THE MIDLAND CHEMIST

A publication of the Midland Section of the American Chemical Society

September 2024, Vol. 61, No. 9

Contents

Chair Column

Erin Vogel, Chair, Midland Section ACS

I hope you have been enjoying hearing from many diverse individuals working in science this year about their "WHY" – Why they are working in the sciences, what their passions are, what drives them, and personal reflections on why they are working in a specific discipline and perhaps why they find themselves within a certain technical position and/or management role at this stage in their careers. This month, I'd like to introduce you to Don Kadlec, one of my team members, and I'll let him take it from here.

Don Kadlec

FOLLOW YOUR PASSION

I was recently approached by one of my team members about the opportunity to contribute an article to the *Midland Chemist* describing my WHY … why I chose a career path in the sciences. I thought about this opportunity and at first, I wasn't very interested (being busy as we all are) and then, the more I thought about it, the more I realized what a unique opportunity this would be. One of my passions is mentoring – teaching and encouraging others to find and pursue their own career paths and to continue learning and asking questions. I thought if I could share my personal experiences, maybe, just maybe someone might benefit from my story to help them create their own story.

My name is Don Kadlec, and I am a Technical Manager for DuPont Liveo™ Healthcare, part of the Electronics & Industrial Business. I have been a scientist for 35 years and I have followed my passion. My scientific career path initially began at Dow Corning (27 years, 1989-2016) where I held various technical

positions with responsibility for chemical synthesis, formulation, product and process development, product commercialization, and teaching. My experience spanned multiple business segments and market applications including elastomers, electronics, healthcare, Molykote® lubricants, personal, household & beauty care, industrial, and college recruiting.

Dow Corning was founded on silicon and silicone-based technology, and this is where I learned silicone chemistry and developed my expertise. In 2016, Dow Chemical purchased Corning Glass Inc.'s 50% share of Dow Corning, and I became an employee of Dow Chemical (3 years, 2016-2019), continuing to support the heritage Dow Corning lubricants and healthcare (Silastic™) products as a researcher. Also in 2016, the Dow-DuPont merger began followed by the subsequent split into three separate companies in 2019 (Dow Chemical, DuPont, and Corteva). As a result of the split, I saw my career path move to DuPont Healthcare, continuing to support the heritage Dow Corning silicones healthcare technologies (5 years, 2016-present). During my time at DuPont, my career path changed from scientific research investigator (individual contributor role) to technical manager, a departure from the technical career path to the managerial career path. This was a change from my safe space or comfort zone and significantly challenged my skills, knowledge, and confidence. It meant moving outside my area of knowledge and learning how to manage and inspire people, drive projects, develop strategies, and expand capabilities and assets to support business growth.

My *why* was inspired by my interest in science from a very early age. I was always interested in science and my love for it developed during my formative elementary school years. You might say it was a combination of *interest*, *influence*, *inspiration*, and *initiative*. I say *interest* because I always had a natural curiosity that caused me to explore, question, and seek answers to the "why," the "how," and the "what." Because of my interests, the sciences came easy or naturally for me as a subject. As a result, I found myself immersed in learning the subject as it was easy, fun, and exciting.

My 35-year science career began in 1989 when I joined Dow Corning upon graduation from college. I attended the University of Wisconsin-LaCrosse from 1984 to 1989. It took me five years to graduate as I chose to pursue a double major in chemistry and microbiology. At the time, I was leaning toward pre-medicine/pre-veterinary sciences in my undergraduate studies with the intention of either dentistry or veterinary medicine with a specialty in large animals. WHY? I grew up in a family of dentists. Both my grandfather and father were dentists. My grandfather was a dentist in the Army before relocating from Colorado Springs, CO to LaCrosse, WI, and opening his own practice. My father graduated from Marquette University School of Dentistry (Milwaukee, WI) and served two years in the Air Force medical corps in Abilene, TX. After leaving the service, my family relocated back to LaCrosse where my father joined his father in the family dental practice. Hence my interest in dentistry.

My family was also very involved with pet ownership. We always had small dogs at our house including several litters of puppies. My brother and I collected everything that swarmed, crawled, or flew that we could and enjoyed them before sending them back to their native habitat. Later, we graduated to hunting dogs and pursued upland gaming hunting. The big dogs required a lot of work and training and were considered members of the family, so very close relationships developed with our animals. We also had a close family friend with a dairy farm. As I attended school with their son, I spent many weekends on their farm, participating as one of the family members taking care of the cows, helping with crops, and general mischief as teenagers do. My mother encouraged my love of animals with the James Herriott book series about a small-town British veterinarian, later a 1978 British TV series, *All Creatures Great and Small,* which is what fed my consideration of veterinary sciences.

I had the good fortune to have several people *influence* my love of the sciences and natural curiosity. One of the first I can remember was Peggy Grelle, my sixth to eighth grade science teacher. She had a tremendous impact on me during these formative years, answering my many questions, putting up with all my volunteer extra credit crafts that hung on her bulletin boards in the classroom, to challenging me to read and learn as much as I could to help answer my many questions. During college, one professor stood out to me and *inspired* me by his personality and teaching style. His passion for chemistry soon became mine. He mentored and encouraged me and provided counsel during my struggles with concepts. As a result, I continued my academic path toward a Bachelor of Science in Chemistry. My equal interest in biology led me to take courses to complete a Bachelor of Science degree in Microbiology at the same time. Several biology professors played key roles encouraging my pursuit of the sciences.

While in college, I was fortunate to have a two-year internship working first at NECAL Corporation (LaCrosse, WI, 1988), a custom industrial adhesive systems supplier of acrylic solvent-based PSAs for automotive, industrial, and appliance markets. And later at Northern Engraving Corporation (Sparta, WI, 1989), a manufacturer of metal trim, nameplates, dials, and decorative trims for appliances. Northern Engraving was the parent company of NECAL. While working at NECAL, Bob Ebner was the resident chemist on staff supporting the formulation and coating of adhesives to a wide variety of substrates for automotive and appliance applications. Under Bob's guidance, I was exposed to industrial operations and protocols. I learned analytical techniques supporting raw material and final product testing, participated in novel prototyping for automotive applications, scale-up of solvent-based adhesive formulations, and industrial coating operations on a 300-foot, multi-zone oven curing and laminating adhesives on 52-inch roll stocks. His support and encouragement as well as his teaching and mentoring approach strengthened my desire to work in the sciences. While at Northern Engraving, I had other staff chemists mentor me in R&D and testing of materials and products and I gained additional knowledge and exposure to various manufacturing techniques including molding, printing, and coating of plastics and metals.

Upon graduation, I joined Dow Corning and began my career path under Dimitris (Dimi) Katsoulis. Dimi was like a scientific father figure to me and was responsible for much of my early exposure to silicone technology and contributed to my energy for learning. Throughout my tenure at Dow Corning, I had the great pleasure of working with the likes of John Kennan, Don Kleyer, Don Liles, Maris Zimelis, Bill Schulz, Mike Starch, Kimmai Nguyen, Mike Ferritto, and many, many other fellow scientific researchers who imparted wisdom and knowledge that helped inspire my career. These experiences and relationships inspired me to "pay it forward."

For my *initiative*, I wanted to provide similar experiences to new researchers joining the companies I worked for. I volunteered to mentor fellow members of our teams (new and experienced) as well as provide technology and process education through informal lunch & learn seminars, training sessions, and course instruction. As my role changed to management, I provided career guidance through performance counseling and goal setting, one-on-one review sessions, mentoring, and encouragement. My hope was to provide an environment and access to inspire others to achieve their goals or at least begin a pathway of exploration to finding theirs.

My career would be nonexistent if not for the support of my wife, Suzanne. We have been married for 28 years and live in Midland, MI. Suzanne has an accounting degree from Central Michigan University and has recently retired as the office manager of Smith-Miner Funeral Home, in Midland. She is a strong supporter of my career and has always been there through the good times and the bad times and is the source of my inspiration and confidence. She is not only my best friend, but my biggest supporter. We have five children: Megan (41), Tony (37), Mason (33), Benjamin (27), and Kelly (25). All of them are very successful and continue to be a huge part of our lives. We also have five grandchildren: Ray and Harry (10), Frances (6), Colton (4), and Milo (1.5), and we love to spend as much time as possible with them and find time to travel and see them whenever possible. We

currently have two Siberian Huskies, Bandit (2.5) and Shasta (11). They are full of energy, crave attention and play time, and are considered equal members of the family. Unfortunately, our family suffered a loss recently losing our third Siberian Huskey, Mya (12), due to age and health issues.

When not at work, I enjoy spending time hunting and fishing, kayaking, biking, walking, traveling, and working with my hobbies. My favorite hobbies include rock collecting/polishing, beer can-collecting (8,000 cans), ammunition reloading, and target shooting. I utilize these activities as my change of focus and application of my energy to accomplish something relaxing and creative. Over the course of raising five children, we were very active in our church, school functions, community events, and of course extracurricular activities. Suzanne and I were active in school and sports functions as coaches, assistant coaches, board members, volunteers, organizers, and participants in STEM programs, T-ball, soccer, basketball, softball, hockey, figure skating, cub scouts, and football. Despite the enormous commitment of time and energy, it brought us together as spouses, as a family, gave time and talent to the community and school districts, enriched our religion, and allowed us to develop many deep and lasting friendships.

If asked what I would like to be remembered for, or known for, it would be my energy and desire to promote enthusiasm around scientific education and careers, mentoring and encouragement of others, and influencing those that may have doubts or uncertainty, whether career related or with personal struggles. These impacts are far more important to me than the successes and awards I have received over the course of my career. As I approach the end of my work career, I hope that I can continue to influence and guide the next generation of scientists as they discover their own paths.

What would you like to leave to the next generation? What advice would you pass along to others thinking about entering into the sciences?

The advice I would share would be multifaceted (apologies for the length!):

- I would recommend a strong work ethic, always striving to give your best even during challenging or difficult times. A strong work ethic is respected, inspires others, and drives careers.
- Take initiative. Don't wait around for others to do the work or develop the plan or strategy. Jump in and give your thoughts and opinions and ask questions when in doubt. Chances are that others in the room have the same question but are unwilling or afraid to ask.
- Take charge of your career. Develop a plan for your path and seek company resources to help you with that vision. Work with your direct manager as well as seek input from other peers or leaders both inside and outside of the group or team you work with. Having other perspectives can help shape your vision.
- Innovate and generate ideas! Keep up with scientific advancements and technology by utilizing scientific articles, patents, books, conferences, academia, and your peers.
- Network whenever possible! Good networking and communication skills open doors and create opportunities. However, a word of caution, … make sure you have substance with your actions, otherwise people see through those that are not genuine and trying to advance without actually performing tangible work or project outcomes. This doesn't leave a good impression.
- Join and participate in a professional organization such as ACS, AIChE, etc. These are great opportunities for participation in committee positions, volunteering, and networking.
- Never stop learning. No matter how many degrees you have or from what prestigious university or previous job experience, there is always more knowledge and wisdom available, … much of it free. Embrace it.
- Remember, you are a professional, … act like one.

- Practice work/life balance. This is easily spoken but often difficult to do. Many people feel that if they are not laser focused on work 110% of the time, they are not doing enough or are attempting to overachieve. I've seen many failed marriages/relationships/families/careers when the work/life balance is *out of balance*.
- Finally, have passion around your chosen career. Big salaries and responsibility are exciting and rewarding unless you truly do not enjoy and embrace your chosen career path, … choose wisely!
- Oh, and last but not least, … have fun with your chosen profession! Otherwise, it is not a career but just a job.

Where did you think your career would lead when you started?

In the beginning, I was unsure. I didn't always understand or follow the advice I shared above. I was naïve upon graduating from college despite having secured a job at Dow Corning prior to graduating. I was ready to leave the nest and begin my own life and handle whatever ups and downs life threw at me. In the beginning, it was overwhelming, and I struggled initially to find my path, my worth. It took time, sometimes your worst enemy, for me to develop my vision. I sought advice and counsel from peers, leaders, and those outside my profession to help me discover where my interests and values were. I participated in the local Midland Section ACS starting with the Younger Chemists Committee and eventually held committee and leadership positions which connected me to other professionals as well as to professors/teachers from local universities. I learned to develop my strengths, identify my weaknesses, and formulate a plan to overcome those weaknesses and plot my journey.

Personally, I felt I was below average and that was frustrating. These feelings may have been impacted by several poor experiences from managers during my career and their negative style of leadership and lack of encouragement. My goal was not to develop into "that" person. Rather, I wanted to build people up, not tear them down. Later, I learned and understood the adage, "we are our own worst enemy." Once you realize that, you have choices to follow your current path or be bold and blaze a different, often more challenging path. We all need to climb from the bottom rung of the ladder that we start our career on, to climbing high to achieve our career dreams. I realized my value and aligned myself to those who could encourage me, guide me, and bring out the best in me. It took time and required change but ultimately, I was successful and have enjoyed a very rewarding 35-year career spanning technical contributions at Dow Corning, Dow Chemical, and DuPont. During this career path, I participated in the development and commercialization of 16-plus products with $780-plus million sales revenue, 22 patents, 100-plus reports, and countless internal/external presentations, posters, articles, and awards. I am currently a technical manager responsible for the leadership and the careers of 16 people in DuPont Healthcare and am recognized as a silicone subject matter expert (SME).

My career road has not always been marked with positive memories. As with any role, there are circumstances that challenge our very desire to continue working. I've experienced them all from feeling undervalued, not recognized, overlooked for promotions or increased responsibilities, to feeling like a failure when not being able to provide adequately and timely recognition and advancement for my team members. However, looking back over this career and owning the struggles and difficulties I had in the beginning, I can honestly say I that I had fun, developed lasting friendships, enjoyed mentoring/teaching others, and hopefully inspired my colleagues to be their best. I hope your career can be as rewarding for you!

What is your greatest achievement so far?

For me, my greatest achievement or accomplishment has been to see a commercial product on the store shelves that contained a material I helped invent or developed. Working on a team with the focus of understanding

customer or market needs and trying to develop a solution to fit that unmet need was incredibly rewarding personally. Being involved from the "ground up" with concept development, prototyping on the lab scale, progression to pilot scale and onward to manufacturing scale as successful prototypes advanced through the evaluation and selection process was exciting. The real reward was picking up a commercial product on a store shelf, reading the ingredient list and seeing the material we worked months or years to develop in that product. I felt a true sense of accomplishment and pride whether impacting someone's health through medical technology development or building someone's self-esteem or image with personal care products. This has been my greatest reward!

Anything else you would like to share about yourself or your experiences. Readers love to also learn about your hobbies or other passions, anything that makes you, you.

I love the outdoors which includes hunting and fishing, kayaking, hiking/exploring, biking, walking, rock hunting, and beaches – love the beach – especially in the Caribbean and it has been too long since I've been there. As mentioned above, one of my hobbies is rock collecting. I enjoy rock polishing and own several rock tumblers and use this hobby as my time to unwind and create. Rock polishing gives me the chance to explore my artistic side and create beautiful works of art from nature's creations. I love to hunt for rocks along the Great Lakes shores and pick up any that appear to be interesting or visually appealing based on how they look when wet, their size, shape, color, and what type of rock they are. Take Petoskey stones for example. Most have a rough looking exterior that is not very visually appealing at first although they display evidence of the characteristic hexagon shape of the 350-million-year-old *Hexagonaria percarinata* coral. However, they don't look like much in this unrefined state. One can visualize the potential of what is underneath that rough exterior and this is where the fun and patience begin. Rock tumbling involves a process of slowly removing the rough exterior using different stages of abrasive grits to mimic the wave action rolling stones over sandy, rock-covered beaches to erode the rough exterior and begin to uncover the beauty that lies beneath the surface. I personally hand-polish Petoskey stones to their final, highly polished state due to their relative softness, giving each stone a personal touch. Then, the true potential of each stone is revealed.

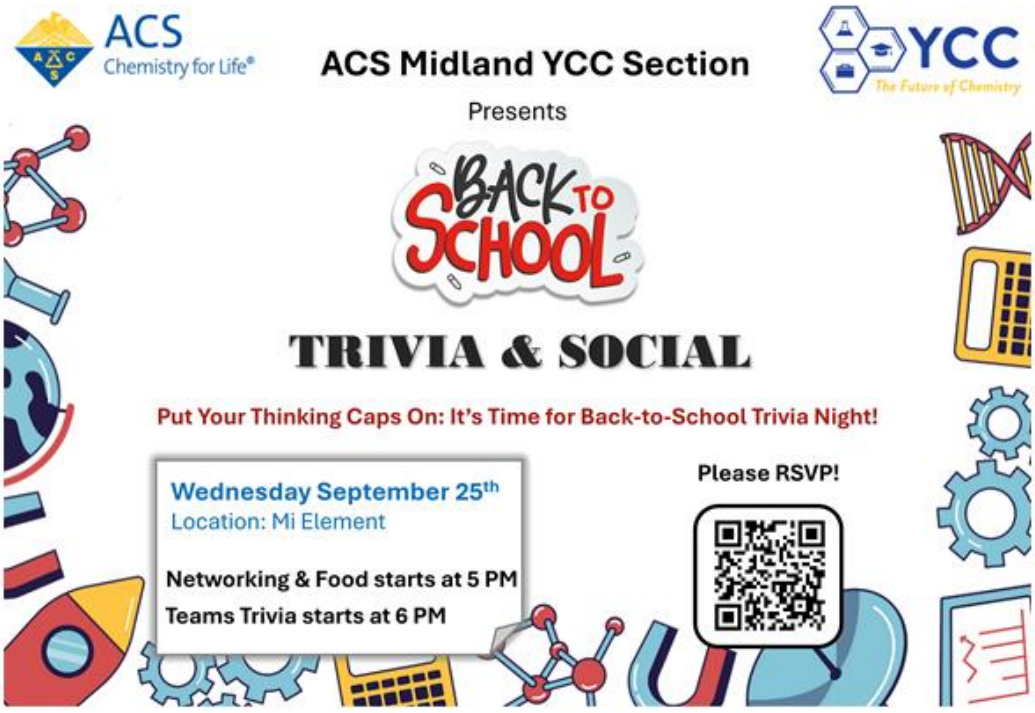
The development of a rock from unrefined to beauty follows a similar process as managing people. You may need to look below the surface to see someone's true value and it is important to dedicate the time and energy to help them see that in themselves.

Back to School Trivia & Social Event, September 25
Arpita Sharma, Young Chemists Committee, Midland Section ACS

Date and time: Wednesday, September 25, 2024
5:00 PM – Food and Networking starts
6:00 PM – Teams Trivia starts

Location: Mi Element Grains and Grounds, 3124 Jefferson Avenue, Midland

Food will be provided by the Midland Section ACS, but pre-registration is required. Please hover over the QR code in the graphic below to RSVP. Contact Arpita Sharma at arpita.sharma@dupont.com for any questions.



ACS Spring 2025, Abstract Deadline September 30

Steve Keinath, Midland Chemist Co-Editor, Midland Section ACS

Editor's note: The information contained in this article is reprinted, in part, from material provided in a couple recent email messages posted to all ACS members, dated September 4 and 23, 2024.

Became a Leader in the Chemistry Community
Submit an Abstract or the ACS Spring 2025 Meeting

The **ACS Spring 2025 Meeting** is the chance to share your research with the chemistry community. Submit your abstracts for open symposia for a chance to share your research with over 14,000 chemistry professionals. Visit the **ACS Spring 2025 Abstract Submission Page** for more information about submitting and the list of open symposia for in-person posters, virtual sessions, and In-person oral presentations.

The deadline to submit abstracts for ACS Spring 2025 is Monday, September 30.

Join us Virtually at the ACS Spring 2025 Global Virtual Symposium (GVS)

Share your research and exchange knowledge as a leader on the **ACS Spring 2025** virtual stage with thousands of virtual attendees in the science community. Join us in showcasing the power of international collaboration. **Submit your GVS abstract** for a chance to present **virtually in Asia, Africa, Europe, the Middle East, and Latin America time zones.**

Visit the **ACS Spring 2025 Global Virtual Symposium** page to learn more about the participating programming divisions and planned symposia open for submissions.

The deadline to submit abstracts for the Global Virtual Symposium is Monday, September 30.

2024 Central Regional Meeting (CERM), November 6-9

Steve Keinath, Midland Chemist Co-Editor, Midland Section ACS

Editor's note: The information contained in this article is reprinted, in part, from material provided in an email message posted to all ACS members, dated September 20, 2024.

Central Regional Meeting

The Confluence of Chemistry: Past, Present, & Future

November 6–9, 2024 | Pittsburgh, PA

Take advantage of early bird registration rates until Tuesday, October 1.

Registration for the **2024 Central Regional Meeting (CERM)** is now open. The 2024 CERM theme is **"The Confluence of Chemistry: Past, Present, and Future."** Our beautiful city of Pittsburgh is at the center point of three rivers. The Allegheny River and the Monongahela River join to form the Ohio River. In the same way, chemistry as a whole is built by the chemists of our past, the present-day discoveries, and the outlook of chemistry in the future. Through this theme, we will honor and celebrate the history and future of chemistry with our regional chemistry community in Pittsburgh and beyond.

Attending CERM 2024 offers several compelling benefits:

Networking Opportunities: Connect with fellow chemists, researchers, and industry professionals. This can lead to collaborations, job opportunities, and valuable professional relationships.

Cutting-Edge Research: Stay updated on the latest advancements in various fields of chemistry through technical symposia, poster sessions, and plenary lectures.

Professional Development: Participate in workshops and courses that can enhance your skills and knowledge, helping you excel in your career.

Exhibition and Resources: Explore the exhibition to discover new products, technologies, and services that can aid your research or work.

Cultural Experience: The event is held in Pittsburgh, a city known for its rich history and vibrant cultural scene. Enjoy the local attractions and the unique theme of the meeting, "The Confluence of Chemistry: Past, Present, and Future."

Community Engagement: Be part of a community that celebrates the history and future of chemistry, honoring the contributions of past chemists while looking forward to future discoveries.

The early bird rates for registration are available until Tuesday, October 1.

To register, go to Registration - CERM 2024 (acscerm2024.org)

Lunch and Learn Seminar Event, October 1

Krishnaja Duvvuri, Chair-Elect, Midland Section ACS

Route Design and Development of Adavelt™ Active – A Corteva Fungicide

Date and time: Tuesday, October 1, 2024, 11:30 AM to 1:00 PM
11:30 AM-12:00 PM – Lunch and Networking
12:00-1:00 PM – Seminar Presentation

Speaker: Nicole Hough, Process Chemist, Corteva Agriscience

In-person location: MSU St. Andrews (1910 West St. Andrews Road, Midland)
Virtual meeting: Microsoft Teams **Join the meeting now** Meeting ID: 218 448 031 904 Passcode: 9fsFVD

Lunch will be provided by the Midland Section ACS: **RSVP here** (only if you plan to attend in person)
Contact Krishnaja Duvvuri at kduvvuri@dow.com for any questions.

Seminar Abstract:
The design and synthesis of the broad-spectrum fungicide, Adavelt, embodies multiple Green Chemistry principles. The active ingredient was strategically designed to deliver maximum biological activity and rapidly degrade after application to minimize its environmental impact. Unlike many chiral crop protection molecules, Adavelt was purposely developed as a single stereoisomer which can be derived from the natural antipodes of lactic acid and alanine. This talk will highlight how the principles of Green Chemistry were used to guide the improvement of the synthetic route to ultimately deliver a convergent stereoselective synthesis that is more sustainable and cost effective. In addition, this talk will discuss the goals and thought process of process chemists and engineers as a molecule moves toward becoming a product.

Speaker Biography:
Nicole Hough is a process chemist at Corteva Agriscience. She began her career in 2014 at Dow Chemical in Core R&D, after obtaining her PhD from Michigan State University. Nicole joined Corteva when it spun off from Dow and relocated to Indianapolis with her family. After several years, she returned to Michigan in a newly created role to better support the Pilot Plants in Midland. Over the course of her career, Nicole has worked on many molecules at various stages in the pipeline from early-stage process development through launch. She has supported at least a dozen pilot campaigns both internal and external, as well as several commercial start up campaigns. Nicole loves being a process chemist due to the complex challenges as well as a variety of people across different functions that you get to work with. It's also pretty neat to get to see your vial-scale chemistry go on to produce hundreds of kilos per batch.

Midland Section ACS Board of Directors 2025 Election

Raghida "Reggie" Bou Zerdan, Chair, Nominations & Elections Committee, Midland Section ACS

The annual election for the Midland Section ACS Board of Directors will be open starting **Monday, October 14, 2024, and will close on Monday, November 4, 2024**.

The positions that are open for election are:

- Chair-Elect[1] (1-year term)
- Secretary (1-year term)
- Treasurer (1-year term)
- Chair, Nominations & Elections (1-year term)
- Directors (3 open positions, 3-year terms)

[1]The Chair-Elect position involves an overall three-year leadership commitment. The candidate elected to the Chair-Elect position will serve the first year as Chair-Elect, the second year as Chair, and the third year as Past Chair.

The candidates running for open Board positions are as follows:

Position (# of vacancies)	**Candidates**	
Chair-Elect (1)	Todd Pangburn	Judith Espinoza Perez
Secretary (1)	Melissa Aplan	Paulami Majumdar
	Ziyue Zhu	--
Treasurer (1)	Ericka Bruske	Justin Massing
	Heather Spinney	Zhiguan Yang
Chair, N&E Committee (1)	Raghida "Reggie" Bou Zerdan	Milton Repollet Pedrosa
Directors (3)	Allison Abdilla	Anne-Catherine Bedard
	Marc-André Courtemanche	Zhifang Du
	Sami El Awad	Mark Jones
	Rowan Katzbaer	Ashlin Sathyan
	Juan Venegas	Hunter Woodward

Below are the job descriptions for each of the open positions and the professional profile summaries for all of the candidates.

-- --

Chair-Elect Job Description:

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 in the following January (2026). They serve on the Board of Directors and the Executive Committee.

Candidates for Chair-Elect:

Todd Pangburn, Ph.D.

Todd Pangburn is a Lead R&D Scientist II with DuPont – Liveo™ Healthcare Solutions R&D. With over 10 years of industrial R&D experience, Todd has led and supported the development of multiple new products with combined revenue of over $100 million. He has a true passion for new business and new product development, working at the interface where the profitable intersects the possible. Todd has deep technical expertise in polymer science including polymer processing, synthesis, characterization, and formulation, as well as significant market knowledge in the biopharma processing, medical device, and cell & gene therapy industries. He has many external market ties including leading the cell & gene therapy whitepaper subcommittee of the BPSA (Bio-Process Systems Alliance) industry trade organization.

Outside of new product development, Todd also serves the Liveo™ business as the Innovation Portfolio Champion, managing the business' innovation portfolio and stage-gate processes, the Digital Transformation Strategy Lead, and the Open Innovation Business Focal Point. Todd has also chaired the Michigan Technical Community (MTC) within DuPont for over 5 years and organized a multitude of DuPont-internal events through this organization including yearly TechCon North technical conferences.

Todd holds a Ph.D. in Chemical Engineering from the University of Minnesota where he spent his days, nights, and weekends synthesizing block copolymers, bioconjugating peptides, and attempting to kill cancer cells *in-vitro*. He also holds a B.S. in Chemical Engineering with a minor in Chemistry from Texas A&M University.

Building communities has been a consistent theme in Todd's career and he hopes that he can leverage his skills and network to further strengthen the local ACS community and energize the incredible pool of talent that exists in the greater Midland region.

Outside of work Todd devotes what little time remains after being the best father and husband he can be to a few hobbies, including photography, tennis and pickle ball, and dabbling in writing sci-fi fiction.

Judith Espinoza Perez, Ph.D.

Judith Espinoza Perez is a TS&D scientist in Dow Construction Chemicals, focusing on the development and implementation of additives for roller-compacted concrete and cement-based tile adhesives. Judith joined Dow with more than 15 years of experience in the development of bio-based materials and non-metallic materials for their application in the food, chemical, oil and gas (O&G), and construction industries. She specializes in composite materials, elastomers, thermoplastics, and thermosets.

Her career started in Mexico working in the development of bio-base products, which led to her path back to graduate school in the USA, focusing her research on the synthesis of bio-based resins applied to composite materials. After graduate

school, she joined Air Products Performance Materials where she continued her journey in thermoset chemistry and composite materials. Most recently, before joining Dow, she worked for the O&G industry as a non-metallics materials expert consolidating new business and expanding the knowledge on the application of non-metallics in carbon capture sequestration.

She has served as a chair in different committees for the American Society of Agricultural and Biological Engineers (ASABE) and for the American Petroleum Institute (API). She is an active member of the Roller-Compacted Concrete Council, Sigma Xi, Society of Plastics Engineers (SPE), Society of Petroleum Engineers (SPE), and the ACS.

Judith earned her PhD in Biosystems Engineering from North Dakota State University (NDSU). Judith also holds an MS in Biochemical Engineering from the Instituto Tecnológico de Veracruz and a BS in Chemical Engineering from the Universidad Autónoma de Coahuila in Mexico.

Judith lives in Midland, MI, with her daughter Maria (15 years old) and Ollie (a 7-year-old shih-tzu). Judith enjoys cooking, reading, traveling, and learning about coffee-brewing techniques.

-- --

Secretary Job Description:

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:

Melissa Aplan, Ph.D.

Melissa is currently an Associate Research Scientist in Dow Performance Silicones Process R&D where her work focuses on process development and scale-up of silicone-organic copolymer innovation products. Since joining Dow in 2020, Melissa has worked on projects covering a broad range of chemistries (hydrosilylation, silazane, epoxy-amine, Piers-Rubinsztajn) and process technologies (batch reactor, high-shear change-can mixer, twin screw extruder) to support commercialization of products serving a variety of markets (personal care, fluoro-replacement, polyurethane additives, coatings). She is a member of the Silicon Academy technical resource platform where she leads the organization and publication of the quarterly newsletter.

Prior to Dow, Melissa earned a B.S. in Chemistry from the University of Maryland and a Ph.D. in Chemical Engineering from Penn State University. Her PhD thesis research focused on the design, synthesis, and characterization of fully-conjugated block copolymers to understand mechanisms of charge generation in organic electronics. Melissa also spent one year at PPG developing R&D 100 Award winning Ambient Reactive Extrusion additive manufacturing technology.

Outside of work, Melissa enjoys traveling, hiking, running, biking, and cooking/eating.

Paulami Majumdar, Ph.D.

Paulami joined Dow in 2018 and is currently an Associate Research Scientist in Core R&D, Chemical Science organization at Dow. She works on using quantum simulations for heterogeneous and homogeneous catalysts to investigate structure-property relationships for chemical reactions. At Dow, she has contributed to diverse technical areas such as olefin oxidation, alkoxylation, carbonylation, and siloxane chemistries. Paulami is the Dow PI on a collaborative UPI project on fundamental kinetics of plastic pyrolysis with Penn State and Northwestern University. Outside of technical work, Paulami currently serves as a peer reviewer for manuscripts in various journals, including ACS Catalysis, and is a member of the Early Career Editorial Board of the Journal of Catalysis. She is also serving as Secretary in the local ACS Diversity and Inclusion team at Midland, MI.

Paulami earned her Bachelor's degree in Chemical Engineering from Jadavpur University, India, and her Ph.D. in Chemical Engineering from Purdue University, USA. During her Ph.D., she worked on atomistic modeling using Density Functional Theory (DFT) simulations for heterogeneously catalyzed reactions.

Ziyue Zhu, Ph.D.

Ziyue (Zoe) Zhu is currently a Senior Research Specialist in the Dow Coating Materials (DCM) group. In this role, Ziyue mainly contributes to research and product development on high performance acrylic-based 2K durable road marking technology with various application methods and supports potential scale-up activities towards commercialization. Ziyue is a steering team member for the Young Researchers Community (YRC) and organized the 2024 GLFO Great Lakes Poster Session along with the planning committee within Dow.

Prior to joining Dow in 2023, Ziyue received her Ph.D. in Chemistry from the University of California, Santa Barbara (UCSB) under the joint supervision of Prof. Gui Bazan and Prof. Javier Read de Alaniz researching on molecular design, simulation, synthesis, and characterization of narrow-bandgap non-fullerene acceptors type semiconductors targeted for efficient, semi-transparent, and eco-friendly (green solvent processable) near-infrared optoelectronics applications.

Outside of her research, Ziyue was the committee member of Diversity, Equity, and Inclusion in UCSB Chemistry Department, working on developing a Strategic Action Plan (SAP) for the long-term goals of increasing students, faculty diversity, and implementation of curriculum improvements. She is also passionate about volunteering in scientific outreach and participated in Science Nights demonstration organized via local elementary schools, presenting hands-on activities to students and their families to inspire interest into Materials Science-related topics.

-- --

Treasurer Job Description:

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.

Candidates for Treasurer:

Ericka Bruske, Ph.D.

Ericka Bruske joined Dow Performance Silicones Product Development as a Senior Research Specialist in August 2023. In this role, she focuses on the development of new catalysts and textile coatings. She is originally from Saginaw, MI, but grew up in Chesapeake, VA, and earned her B.S. Chemistry degree from Virginia Tech. She is a chemistry PhD graduate from the University of Illinois Urbana-Champaign where her advisor was Alison Fout. At UIUC, Ericka worked as part of a University Partnership Initiative (UPI) with Dow centered around new platinum hydrosilylation catalysts. Since joining Dow, she has joined the local YCC chapter, which is going to have a kick-off event this year.

At UIUC, Ericka enjoyed being involved in student groups including being the chair of the chemistry department student leadership council in 2022. In this role she actively promoted networking and team-building opportunities by reintroducing events continued today like the annual summer volleyball league and the Fall/Spring cookouts. She was also part of the UIUC Women's Chemist Committee where she participated in the annual summer camp wherein kids were invited to come to UIUC and participate in fun science demonstrations ending with liquid nitrogen ice cream.

At Virginia Tech, Ericka was the Treasurer for the Gamma Iota chapter of Alpha Chi Sigma, the chemistry fraternity, which held over 250 active members at the time. This role encompassed maintaining the bank account, collecting all dues, running the fundraising efforts, and the design and sale of fraternity merchandise.

Outside of work, she enjoys reading, cooking, and time outdoors with her family.

Justin Massing, Ph.D.

Justin Massing joined Dow as an Associate Research Scientist in May 2022 where he is a member of the Process Chemistry group in Engineering and Process Science within Core R&D. In this role, he is focused on process optimization and scale-up of materials to support various Dow businesses. Prior to Dow, Justin was an Assistant Professor at the University of Michigan-Flint. In addition to teaching various lecture and laboratory courses, Justin maintained a research program aimed at creating reaction-based probes for monitoring biologically relevant species via ^{19}F nuclear magnetic resonance and fluorescence spectroscopy. While at UM-Flint, Justin served on numerous committees, including those involving allocation of scholarships, grants, and awards. He is currently the treasurer for the Midland Section ACS and a member of the 2024 D&I Steering Committee.

Justin obtained his B.S. from Florida Southern College in 2008, his Ph.D. from the University of New Hampshire in 2013, and conducted postdoctoral research at Northwestern University from 2013-2016. Justin lives in Midland with his wife Jordan, son Torsten, and their three cats. In his free time, Justin enjoys traveling, cooking, running, and playing games.

Heather Spinney, Ph.D.

Heather Spinney is currently a Principal Research Scientist in the Catalysis Group in Chemical Science, Core R&D, Dow. Since joining Dow in 2010, her research activities have focused on homogeneous catalysis, including the design and synthesis of new ligands for transition metal catalysts, catalyst screening experiments, and mechanistic studies of reactions of interest. For her mechanistic work, Heather has developed expertise in high pressure NMR spectroscopy (HP-NMR) and has helped build the capability at Dow. Her work has contributed to programs with various businesses, including Oxygenated Solvents, Consumer Solutions, Hydrocarbons, Home & Personal Care, Monomers, Polyurethanes, and Plastics & Specialty Packaging.

Heather is very active in the external Organometallic Chemistry community. She was the chair of the 2023 Gordon Research Conference on Organometallic Chemistry and sits on the editorial advisory board for the ACS Journal Organometallics. Most recently, she co-organized a symposium for the winner of the 2024 ACS Award in Organometallic Chemistry at the ACS Spring Meeting in New Orleans. From 2020-2023, Heather was a member of a National ACS Award Selection Committee and chaired the committee in her final year. Closer to home, Heather has been a long-time volunteer with the Midland NOBCChE Section (2014 to present), helping to organize the Great Lakes Bay Science Bowl and other educational science activities. She has also been a reading tutor with the Midland-based Legacy Center since 2018. Heather was recognized as a 2021 Rising Star by the ACS Women Chemists Committee (WCC) for her technical and volunteer work. She also received an Emerging Leader Award from the Society of Women Engineers (SWE) in 2019.

Originally hailing from the Maritime Provinces of Canada, Heather earned a B.Sc. degree in Chemistry at Mount Allison University in Sackville, New Brunswick and a Ph.D. in Inorganic Chemistry from Dalhousie University in Halifax, Nova Scotia. Prior to joining Dow, she completed two postdoctoral fellowship positions at the Massachusetts Institute of Technology and the University of Ottawa, Canada. Her doctoral and postdoctoral research involved both main group and transition metal coordination chemistry.

Heather lives in Midland with her husband Josh, dog Trixie, and cat Sadie. In her spare time, she enjoys reading, live music, nerdy board games, knitting, and Pilates.

Zhiguan Yang, Ph.D.

Zhiguan Yang joined DuPont Liveo™ Health Care silicone elastomer R&D Team in October 2022 as a lead scientist. Prior to the role in DuPont, Yang was an application scientist and TS&D in Thermoplastic Polyurethane for eight years in Lubrizol with two patents. Prior to that, Yang had experience in R&D in developing polyhydroxyalkanoates formulas for blown film application in Metabolix, Inc. and starch foam sheet formula developments for thermal insulation. Yang obtained his Ph.D. in Chemical Engineering from Michigan State University under the guidance of Prof. Ramani Narayan, where his work focused on polymers from natural resources. In his free time, Yang enjoys time with his kids and coding.

-- --

Chair, Nominations & Elections Committee Job Description:

The Nominations & Elections Committee is charged with identifying qualified candidates for leadership positions in the Section, setting up, and certifying the elections.

Candidates for Chair, Nominations & Elections Committee:

Raghida "Reggie" Bou Zerdan, Ph.D.

Current Leadership Roles:

- Chair, Nominations & Elections Committee, Midland ACS, 2024-present
- Event Coordinator, Si-Academy at Dow, 2021-present
- Co-chair, Young Researchers Community (YRC) at Dow, 2023-2024
- Finance officer of the YRC at Dow, 2024-present

Raghida "Reggie" Bou Zerdan is currently an Associate Research Scientist in the Dow Performance Silicones – Emulsions, Blends, Powders – Product Development group. In this role, Reggie is working on addressing the market needs of end-use industries for energy efficiency and substrate protection by developing sprayable water-based coatings for high temperature insulation and for condensation service. In addition, Reggie is supporting the development of an environmentally friendly slip additive for leather coatings that is currently entering the final commercialization stages.

Prior to joining Dow in 2019, Reggie was a postdoctoral fellow at the University of California Santa Barbara. There, she worked with industrial collaborators to develop polymeric additives for various applications such as triple function car-engine lubricants, dispersants, and anti-scalants. Reggie holds a Ph.D. in Organic Chemistry from the University of Florida focused on the development of "smart" π-conjugated oligomers capable of mutually controlling the supramolecular architecture and tuning the optoelectronic properties in solution and the solid-state of functional organic semi-conductive materials.

Outside of work, Reggie enjoys spending time with family and friends, reading, and all kinds of outdoor activities.

Milton H. Repollet Pedrosa, Ph.D.

Milton H. Repollet Pedrosa is currently a Research Scientist for the Dow Consumer Solutions Engineered Materials Product Development.

Milton joined Dow Chemical Company in 2014 as part of the R&D organization for Dow Coating Materials – Additives business. In this early role, Milton led the synthetic efforts for rheology modifiers and dispersants for the Architectural Coating market. In 2017, Milton joined Dow Consumer Solutions, Advanced Elastomers Product Development. In this role, Milton focused on developing Silicone moisture-cure coatings and sealants along with waterborne Silicone coatings. Contrasting the previous work at Dow Coating Materials, Silicone moisture-cure sealants are Dow-branded fully formulated technologies. This opportunity allowed for the design and development of unique materials that are made in the lab, scaled up, and commercialized by the R&D group. Lastly, in 2024 Milton joined Engineered Materials Product Development in 2024 focusing on protective coatings for electronic materials and the automotive industry.

Milton completed his Ph.D. in Polymer Chemistry at the University of Wisconsin - Madison. Milton is passionate about his work and enjoys teaching about the world of coatings (both silicones and acrylics) to people inside and outside of the Dow Chemical Company. Outside of work, Milton enjoys golf, cycling, running, live music, and having conversations with friends. Milton enjoys spending time with his wife and is a proud dad of two girls, Lucy (6) and Madison (4).

-- --

Director Job Description:

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 to the Executive Committee, which may require attendance at additional meetings.

Candidates for Director:

Allison Abdilla, Ph.D.

Allison is currently a Senior Research Specialist for Dow Performance Silicones Product Development.

Allison joined Dow on RAP in June 2022. During her first assignment in DPS-PD, Allison worked on the Hybrids Polymers & Silanes team supporting the Sustainable Silicones and Custom Synthesis portfolios. She then completed two 6-month rotations in Analytical Sciences in Midland and Dow Performance Monomers in Collegeville, PA. Allison is currently the leader of the Si Academy team and has served as seminar chair for the Young Researchers Community (YRC) steering team. Allison also organized the 2023 Si symposium along with the planning committee within Dow.

Allison received her Ph. D. in Chemistry in 2022 from the University of California, Santa Barbara under the joint advisement of Professor Craig Hawker and Professor Javier Read de Alaniz focusing on the synthesis of chain-

end functional materials through living anionic polymerization. She also actively contributed to the Dow-UCSB UPI titled "Phase Behavior Fundamentals of Silicone Organic Hybrid Materials" focused on the synthesis, characterization, and application of siloxane- and (meth)acrylate-based polymer blend compatibilizers. Outside of her research, Allison was the Co-President of the Chemistry Professional Development team and led a team of 25+ graduate students to organize the annual UCSB Chemistry Career Day for over 130 participants and 33 industrial representatives.

In her spare time, Allison enjoys exploring new food spots, cooking, and spending time with her friends.

Anne-Catherine Bedard, Ph.D.

Anne-Catherine "AC" Bedard joined Dow in 2018 in the Catalysis group in the Chemical Science Capability of Core Research & Development. Her research activities involve catalyst development and reaction optimization. She is the expert in flow chemistry reactor and automation/AI on the discovery scale. Her research mostly aligns with Dow Performance Silicone, Dow Polyurethanes, and Dow Industrial Solutions. She has authored or co-authored 17 external publications, 3 book chapters, 43 internal CRI, and 12 patents applications. She received the ACS Industrial Early Career Investigator Award in 2024.

Prior to joining Dow, Anne-Catherine earned a Ph.D. in Organic Chemistry from the University of Montreal in Canada (Vanier Fellow, highest distinction in Canada) and completed a postdoctoral fellowship position at the Massachusetts Institute of Technology with Tim Jamison. Her doctoral and postdoctoral research involved methods development, catalysis, total synthesis, and continuous flow chemistry.

On a personal side, she enjoys spending time with her husband and two young daughters, being active (running, biking, Pilates), and enjoying Michigan's outdoors. Anne-Catherine has been volunteering with the ACS for the past 7 years and is currently the co-chair of the Midland Section ACS Inclusion and Diversity Committee. She won the Midland Section ACS Award for Outstanding Achievement in the Promotion of Diversity in Chemistry, Related Sciences, and Engineering in 2023.

Marc-André Courtemanche, Ph.D.

Marc earned his PhD from Université Laval, and after a postdoc at MIT, joined Dow Performances Silicones in 2017 where he is now a Research Scientist. Marc's work is focused on developing new sustainable technologies ranging from CO_2 transformation to the development of bio-sourced products or improving efficiency in industrial processes.

He is passionate about learning, mentoring, and the history of chemistry. He led the Si-Academy through a transformation that greatly improved access to learning materials, onboarding, and improved knowledge retention. Marc organized the chemical heritage symposium for CERM in 2019 and served as program co-chair for the 52nd Silicon Symposium. He currently serves as a Director for the Midland Section ACS and hopes to continue engaging with the local chemistry community in this role over the next three years.

Zhifang Du, Ph.D.

Zhifang Du is a Senior Research Specialist at Dow on RAP. His current assignment is with FAMS, working on acrylic and biopolymer blends for oxygen barrier used in paper coating and auto power usage tracking system design for Nine-Layer and MesPack Line in Pack Studios. He is currently the Secretary of the 2024 Dow Discussion Group on Interface Science (DDGIS) Steering Committee.

Zhifang worked in a startup company in the Bay Area before he joined Dow in 2023-2024. He managed an auto pilot line and led projects on transparent solar windows as a PV Module Engineer. His responsibilities included planning daily operations, system maintenance, and technician guidance. Zhifang's delivery helped the startup save millions of dollars in the product line design.

Prior to joining industry, Zhifang received his PhD in Materials Chemistry from the University of California, Santa Barbara. His research focused on advanced organic electronic devices, particularly organic solar cells and wearable photodetectors. He led a 3-year project supported by the Air Force focusing on green-solvent-processing organic electronics, keeping close collaboration between UCSB and five research groups in France, South Korean, and United States. He was also an active volunteer for the Scientific Outreach and Excellence Program at UCSB.

In his free time, Zhifang is an active reviewer for RSC, ACS, and MDPI. He also enjoys traveling, hiking, and spending time with his cat, Joey.

Sami El Awad, Ph.D.

Sami El Awad holds a B.S. in Mechanical Engineering from Florida International University and a Ph.D. in Materials Engineering from Purdue University. Under the mentorship of Prof. Jeffrey Youngblood, Sami's doctorate studies focused on processing of nano-cellulose materials (e.g., cellulose nano-fibrils and cellulose nano-crystals) into different macro-scale forms like films, fibers, coatings, and high-performance composites for use in applications like packaging and construction.

After completing his doctorate work, he joined DuPont in 2021 as a Senior Research Investigator working for the Liveo™ Healthcare business based in Midland, MI. His current role is a combination of product development (R&D) and process engineering. His work focuses on developing new silicone and silicone-hybrid adhesives technologies for use in transdermal drug delivery and medical device construction and attachment. In 2023, Sami led the R&D and scale-up efforts for the commercialization of a new conductive silicone adhesive (DuPont™ Liveo™ Soft Skin Conductive Tape).

In addition to his primary job duties, Sami has taken on a mentorship role training and on-boarding new Ph.D. hires in the Healthcare group. Sami also acted as the hiring focal point for the Healthcare group and is currently part of the campus recruiting team targeting graduate students from Purdue University. Additionally, Sami has actively participated in employee resource groups like CARE and is part of DuPont's Early Career Board.

Prior to his role in DuPont, Sami worked for Cummins, Inc. as a Fluids Metrology engineer where he designed different parts and components of the fuel system of diesel engines and other testing equipment. Outside of work, Sami enjoys gathering with friends, hiking, cycling, and taking long walks in the woods with his spouse and two dogs, Paco and Luna.

Mark E. Jones, Ph.D.

A love of science and a passion for chemistry propelled a farm kid from Virginia to a satisfying industrial career. Mark Jones retired in March 2021 as Executive External Strategy and Communications Fellow for Dow Chemical, having spent a decade on the CTO's staff. He retired with responsibility, among other things, for next generation sustainability goals associated with innovation at Dow.

Mark is currently Creative Director at MJPhD, LLC, an independent consulting business. Mark consults about the chemical industry, improving communications, presentation of quantitative data, and topics related to science. He now writes a monthly column for *Design World*, writes science articles for a variety of outlets, and does the occasional graphic arts project. Mark volunteers time with the ACS, AIChE, and other professional organizations. He has also hosted webinars for the National Academies and other organizations. He continues to support the awards ecosystem, serving as a judge for the R&D 100s, Edison Innovation Awards, and others. He frequently speaks at universities, both as a guest lecturer and as a keynote speaker.

Mark is a frequent contributor to the American Chemical Society, as previous chair of the Midland Section ACS, writing for *Industry Matters* and, previously, *Industry Voices*, hosting webinars, currently serving on the Communications and Public Relations and National Historic Chemical Landmarks committees, and former Corporation Associates member. In 2017, he was named a Fellow of the American Chemical Society, recognized for his commitment to communicating chemistry. Mark currently serves on and is past co-chair of the National Academy's Chemical Sciences Roundtable. He is a co-author on the recently released National Research Council reports on ARPA-E and "Sustainable Development of Algal Biofuels in the United States." Mark also volunteered his services in creating videos for the American Center for Life Cycle Assessment in 2020. Mark was a member of the Board of Directors of the Biotechnology Innovation Organization (BIO) Industrial and Environmental Section, serving on Communications, Regulatory, and other committees, and was an active member of the American Chemistry Council's Biobased Chemistry Network. The White House's Advanced Manufacturing Partnership was a focus from 2013-2015, looking both at technology options and improving scale-up of new technologies. He participated in a number of World Economic Forum events, leading discussions around energy and bioproducts. He chaired DOE review panels for the Office of the Biomass Program from 2007-2011 and continues to serve as a reviewer for DOE and other organizations. He supports awards that recognize scientific advancement. He currently serves on the Edison Awards Steering Committee, served on the R&D 100 Steering Committee, and served or serves as a judge for BIO's Rosalind Franklin Award for Leadership in Industrial Biotechnology and Agriculture, ACS's Heroes of Chemistry, the SCI's Moore medal, the BIG Innovation Award, the R&D 100 Awards, and a collection of Dow internal awards.

Mark is a frequent keynote speaker. His talks include multiple times at Chemicals America conferences, American Chemical Society national, regional, and local meetings, the 2017 SATA conference, AIChE national and local meetings, multiple R&D 100 conferences, American Association for the Advancement of Science National Meetings, the Edison Universe Meet the Innovators Forum, R&D 100 Conference, REFOCUS, American

Center for Life-cycle Assessment, Sustainable Manufacturer, Plastics Recycling, National Academy events, and many universities.

Mark joined Dow in 1990 following a graduate career that had very little to do with his ultimate career path. He followed a degree from Randolph-Macon College with a Ph.D. from the University of Colorado-Boulder where he studied gas-phase ion molecule chemistry – not an area of great industrial interest. A post-doc at the Cooperative Institute for Research in Environmental Science preceded his coming to Dow. His early Dow career was spent in Catalysis, in what is now Core R&D. Mark discovered a family of catalysts useful for the conversion of ethane directly to vinyl chloride, and other catalysts for both chlorocarbon chemistry and alkane activation. Moves to Performance Plastics, Hydrocarbons, Chemicals, Energy and Licensing R&D, Ventures and New Business Development, and Energy Storage Devices followed. Mark co-directed the Renewable Chemistries Expertise Center (RCEC) for over a decade. Mark touched many areas of technology, including experience in chemical processing, the processing of inorganic materials, fuel cell development for both stationary and portable power applications, battery materials, cellulosic conversion, polymer recycling, and broad technology exploration.

Rowan Katzbaer, Ph.D.

Rowan is a Senior Research Specialist in Chemical Sciences, Core R&D, at Dow. They are part of the inorganic synthesis group where they work primarily around heterogeneous catalysis. They have contributed to various projects that support the hydrocarbons, polyurethanes, and performance monomers businesses.

Rowan obtained their PhD in chemistry at the Pennsylvania State University in 2023. There they researched materials for clean energy generation, with an emphasis on transforming theoretical insights into measurable material properties and applications. Rowan has research experience in various fields of chemistry, including thermodynamics of inorganic liquid crystals, simulations of protein stability, and data-driven discovery of photocatalysts. They have published papers in peer-reviewed journals and presented their work at national and regional conferences. Rowan is a reviewer for several journals, including *ACS Nano*.

Rowan is a member of professional organizations such as the Michigan Catalysis Society, the Electrochemical Society, and the American Chemical Society. They have actively been involved in leadership activities through ACS since joining in 2015. Rowan led the undergraduate chapter of ACS at Knox College and remained involved in ACS in graduate school, mentoring undergraduate researchers that presented their work at ACS national meetings. Rowan has also been involved in outreach and mentoring activities for underrepresented and young students in partnership with North Carolina Central University and the Franklin Institute. They have received several awards and fellowships, such as the NASA Graduate Fellowship, the Leland Harris Award in Chemistry for their undergraduate honors thesis, and the ASSET Fellowship Undergraduate Research Fellowship.

Outside of work, Rowan enjoys hiking and canoeing with their wife, as well as woodworking and writing poetry.

Ashlin Sathyan, Ph.D.

Ashlin Sathyan is a Senior Scientist at the DuPont Healthcare Silicones R&D Team. She completed her Ph.D. in Polymer Science and Engineering from the University of Massachusetts Amherst and an integrated B.S. and M.S. in Chemical Sciences from the Indian Institute of Science Education and Research in Kolkata, India. With over three years of experience at DuPont, Ashlin is developing innovative solutions using polymer science to address global healthcare challenges in the silicones business. She leads cross-functional teams to design and implement new polymer formulations using her technical expertise and honed project management and leadership skills. Ashlin is also committed to outreach activities that promote science education and community engagement. She is an active member of the ACS Polymeric Materials: Science and Engineering Division and the co-chair of the Midland Section ACS Women Chemists Committee, championing and elevating the role of women in science. In addition, she serves as a mentor for junior scientists to foster a collaborative and innovative research environment, reflecting her belief in sharing knowledge and supporting the next generation of researchers. In her spare time, Ashlin loves to spend time outdoors with her family and friends.

Juan Venegas, Ph.D.

Juan M. Venegas is currently an Associate Research Scientist in Dow Consumer Solutions Silicones Process R&D. He received his Ph.D. in Chemical Engineering from the University of Wisconsin - Madison. Juan's expertise focuses on heterogeneous catalysis and reaction engineering, working in natural gas upgrading as well as implementing novel catalytic technologies in the silicones value chain. He is an author on 16 peer-reviewed publications and an inventor on two patents.

Juan is passionate about collaboration and the mixing of different perspectives which he hopes will support the local ACS community. He is an active leader in the Mixing, Reaction Engineering, and Scale-Up Community of Practice at Dow, helping expose colleagues in different fields to new ideas and concepts to foster innovation. He also supports ACS inclusion efforts as part of the Midland Section ACS Diversity and Inclusion Committee, bringing together the local member community, as well as promoting new generation's interests in STEM careers. Earlier in 2024, Juan helped organize Dow Consumer Solutions' internal technical conference as a focal point for the scientific program of the conference.

Hunter Woodward, Ph.D.

William Henry Hunter Woodward joined Dow Chemical Core R&D in 2011 and has contributed to several projects involving the electrical, thermal, and rheological characterization of polymers. Working in Dow Core R&D, he has enhanced Dow's capabilities in Broadband Dielectric Spectroscopy and applied it in innovative ways for such industries as Oil, Gas, & Mining, Building Materials, Food & Pharmaceuticals, Electronic Materials, and Packaging & Specialty Plastics. Hunter has co-authored 17 patent applications, over 30 journal articles, and recently edited a book for the ACS Symposium Series. Hunter believes strongly in the promotion of scientific exploration at all levels of education and is the immediate Past Chair of the Midland Section of the American Chemical Society. He regularly mentors undergraduate students and delivers annual seminars to graduate students on the perspectives of a career in industrial R&D. He received his B.S. in Chemistry from Dickinson College and his Ph.D. in Chemistry from Penn State. https://www.linkedin.com/in/hunterwoodward/

80th Fall Scientific Meeting, October 25

Dale LeCaptain, Fall Scientific Meeting Co-Chair, Midland Section ACS

SUSTAINABILITY, MATERIALS, WHERE NEXT?

Date and time: Friday, October 25, 2024

10:00 AM – 12:30 PM – Career Expo Networking (with Lunch)
12:30 – 1:30 PM – Keynote Address (Prof. LaShanda Korley, University of Delaware)
1:30 – 3:30 PM – Speed Presentations
4:00 – 6:00 PM – Poster Session
6:00 PM – Networking, Awards Presentations, and Dinner

Location: Central Michigan University, Mount Pleasant

For registration, go to https://forms.gle/Vjk4HzinZ6QVoWnf6 (or hover over the QR code in the graphic below)
To submit abstracts, go to https://forms.gle/r3BYx4A5H1ZnKSaL6
For more information, go to https://midlandfsm.org

Contact Dale LeCaptain at fsm@midlandacs.org for more information or any questions.

ChemLuminary Awards for 2023 – Midland Section Shines Again!
Gina Malczewski, Director and Outreach Committee, Midland Section ACS

The Midland Section ACS, a "Medium Small" Section in the National ACS total of 185 local sections, was richly rewarded for its outstanding programs at this year's 25th ChemLuminary Awards ceremony at the recent ACS 2024 Fall National Meeting, in Denver. Midland was nominated for 15 awards (the most of any Section) and was the top winner with six awards.

The nominations and awards, with the recognized activities, are listed in the table below. Several Midland Section ACS representatives were on hand for the awards event – where we learned that we had received two more nominations than the National ACS had originally notified us about! Our most notable achievement was the acceptance of the Outstanding Performance by a Local Section (Medium Small Size Category) for the twelfth year in a row, spanning the years 2012 through 2023. Prior to that, the Midland local section enjoyed a not-quite-as-long, six-year running streak for this same prestigious award from 2002 through 2007. This level of sustained, high performance is truly unprecedented and places the Midland local section in a class all its own.

Hunter Woodward, 2023 Midland ACS Chair

Past Chair Hunter Woodward is to be congratulated for his leadership in 2023, and the quality of the annual report he assembled, which included entries for all the recognized activities and the nominating documents for each recognition. We are also grateful to the additional officers, committees, and other volunteers that helped with all these activities!

Every year in August at its Fall Meeting, the National ACS recognizes outstanding Local Sections for their activities during the previous year at the ChemLuminary Awards Poster Session and Ceremony. The Midland Section ACS has a rich history of acknowledgment at the National level, including recognition with the Phoenix Awards which pre-date the current ChemLuminary Awards. The 2024 awards for 2023 programs activities received by the Midland Section ACS are highlighted in yellow in the table below.

Nomination Category	Midland ACS Events / Programs Nominated	Outcome / Winner
Best New Public Relations or Communications Program	Facebook series on Algae for Earth Day, with alphabetic entries	Indiana
Outstanding Continuing Public Relations or Communications Program	H2O Q Community Water Testing Program	Midland
Outstanding Engagement with K-8 Students	Over 50 programs in four schools, two summer camps, one science fair	Detroit
Outstanding US Chemistry Olympiad	Midland Chemistry Olympiad: 144 students, 8 high schools (almost double the participation in 2022)	California
Outstanding Project SEED Program (Small Site)	Ten students, monthly meetings, poster presentations at scientific meetings, student tours, outreach volunteering	Midland
Outstanding Sustainability Activities	Green Science Club established at BCW, Recycling Programs with MS students, "How We Can Make a Difference" Sustainability Event. BCW and Midland Community Gardens	Indiana
Best Event Organized by, or Benefiting, the Applied Chemical Technology Professional Community	MMTG "Bee Booth" at Midland Farmers Market	Indiana
Best Overall Local Section Minority Affairs Committee	Ten activities, including social events, seminars, and Facebook features	Midland and New York (co-winners)
Best Continuing Senior Chemists Activity Within a Local Section	Activities at the Centennial Exhibit at CMU, including school tours and display updates	Midland
Most Creative & Innovative Use of the CCEW theme	Earth Action Expo, MS classroom programs, Scrumptious Seaweed Food Science Cafe	Midland and Georgia (co-winners)
Most Creative NCW Celebration Using the Yearly Theme	Frankenstein Friday and Halloween Bash with activities around medical applications of chemistry: sutures, buffers, blood-clotting treatments, antibiotics, give-away stitch tattoos	Virginia
Best Activity or Program Stimulating Member Involvement	Fall Scientific Meeting	New York
Local Section Partnership Award	Spring Awards Banquet, which included a speaker, and recognition for outstanding area teachers, students, ≥50-year ACS members, and Chemistry Olympiad participants	Indiana
Outstanding Performance by a Local Section (Medium Small Size Category)	For all activities! (Overall local section performance award, not related to any specific event or program)	Midland

Midland Section ACS leaders standing by our poster before the ChemLuminary Awards ceremony in Denver, left to right, Lacey Brissette, Michelle Rivard, and Gina Malczewski. (Photo provided by Gina Malczewski)

Upcoming Dates, Events, and Other Updates

- September 9 (7:00 – 8:30 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at September 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 September, not the usual first Monday of most months, due to the Labor Day holiday.**
- September 13-15, 2024 – Water Quality Weekend Adventure and ACS H2O Q Volunteer Training, Central Michigan University Biological Station, Beaver Island. First come, first served opportunity for ACS members and their families. For more information, please see the accompanying articles on pages 11 and 12. Please click on ACS H2O Q Volunteer Training Adventure Registration (google.com) for more details and to complete the online registration process. For any questions, please call 989-774-3982 or send an email note to esch1pa@cmich.edu.
- September 25 (5:00 – 7:00 PM) – Back to School Trivia & Social Event, sponsored by the Young Chemists Committee. Time: 5:00 PM, food and networking starts; 6:00 PM, Teams Trivia starts. Location: Mi Element Grains and Grounds, 3124 Jefferson Avenue, Midland. Free food but an RSVP is required. Go to page 7 and hover over the QR code on the even flyer to RSVP. Contact Arpita Sharma at arpita.sharma@dupont.com for any questions.
- September 30 – **Deadline to submit an abstract for ACS Spring 2025 National Meeting & Exposition**, March 23-27, 2025, San Diego, CA, and virtual. Please see the article on page 8 and click on the abstract submission link. A Global Virtual Symposium (GVS) option is also available. Again, see the article on page 8 and click on the GVS abstract submission link.

- October 1 – **Deadline for early bird registration for ACS Central Regional Meeting (CERM 2024)**, November 6-9, Pittsburgh, PA. Meeting theme: "Confluence of Chemistry: Past, Present, & Future." For more details, please see the article on pages 9 and 10 and visit CERM 2024.
- October 1 (11:30 AM – 1:00 PM) – Lunch and Learn Seminar, *Route Design and Development of Adavelt™ Active – A Corteva Fungicide*, presented by Nicole Hough, Process Chemist, Corteva Agrisciences. Time: 11:30 AM – 12:00 PM, lunch and networking; 12:00 – 1:00 PM, seminar presentation. In-person location: MSU St. Andrews (1910 West St. Andrews Road, Midland). Virtual meeting option: **Microsoft Teams, Join the meeting now**, Meeting ID: 218 448 031 904, Passcode: 9fsFVD. For more information, please see the article on page 10. To RSVP for the free lunch, please click on the link in the article on page 10. Contact Krishnaja Duvvuri at kduvvuri@dow.com for any questions.
- October 9 (5:00 – 6:00 PM) – Tour of award-winning Midland Section ACS centennial exhibit, *A Century of Science and Service*, Rowe Hall, Central Michigan University, Mount Pleasant. For more information, please contact Gina Malczewski at reginamalczewski@gmail.com.
- October 9 (6:00 – 7:00 PM) – Free dinner and social time with CMU students, Biosciences Building, Central Michigan University, Mount Pleasant. For more information or any questions, please contact Dale LeCaptain at dale.lecaptain@cmich.edu.
- October 9 (7:00 – 8:00 PM) – Hybrid Midland Section ACS Board meeting, Biosciences Building, Central Michigan University (in person), and via a Microsoft Teams videoconference call connection at October 2024 ACS Board Meeting Teams Link, Meeting ID: 939 576 147 515 1, Passcode: A52hAT. **Please note: This Board meeting is being held on Wednesday, October 9, not the usual Monday, October 7, date that one would expect. This is being done to take advantage of a networking opportunity between Midland Section ACS Board members and CMU students.**
- October 14 – November 7 (Please Note) – **Midland Section ACS Board of Directors 2025 Election** period. For more information about the candidates running for various elected positions, please see the article on pages 11 to 24. For more information or any questions, please contact Raghida "Reggie" Bou Zerdan, Chair, Nominations & Elections Committee, at RBouZerdan@dow.com.
- October 25 (10:00 AM – 8:00 PM) – 80th Midland Section ACS Fall Scientific Meeting, Meeting theme: *Sustainability, Materials, Where Next?*, Central Michigan University, Mount Pleasant. Time: 10:00 AM, Career Expo Networking (with Lunch); 12:30 PM, Keynote Address (Prof. LaShanda Korley, University of Delaware); 1:30 PM, Speed Presentations; 4:00 PM, Poster Session; 6:00 PM, Networking, Awards presentations, and Dinner. **For registration**, go to https://forms.gle/Vjk4HzinZ6QVoWnf6 (or hover over the QR code in the graphic on page 25). **To submit abstracts**, go to https://forms.gle/r3BYx4A5H1ZnKSaL6. **For more information**, go to https://midlandfsm.org. For more information or any questions, see the article on pages 24-25, or contact Dale LeCaptain at fsm@midlandacs.org.

- November 4 (7:00 – 8:30 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at November 2024 ACS Board Meeting Teams Link, Meeting ID: 939 576 147 515 1, Passcode: A52hAT.
- November 6-9 – ACS Central Regional Meeting (CERM 2024), Pittsburgh, PA. Meeting theme: "Confluence of Chemistry: Past, Present, & Future." **Deadline for early bird registration is October 1.** For more details, please see the article on pages 9 and 10 and visit CERM 2024.

- December 2 (7:00 – 8:30 PM) – Hybrid Midland Section ACS Board meeting, Rotunda Room, MSU St. Andrews, Midland (in person), and via a Microsoft Teams videoconference call connection at December 2024 ACS Board Meeting Teams Link, Meeting ID: 939 576 147 515 1, Passcode: A52hAT.

- March 23-27, 2025 (Save the Date) – ACS Spring 2025 National Meeting & Exposition, San Diego, CA, and virtual. Please see the article on page 8 and click on the abstract submission link if interested. A Global Virtual Symposium (GVS) option is also available. Again, see the article on page 8 and click on the GVS abstract submission link if interested. **The abstract submission deadline is September 30, 2024.**

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.