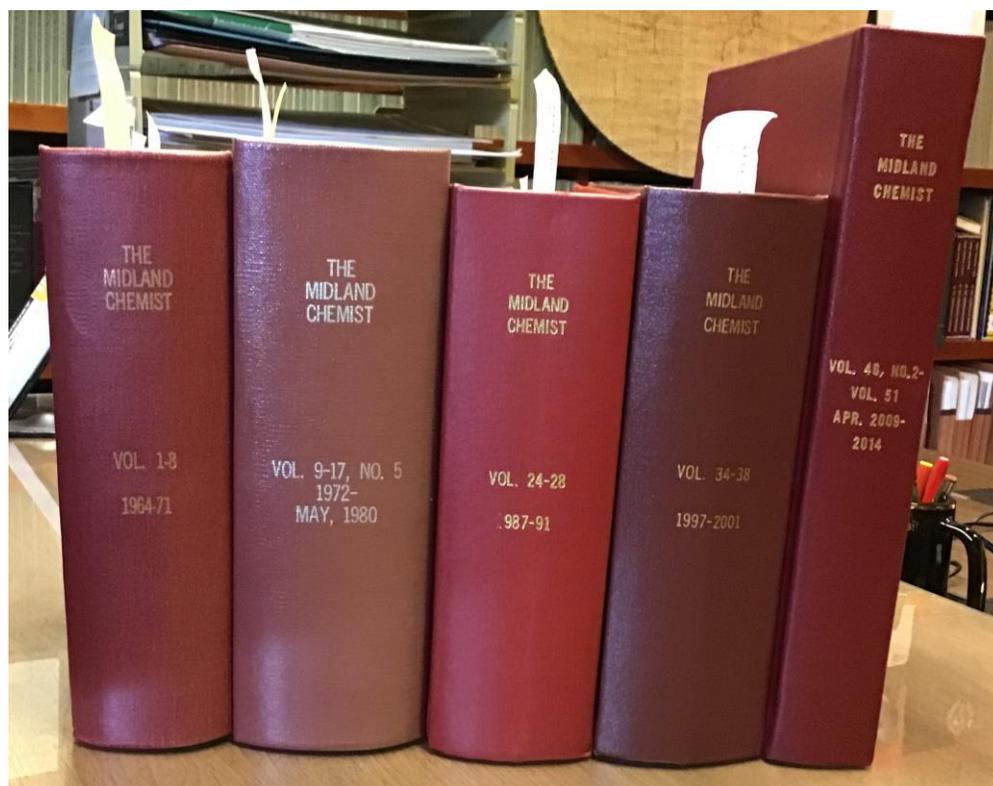


All chemists know that refineries really separate mixtures of molecules into highly purified versions of oil, sugar, natural gas, etc., on a scale that is suitable for society-wide consumption. However, the public's image of chemistry is too often associated with industrial refineries, and the accompanying smoke stacks, sulfurous smells and, more recently, the impact of CO₂ and methane on climate change. Perhaps the refineries for the future will be images of CO₂ removal and mineralization, or the cleansing of drinking water on a global scale. From a Scotsman's perspective, however, my favorite refinery will always be the Glenfarclas distillery in Speyside Scotland — sustainable, beautiful and one of the greatest man-made products on earth.

-- David MacMillan -- Princeton University

In Past Issues of *The Midland Chemist*

Wendell L. Dilling, Director and Historian, Midland Section ACS



From these volumes . . .

50 Years Ago, *The Midland Chemist* **1969**, 6, No. 4 (Oct), 8.

In *26th Annual Fall Scientific Meeting* by John B. Moran, General Chairman, Fall Scientific Meeting: "We again are approaching that traditional time of the year for the Fall Scientific Meeting sponsored by the Midland Section of the ACS in cooperation with The Dow Chemical Company and Dow Corning Corporation. This year will be the 25th such meeting. These Fall Meetings have become a traditional Midland event occurring in late October or early November. In recent years we have seen an increase in interest and participation by groups outside the local area. Last year's meeting drew state-wide interest and national coverage through a feature article in *Chemical and Engineering News*. Attendance for these Saturday morning events has increased steadily over the years, which supports the view that this is a major event to the Midland area scientific community."

40 Years Ago, *The Midland Chemist* **1979**, 16, No. 8, 193.

In *Fall Scientific Speakers' Banquet/ACS Spouses' Night* by Gery Essenmacher: "This year's event will combine the annual Fall Scientific Speakers' Banquet with the ACS Spouses' Night Banquet and should be an outstanding evening for everyone. It begins with a social hour (cash bar) at one of the area's truly excellent restaurants -- the Embers of Mt. Pleasant. The dinner, commencing at 7:00 p.m. features the specialty of the house -- a one pound pork chop which, incidentally, requires 24 hours for preparation."

30 Years Ago, *The Midland Chemist* **1989**, 26, No. 6, p 2 of insert.

In *1989 Fall Scientific Meeting* by Donald E. Kirkpatrick, General Chairperson, Fall Scientific Meeting: “The theme of this year’s meeting is “Focus on the Environment.” This subject was chosen due to the recently increasing debate in such areas as atmospheric chemistry and waste disposal. With this topic we hope to encourage thought, discussions, and positive outcomes concerning the influence of the chemical sciences on our environment. We are pleased to have Dagmar Cronn, Dean of College of Sciences, University of Maine at Orono as our keynote speaker to address this subject with a talk entitled “The Impact of Atmospheric Trace Gases on Climate Change.” Other presentations on this year’s theme can be found in the symposia sessions “Chemistry and the Atmosphere” and “Chemical Hazard Engineering” and in the topical session “Environment”.”

20 Years Ago, *The Midland Chemist* **1999**, 36, No. 7, 4.

In *From the Chair* by Debora Bergstrom, Chair ACS Midland Section: “Although we need both national and topical conferences perhaps one of the best values available to our membership are our local and regional conferences and meetings. We tend to overlook these local opportunities, perhaps believing that we already know what is going on locally or regionally, but do we really? Exciting things can be going on in your own back yard. Local area conferences are low or no cost, require less time than any others and are therefore one of the best values for scientific exchange. Consider taking advantage of several upcoming opportunities to gather with your local colleagues, including our own excellent technical conference, the Midland Section **ACS Fall Scientific Meeting** on “Emerging Growth Opportunities for Chemistry” taking place Saturday, October 30, at Dow High School.”

10 Years Ago, *The Midland Chemist* **2009**, 46, No. 5, 2.

In *Advancing Chemistry through Science Education* by Susan Rhodes and Matt Gave, FSM Co-chairs: “The 65th Fall Scientific Meeting will be held at Delta College on October 10, 2009. The theme for this year’s meeting is “Advancing Chemistry through Science Education.” We are particularly excited about this year’s program because it brings together scientists, science educators, and students in a unique way, encouraging networking and providing a forum for new ideas.”

Upcoming Dates, Events, and Other Updates

- October 4 – **Registration deadline** to register a group of students and early career chemists to join thousands of others from around the world to participate in the October 22, 2019 ACS Program-in-a-Box, *Marvelous Metals* event, an online, free, one-night only event. For more information, please see <https://www.acs.org/content/acs/en/acs-webinars/program-in-a-box/pib-on-demand/metals.html>.
- October 6 (1:00 – 2: 00 PM) – FOAM: Facts and Fun! Herbert D. Doan History Center, 3417 W. Main Street, Midland. Free and open to the public. See flyer in this newsletter.
- October 7 (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- October 7 – **Registration deadline** to attend the 2019 Midland Section ACS Fall Scientific Meeting. Location: Curtis Hall, Saginaw Valley State University. Date and time: Saturday, October 26, 8:00 AM – 5:00 PM. Meeting theme: *Marvelous Metals*. For more information or any questions, contact Elizabeth Santos (emsantos@dow.com) or Tom Bekemeier (tom.bekemeier@dow.com).

- October 12 (Save the Date) – 2019 Midland Section ACS Centennial Exhibit program, *Scavenger Hunt*, Heritage Park History Campus, Midland. For any questions, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.
- October 19 (Save the Date) – 2019 Midland Section ACS Centennial Exhibit program, specific topic TBD, *Silly and Special: Warrick's Putty, or It's a Wrap – The Science of Saran™ and Plastic Films*. For any questions, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.
- October 22 (6:45 PM to ????) – ACS Program-in-a-Box, *Marvelous Metals*. To register a group of students and early career chemists for this free, one-night only event, please see <https://www.acs.org/content/acs/en/acs-webinars/program-in-a-box/pib-on-demand/metals.html>. Please note the registration deadline of October 4, 2019.
- October 26 (8:00 AM – 5:00 PM) – 2019 Midland Section ACS Fall Scientific Meeting, Curtis Hall, Saginaw Valley State University. Check-in starting at 7:30 AM. Meeting theme: *Marvelous Metals*. For more information or any questions, contact Elizabeth Santos (emsantos@dow.com) or Tom Bekemeier (tom.bekemeier@dow.com).
- October 27 (12:00 PM – 3:30 PM) – National Chemistry Week Celebration of *Marvelous Metals*. Herbert D. Doan History Center, 3417 W. Main Street, Midland. Family-friendly activities. Free and open to the public. See flyer in this newsletter.
- November 4 (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- November 5 (6:00 – 8:00 PM) – 2019 Midland Section ACS Centennial Exhibit program, *An Evening with Author Sam Kean: The Disappearing Spoon and Other Table Tales* (and book signing), Herbert D. Doan Midland County History Center, Solutions Room, Midland. Free and open to the public. See flyer in this newsletter. For any questions, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.
- November 11 (11:59 PM EST) – **Deadline for election of 2020 Midland Section ACS Officers and Board.** Voting will start October 21, 2019 and will close November 11, 2019. Watch your email for a ballot.
- December 2 (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- December 7 (Save the Date) – 2019 Midland Section ACS Centennial Exhibit program, specific topic TBD, *Silly and Special: Warrick's Putty, or It's a Wrap – The Science of Saran™ and Plastic Films*. For any questions, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.
- December 14 or 15 (Save the Date) – 2019 Midland Section ACS Centennial Exhibit program, *Christmas Chemistry and Crafts*, Herbert D. Doan Midland County History Center, Midland. For any questions, contact Gina Malczewski at reginamalczewski@gmail.com or Gretchen Kohl at gretchen.kohl@att.net.
- January 6 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- February 3 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- March 2 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.

- March 22 – 26, 2020 (Save the Date) – Spring 2020 National ACS Meeting & Exposition, Philadelphia, PA. Meeting theme – *Macromolecular Chemistry: The Second Century*. For more information, and to submit an abstract, please see <https://www.acs.org/content/acs/en/meetings/national-meeting/abstract-submission.html>.
- April 6 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- May 4 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.
- May 27 – 29, 2020 (Save the Date) – 2020 Central Regional Meeting, Columbus, OH. For more information, please see <https://www.acs.org/content/acs/en/meetings/regional/central.html>.
- June 1 (tentative date) (7:00 – 8:00 PM) – Midland Section ACS Board meeting, MCFTA Board Room (anticipated location, in person), or via a WebEx conference call connection (TBD), phone number: 989-633-1166.

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