

# THE MIDLAND CHEMIST

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## Call for Nominations for 2018 Officer and Director Candidates

**Wendy Flory, Chair, Nominations & Elections Committee, Midland Section ACS**

Here is your opportunity to become more involved in your local ACS section! We need candidates to run for the following positions for 2018:

- Chair-elect (1-year term)
- Secretary (1-year term)
- Treasurer (1-year term)
- Chair, Nominations and Elections Committee (1-year term)
- Councilor (3-year term)
- Alternate Councilor (3-year term)
- Directors (3 open positions for 3-year terms)

If you are interested in running for any of these positions, or if you know of someone who might be interested, please contact Wendy Flory at [wcfory@dow.com](mailto:wcfory@dow.com) or 989-636-5097. If you have any questions regarding the responsibilities of any of the positions, please contact the current officers or Wendy Flory. You are also encouraged to visit our website at [www.midlandacs.org](http://www.midlandacs.org).

ACS Fall Scientific Meeting, Saturday October 21  
Peter Bai, Fall Scientific Meeting Chair, Midland Section ACS

# ACS Fall Scientific Meeting

Saturday, October 21, 2017 8am – 5pm  
Saginaw Valley State University, Curtiss Hall



## Meeting Highlights

### Expanded oral presentation sessions and poster session!

More opportunities for industry professionals, academic researchers, and students to present in both formats. Invited speakers include:

**Prof. Megan Rohrsen**, CMU Geology and Environmental Sciences

**Dr. Cordell DeMattei**, CMU Director of Fermentation Sciences

**Prof. Matt Schrenk**, MSU Earth and Environmental Sciences

**Dr. Jon Cleland Host**, Hemlock Semiconductor Corporation

**For More Details about the Conference, Please Visit:**

<http://www.midlandacs.org/fall-scientific-meeting/>



### Keynote Speaker

Prof. Philip Robertson  
University Distinguished  
Professor of Ecosystem Science,  
Michigan State University

For any questions, please  
contact the Meeting Chair at  
[PJBai@dow.com](mailto:PJBai@dow.com)!

## Call for Nominations for 2018 ACS Fellows Program

**Diana Deese**, Chair, Midland Section ACS Awards Committee

*"... a fellow is a member of a group of learned people who work together as peers in the pursuit of mutual knowledge or practice ..."* Wikipedia

As Chair of the Midland Section ACS Awards committee, I would like to make everyone aware of the 2018 ACS Fellows Program.

### Purpose of the Program

The purpose of the ACS Fellows Program, one component of the broader ACS Awards Program, is to recognize and honor members of the American Chemical Society for their outstanding achievements in and contributions to the science and the profession **and** for their equally exemplary service to the Society.

Although the “Fellow” designation has been adopted by many professional societies, the criteria for awarding this designation vary significantly from society to society. For some, such as the Royal Society of Chemistry, the Fellow designation indicates a senior membership level, signifying that the individual has attained a particular status within the profession. For others, such as the American Physical Society, the designation indicates that the individual has been recognized by his or her peers for significant contributions to the science. The ACS Fellows Program, however, uniquely recognizes a different standard of achievement and service. Specifically, the Fellow of the American Chemical Society (ACSF) designation is awarded to a member who, in some capacity, has made exceptional contributions to the science or profession **and** has provided excellent volunteer service to the ACS community.

### **Selection Criteria**

The selection of ACS Fellows is based on documented excellence and leadership in **both** of two areas: (1) science, the profession, education, and/or management, **and** (2) volunteer service in the ACS community. Nomination documents must address **both** of these areas.

1. Documented excellence and leadership that has an impact in the science, the profession, education, and/or management. Appropriate activities might include, but are not limited to, the following:
  - a) Outstanding and creative contributions to basic and/or applied scientific research;
  - b) Distinguished accomplishments in the teaching and learning of chemistry;
  - c) Demonstrated leadership or managerial excellence in an organization within the chemical enterprise.
2. Documented excellence and leadership in volunteer service, based on specific results achieved, in service to the ACS and its membership and community. Appropriate activities might include, but are not limited to, the following:
  - a) Outstanding leadership, documented through specific results achieved, of Divisions, Local Sections, regional meetings, national meetings, and/or international conferences;
  - b) Exceptional assistance, as an unpaid volunteer, in the publication of scientific information (not including routine authorship or reviewing publications associated with one's own research);
  - c) Organization of especially significant symposia, major presentations, or other programming at national/international meetings;
  - d) Leadership or other outstanding contributions to public outreach activities, such as National Chemistry Week and Chemists Celebrate Earth Day;
  - e) Effective communication to the public of the value of the chemical sciences or chemical professionals through the press, radio, TV, or other electronic media.

### **Nominees**

1. Nominees for ACS Fellows must be current members (including retired and emeritus members) in good standing of the American Chemical Society.
2. Current members of the Fellows Selection Committee, Fellows Oversight Committee, ACS Board of Directors, and current ACS staff are not eligible to be nominees.
3. Former members or deceased members will not be considered as nominees for ACS Fellows. However, if a member dies after his/her name is submitted as a nominee and if that candidate is selected, he/she will be granted the Fellow designation posthumously.
4. Nominees, in past and present circumstances, are expected to employ and require good safety protocols and practices in their laboratories and/or work environments; uphold the highest ethical

standards in their laboratories and/or work environments; and otherwise adhere to the Chemical Professional's Code of Conduct. Nominators must address this in the online nomination form.

5. Nomination for other awards, including national, regional, or local ACS awards, does not disqualify a member from being nominated for ACS Fellow.

#### **Nominators**

1. Primary and secondary nominators must be current members (including retired and emeritus members) in good standing of the American Chemical Society.
2. Current members of the Fellows Selection Committee, Fellows Oversight Committee, ACS Board of Directors, and current ACS staff are not eligible to be primary or secondary nominators.
3. The primary nominator must be eligible to submit as an individual member or on behalf of a Committee, Local Section, or Technical Division. Refer to the Nomination Types section for specific eligibility requirements for primary nominators.
4. No more than one of the nominators (primary or secondary) may be from the same work group at the nominee's primary place of employment. If the nominee is retired, only one nominator (primary or secondary) may be from the nominee's last place of employment prior to retirement.
5. Refer to the Nomination Types section for guidelines about serving as a nominator for more than one nomination.

For more information, see <https://www.acs.org/content/acs/en/funding-and-awards/fellows.html>

The Midland Section of the ACS is allowed two (2) nominations for ACS Fellow per year. If you know of someone who fits the criteria, or if you would like to nominate yourself, and would like to work with me to put together a nomination package, please contact me at [dkdeese@dow.com](mailto:dkdeese@dow.com).

As the deadline for National ACS Fellow nomination submissions is around the first of April, I need to have packets completed and sent back to me by February 1, 2018. There are one thousand and one excuses that will pop up between now and February, so let's get started now!

#### **Silver Circle Retro Lunch Event: Share Memories and a Meal, October 4**

*Joan Sabourin, Silver Circle Committee, Midland Section ACS*

The Midland Section ACS Silver Circle group is sponsoring a "retro" lunch and discussion relevant to the 2019 Midland Section History Exhibit on Wednesday, October 4, 11:30 AM, at Creative 360 (1517 Bayliss Street, Midland). Lunch will be FREE for all attendees, and you don't have to be a "senior" chemist to attend. Watch for your invitation to attend via a separate e-mail note with a RSVP return request.

A discussion about the historical exhibit planned for our local section's 100th anniversary in 2019 with your informational input and suggestions will follow. Of special importance is the possible role of "experienced" ACS members in exhibit design and construction, e.g., by the lending of artifacts, sharing historical knowledge and ideas, construction assistance, or tax-exempt financial support through a new project fund set up at the Midland Area Community Foundation. The exhibit is planned for the Doan History Center from May to December, 2019, with monthly special programs in the nearby Carriage House Hall.

For questions or comments, please contact Gretchen Kohl ([gretchen.kohl@att.net](mailto:gretchen.kohl@att.net), 989-708-9066); Joan Sabourin ([jmsabour2@gmail.com](mailto:jmsabour2@gmail.com), 989-714-8203); or Gina Malczewski ([reginamalczewski@gmail.com](mailto:reginamalczewski@gmail.com), 989-859-9433).

Added note: We also appreciated the involvement of those who helped us win our local section's first Silver Circle ChemLuminary award. We were nominated for this award last year for 2015 activities, but did not win. We received the honor for 2016 programs at the ACS National Meeting in Washington, DC on August 22, 2017.

### **2017 Dow Great Lakes Bay STEM Festival, October 6-7** ***Cindy Drake, Delta College Event Coordinator, 2017 STEM Festival***

The Michigan Tech Mind Trekkers and Delta College invite you to the 5th Annual 2017 Dow Great Lakes Bay STEM Festival. Mind Trekkers brings the "WOW" of Science, Technology, Engineering, and Mathematics to students through hands-on, engaging activities.

- Friday, October 6, 8:30 AM – 2:00 PM, will be for registered area middle schools to bus students to the event for specific, prescheduled time blocks.
- Saturday, October 7, 10:00 AM – 4:00 PM, will be free and open to the general public. You may come and go during the event as you please.

Delta College has hosted this event since 2013. This year will have all of the same fun, engaging, educational opportunities in Science, Technology, Engineering, and Math, with the addition of the Arts and how they connect to STEM. This will be a fun event for all ages! To see pictures from last year's two-day event, click on the following link: <http://www.delta.edu/stemfestival>.

What is a STEM Festival and why should you care? Here are a few good reasons:

- Excite students about STEM education and show them the possibilities and opportunities an education in STEM will bring them.
- Over 100 hands-on "WOW" activities in a wide range of STEM fields!
- Explore before/after school STEM-related activities to keep their excitement level up.
- Explore post-secondary opportunities (what they will do next).
- Explore STEM-related career opportunities in Michigan.
- Meet with STEM professionals to answer student questions in a relaxed and fun environment.
- Explore how the Arts relate to STEM fields.

For more information, or for any questions, please contact the Delta College Event Coordinator, Cindy Drake, at 989-686-9433, or send an e-mail note to her at [cynthiadrake@delta.edu](mailto:cynthiadrake@delta.edu).

## ACS Webinar – Metacommunication: Conveying Passion and Engaging Others, October 12



October 12, 2017 @ 2:00-3:00pm ET

How you deliver your content can be the difference between engaging your audience, or standing in front of a sea of faces staring at their smartphones. Audiences respond to seminars, lectures, and speaking engagements that include stories told by passionate, intelligent experts. Join Matt Grandbois of Dow Chemical to discover how to tap into your inner scientific passion to create engaging storytelling experiences that will make your science and your data reach a larger audience.

### What You Will Learn

- How to find your inner scientific passion and the courage to voice it out loud
- The basics of metacommunication as applied to scientific storytelling
- How to apply “story arc” principles to oral speaking engagements



Matt Grandbois  
Dow Chemical

### Webinar Details

- Date: Thursday, October 12, 2017 @ 2:00-3:00pm ET
- Fee: Free to Attend
- Register at [ACS Webinars - Metacommunication](#)

## Savant Labs Seeking Laboratory Technician

This position requires introductory knowledge of laboratory testing and instrument performance activities to determine chemical and physical characteristics of lubricants and petroleum related materials for such purposes as customer reporting, product or process quality control, product development and test method development. Visit our website at [www.savantgroup.com](http://www.savantgroup.com) to see a detailed job description or submit your resume to [jobs@savantgroup.com](mailto:jobs@savantgroup.com).

## SVSU Adjunct Chemistry Instructor Opportunities

***Tami Sivy, Professor and Chair, Department of Chemistry, Saginaw Valley State University***

Would you be interested in having a direct impact on undergraduate chemistry education in the greater Saginaw Valley region? SVSU currently has several openings available for adjunct instructors in the Winter 2018 semester (January 16-May 5). The current need is for instructors for organic chemistry labs (night), introductory chemistry labs (both day and night), and chemistry general education course lectures (both day and night). All curricula are already developed and will be provided to the adjunct instructors. Contact Tami Sivy ([tsivy@svsu.edu](mailto:tsivy@svsu.edu)) if you have an interest or for any questions.

## DowDuPont Merger Successfully Completed

September 1, 2017 Press Release

*Company Moves Forward Toward Intended Separation into Industry-Leading, Publicly Traded Companies in Agriculture, Materials Science and Specialty Products; Separations Expected to Occur Within 18 Months*

**MIDLAND, Mich., and WILMINGTON, Del., Sept. 1, 2017** – DowDuPont™ (NYSE:DWDP) today announced the successful completion of the merger of equals between The Dow Chemical Company (“Dow”) and E.I. du Pont de Nemours & Company (“DuPont”), effective Aug. 31, 2017. The combined entity is operating as a holding company under the name “DowDuPont™” with three divisions – Agriculture, Materials Science and Specialty Products. Shares of DuPont and Dow ceased trading at the close of the New York Stock Exchange (NYSE) on Aug. 31, 2017. Beginning today, DowDuPont will start trading on the New York Stock Exchange under the stock ticker symbol “DWDP.” Pursuant to the merger agreement, Dow shareholders received a fixed exchange ratio of 1.00 share of DowDuPont for each Dow share, and DuPont shareholders received a fixed exchange ratio of 1.282 shares of DowDuPont for each DuPont share.

“Today marks a significant milestone in the storied histories of our two companies,” said Andrew Liveris, executive chairman of DowDuPont. “We are extremely excited to complete this transformational merger and move forward to create three intended industry-leading, independent, publicly traded companies. While our collective heritage and strength are impressive, the true value of this merger lies in the intended creation of three industry powerhouses that will define their markets and drive growth for the benefit of all stakeholders. Our teams have been working for more than a year on integration planning, and -- as of today -- we will hit the ground running on executing those plans with an intention to complete the separations as quickly as possible.”

“For shareholders, customers and employees, closing this transaction is a definitive step toward unlocking higher value and greater opportunities through a future built on sustainable growth and innovation,” said Ed Breen, chief executive officer of DowDuPont. “DowDuPont is a launching pad for three intended strong companies that will be better positioned to reinvest in science and innovation, solve our customers’ ever-evolving challenges, and generate long-term returns for our shareholders. With the merger now complete, our focus is on finalizing the organizational structures that will be the foundations of these three intended strong companies and capturing the synergies to unlock value. With clear focus, market visibility and more productive R&D, each intended company will be equipped to compete successfully as an industry leader.”

### Board and Governance

The Board of Directors of DowDuPont comprises 16 members – eight directors formerly on the DuPont Board and eight directors formerly on the Dow Board. There are two lead directors: **Jeffrey Fettig**, who previously served as the lead independent director for Dow; and **Alexander Cutler**, who previously served as the lead independent director for DuPont. **Liveris** serves as the executive chairman of the Board and **Breen** also serves on the Board. Other Board members include:

- From Dow:
- James A. Bell, Former Chief Financial Officer, Boeing
- Raymond J. Milchovich, Former Chairman and CEO, Foster Wheeler AG
- Paul Polman, CEO, Unilever PLC and Unilever N.V.
- Dennis H. Reilley, Non-Executive Chairman, Marathon Oil Corp.
- James M. Ringler, Chairman, Teradata Corporation
- Ruth G. Shaw, Former Group Executive, Public Policy and President, Duke Nuclear

- From DuPont:
- Lamberto Andreotti, Former Chair of the Board and CEO of Bristol-Myers Squibb Company
- Robert A. Brown, President of Boston University
- Marillyn A. Hewson, Chairman, President, and Chief Executive Officer of Lockheed Martin Corporation
- Lois D. Juliber, Former Vice Chairman and Chief Operating Officer of Colgate-Palmolive Company
- Lee M. Thomas, Former Chairman and Chief Executive Officer of Rayonier Inc.
- Patrick J. Ward, Chief Financial Officer of Cummins, Inc.

Three Advisory Committees have been established by the DowDuPont Board, chartered to generally oversee the establishment of each of the Agriculture, Materials Science (Dow) and Specialty Products divisions in preparation for the separations. Additionally, each Advisory Committee will develop a capital structure in accordance with the guiding principles set forth in the Bylaws, and designate the future chief executive officer and leadership team of its respective intended company.

### **DowDuPont Officers**

As previously announced, DowDuPont will be led by a proven leadership team that reflects the strengths and capabilities of both companies. Along with Liveris and Breen, it includes the following executives:

- Howard Ungerleider, Chief Financial Officer
- Stacy Fox, General Counsel and Corporate Secretary
- Charles J. Kalil, Special Counsellor to the Executive Chairman, General Counsel for the Materials Science Division
- James C. Collins, Jr., Chief Operating Officer for the Agriculture Division
- Jim Fitterling, Chief Operating Officer for the Materials Science Division
- Marc Doyle, Chief Operating Officer for the Specialty Products Division

### **Unlocking Value for All Stakeholders**

By merging the highly complementary portfolios of Dow and DuPont and subsequently creating intended industry leaders, DowDuPont expects to maximize value for all its stakeholders.

- Shareholders are expected to benefit from the stronger, focused investment profile of each intended company and substantial cost synergies, as well as from long-term growth and sustainable value creation following the intended separations into three independent companies. The transaction is expected to result in run-rate cost synergies of approximately \$3 billion and the potential for approximately \$1 billion in growth synergies. The company expects to reach 100 percent run rate on the cost synergies within the first 24 months of merger closing.
- Customers will benefit from superior solutions and expanded product offerings. By combining the complementary strengths of Dow and DuPont, each intended company will be able to respond faster and more effectively to rapidly changing conditions with innovative products and greater choice.
- Employees will benefit from being part of these intended highly focused and competitive industry-leaders, built for sustainable, long-term growth – which will create opportunities for our businesses and opportunities for our people.

## Paths to Separation

Dow and DuPont leaders and integration teams are developing the future state operating models and organizational designs that will support the refined strategy of each intended company. Once each division has its own processes, people, assets, systems and licenses in place to operate independently from the parent company, DowDuPont intends to separate the divisions to stand within their own legal entities, subject to Board approval and any regulatory approvals. The intended separations are expected to occur within 18 months.

The intended companies are expected to include:

- **A leading Agriculture Company** that brings together the strengths of DuPont Pioneer, DuPont Crop Protection and Dow AgroSciences to better serve growers around the world with a superior portfolio of solutions, greater choice and competitive price for value. The combined capabilities and highly productive innovation engine will enable the intended Agriculture Company to bring a broader suite of products to the market faster, so it can be an even better partner to growers, delivering innovation and helping them to increase their productivity and profitability. The intended Agriculture Company will be headquartered in Wilmington, Delaware, with global business centers in Johnston, Iowa, and Indianapolis, Indiana.
- **A leading Materials Science Company, to be named Dow** that will consist of the businesses comprising the following current Dow operating segments: Performance Plastics, Performance Materials & Chemicals, Infrastructure Solutions and Consumer Solutions (Consumer Care and Dow Automotive Systems; Dow Electronic Materials is intended to go to the Specialty Products Company), as well as DuPont's current Performance Materials operating segment. The intended Materials Science Company will offer the strongest and broadest chemistry and polymers toolkit in the industry, with the scale and competitive capabilities to enable truly differentiated solutions for customers in high-growth end markets, including packaging, transportation, infrastructure and consumer care. The intended Materials Science Company will be headquartered in Midland, Michigan.
- **A leading Specialty Products Company** that will consist of powerful, market-leading businesses including DuPont Protection Solutions, Sustainable Solutions, Industrial Biosciences and Nutrition & Health, which will integrate the Health and Nutrition business from FMC pending the close of that transaction; as well as Electronic Technologies, which combines DuPont's Electronics & Communications business with Dow's Electronic Materials business unit. The intended Specialty Products Company will be an innovation leader composed of technology-driven specialty businesses with highly differentiated products and solutions that transform industries and everyday life. The intended Specialty Products Company will be headquartered in Wilmington, Delaware.

As announced, the DowDuPont Board is conducting a comprehensive portfolio review to assess current business facts and leverage the knowledge gained over the past year and a half to capture any material value-enhancing opportunities in preparation for the intended creation of industry-leading companies.

Klein and Company, Lazard and Morgan Stanley & Co. LLC served as Dow's financial advisors for the transaction, with Weil, Gotshal & Manges LLP acting as its legal advisor.

Evercore and Goldman, Sachs & Co. served as DuPont's financial advisors for the transaction, with Skadden, Arps, Slate, Meagher & Flom LLP acting as its legal advisor.

## About DowDuPont

DowDuPont (NYSE: DWDP) is a holding company comprised of The Dow Chemical Company and DuPont with the intent to form strong, independent, publicly traded companies in agriculture, materials science and specialty products sectors that will lead their respective industries through productive, science-based innovation to meet the needs of customers and help solve global challenges. For more information, please visit us at [www.dow-dupont.com](http://www.dow-dupont.com).

## DowDuPont Announces Results of Comprehensive Portfolio Review

September 12, 2017 Press Release

*Targeted adjustments maintain and enhance value creation potential and further optimize competitive advantages of three industry-defining intended future companies*

**MIDLAND, Mich., and WILMINGTON, Del., Sept. 12, 2017** – DowDuPont™ (NYSE:DWDP) today announced that its Board of Directors and management, with the assistance of independent advisors, have completed their comprehensive review of the portfolio composition of the three intended independent companies. The Board unanimously concluded that, in light of knowledge gained since the announcement of the transaction, certain targeted adjustments will be made between the Materials Science and Specialty Products divisions, which will enhance the competitive advantages of the intended resulting companies. The changes better align these businesses with the end-markets they serve, ensuring clear focus, market visibility, targeted innovation and stronger growth profiles, and better equip each to compete successfully as industry leaders.

The DowDuPont Board of Directors approved the changes based on: a thorough review led by the lead independent directors, which included recommendations provided by McKinsey & Company; a comprehensive business and operational analysis leveraging knowledge gained over the past 20 months of pre-merger planning; and input from a wide range of stakeholders, including both investors and financial advisors. As a result of this comprehensive analysis, DowDuPont will realign the following businesses to the Specialty Products Division from the Materials Science Division:

- Dow's Automotive Systems' adhesives and fluids platforms
- Dow's Building Solutions business
- Dow's Water and Process Solutions business
- Dow's Pharma and Food Solutions business
- Dow's Microbial Control business
- DuPont's Performance Polymers business
- Several silicones-based businesses aligned with applications in industrial LED, semiconductors, medical, as well as Molykote® brand lubricants for automotive and industrial equipment and Multibase Inc, which provides solutions for the thermoplastic compounding industry

On a forecasted 2017 basis, the businesses that will be realigned to the Specialty Products Division account for total net sales of more than \$8 billion and operating EBITDA of approximately \$2.4 billion, including

approximately 40 percent of the heritage Dow Corning EBITDA. Relative to the original merger agreement, the adjustments are as follows:

- Approximately \$4 billion of net sales from the heritage Dow portfolio, evenly split between the Consumer Solutions and Infrastructure Solutions segments; and
- Approximately \$4 billion of net sales from the heritage DuPont Performance Polymers business moving to the Specialty Products Division.

“Our DowDuPont Board is fully aligned and confident that these targeted portfolio adjustments are the right actions to take and will benefit all stakeholders over the long term,” said Andrew Liveris, executive chairman of DowDuPont. “They bear out the clear results of a significant comprehensive analysis the Dow and DuPont boards undertook over the past many months, which benefited from a fresh look provided by independent, third-party external advisors, in particular McKinsey & Company. We built on the wealth of knowledge gained as both companies advanced our integration work together. These adjustments are also fully supported by the Materials Science Advisory Committee, as they better align select businesses with the market verticals they serve, while maintaining integration and innovation strengths within strategic value chains. As a result, both our Materials Science and Specialty Products divisions will be well-positioned to better anticipate and meet customer needs through focused innovation and technology development that will deliver accelerated growth from a broader suite of best-in-class products.”

“The changes we are making will enhance the competitive advantages and value creation potential of DowDuPont and ensure that the intended companies have the best possible foundation to drive long-term value for all stakeholders,” said Ed Breen, chief executive officer of DowDuPont. “The facts clearly supported the strategic logic of this portfolio configuration. Each of the intended companies will have even stronger competitive positioning, high value-added customer solutions, and a distinct and compelling investment thesis, while maximizing opportunities for strategic growth and synergies. With clear focus, each will serve attractive and growing markets, investing in innovation and delivering greater returns for shareholders.”

DowDuPont reiterates its previously announced plans to achieve run-rate cost synergies of approximately \$3 billion and approximately \$1 billion in growth synergies.

Following the portfolio realignments, the three intended companies of DowDuPont are as follows:

- **A leading Agriculture Company** that brings together the strengths of DuPont Pioneer, DuPont Crop Protection and Dow AgroSciences to better serve growers around the world with a superior portfolio of solutions (seeds, traits, crop chemicals, seed treatment, agronomy and digital services), ensuring greater choice and competitive price for value. The combined capabilities and highly productive innovation engine will enable the intended Agriculture company to bring a broader suite of products to the market faster, so it can be an even better partner to growers, delivering innovation and helping them to increase their productivity and profitability.

The intended company will be headquartered in Wilmington, Delaware, with global business centers in Johnston, Iowa, and Indianapolis, Indiana.

- **A leading Materials Science Company** that will be the premier materials science solution provider, with the vast majority of its sales aligned with three narrower and deeper, high-growth market verticals:

packaging, infrastructure and consumer care. With one of the strongest and deepest toolkits in the industry, the intended company will have robust technology and asset integration, scale and competitive capabilities to enable truly differentiated materials science solutions for customers. The intended company will consist of three powerful, market-leading segments:

- Performance Materials & Coatings, which combines a broad range of technology platforms that empower its customers to: create ingredients and solutions with exceptional performance and process enhancements for home and beauty care applications; and develop solutions that advance the performance of architectural and industrial coatings.
- Industrial Intermediates & Infrastructure, which develops solutions that enable unique properties in manufacturing processes, infrastructure markets and downstream finished goods. The technologies in this business unit: deliver innovative solutions that enable the tapping of oil and gas resources; optimize manufacturing with additives that minimize friction and heat in mechanical processes, manage the oil-water interface and facilitate dissolvability; advance energy efficiency solutions in white goods; and enable infrastructure material properties through unique modifiers and additives.
- Packaging & Specialty Plastics, which represents one of the world's deepest and most differentiated performance plastics portfolios. The solutions and technologies in this unit: address consumer and brand owner demand for increased packaging convenience; reduce food waste; and advance the global development of telecommunications and electrical transmission and distribution infrastructure.

The intended company will maintain the Dow™ brand and will be headquartered in Midland, Michigan.

- **A leading Specialty Products Company** that will be a customer-driven innovation leader composed of technology-based differentiated materials, ingredients, and solutions that transform industries and everyday life. The intended company will apply its market knowledge and deep expertise in science and application development to solve customer needs in distinct markets, including electronics, transportation, building and construction, health and wellness, food and safety. The intended company will consist of four market-leading segments:
  - Electronics & Imaging, the world's largest supplier with the broadest set of materials and technologies to solve complex problems for the semiconductor, circuit board, photovoltaic, display and flexographic printing industries that enable the next generation of connectivity and functionality, as well as the convergence of electronic capabilities into everyday life, such as autonomous and electric vehicles.
  - Transportation & Advanced Polymers, an industry leader providing high-performance engineering resins, adhesives, lubricants and parts to engineers and designers in the transportation, electronics and medical markets to enable integrated materials solutions for demanding applications and environments.
  - Safety & Construction, a global leader and trusted partner with category-leading, proprietary branded products including high-performance fibers and foams, aramid papers, non-woven structures, membranes and filtration technologies and protective garments serving the construction, worker safety, energy, oil & gas, transportation, water purification and medical markets.
  - Nutrition & Biosciences, a market leader and technology pioneer collaborating with customers in food, pharma and personal care markets, utilizing naturally sourced ingredients and bioscience capabilities, including protein and microbial engineering and industrial-scale fermentation, to create higher performing, healthier and more sustainable offerings (such as probiotics, enzymes, antimicrobial technologies, pharma excipients and biomaterials).

The intended company will be headquartered in Wilmington, Delaware.

### **About DowDuPont**

DowDuPont (NYSE: DWDP) is a holding company comprised of The Dow Chemical Company and DuPont with the intent to form strong, independent, publicly traded companies in agriculture, materials science and specialty products sectors that will lead their respective industries through productive, science-based innovation to meet the needs of customers and help solve global challenges. For more information, please visit us at [www.dow-dupont.com](http://www.dow-dupont.com).

### **MMAICHe Lecture Series for 2017-2018**

**Ron Leng, Fellow/Engineering & Process Sciences, Dow Chemical**

All Midland Section ACS members are cordially invited to attend any of several invited-speaker events hosted by the Mid-Michigan Section of the American Institute of Chemical Engineers (AIChE). Evening meetings will be held at the Grand Traverse Pie Company 2600 N. Saginaw Rd, Midland. Admission is free. Meeting times and locations are subject to change; please check the [Mid-Michigan AIChE](http://Mid-Michigan AIChE) website for updates to the schedule. For questions, contact Ron Leng (989-636-6158) or Ted Calverley (989-636-2881).

### **Tentative Lecture Schedule**

**Mark Bassett**, Chairman and Chief Executive Officer, Hemlock Semiconductor  
*Polycrystalline Silicon Technology and Markets*  
Tues, **Oct 17, 2017**, 6 pm dinner (optional), 7:00 p.m. presentation

**Chris Rentsch**, Head of Engineering, Origin Materials  
*Adventures at a Start-up Company vs the Corporate Gig*  
Wed, **Nov 15, 2017**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

**Ken First**, Retired Process Safety Leader, Dow AgroSciences  
*Hazard Analysis & Risk Analysis Tool Kit*  
Wed, **Dec 13, 2017**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

**Billy Bardin**, Tech Center Director, Dow Chemical  
*Advanced Manufacturing*  
Wed, **January 10, 2018**, noon-1:30, Dow Chemical 1790 Bldg, CR 272

**Leo Chiang**, Associate Tech Director, Chemometrics and Data Analytics Analytical Tech Center  
*Big Data Analytics*  
Wed, **Feb 21, 2018**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

**Paul Vosejka**, Dow Automotive R&D Director  
*The Future of Transportation*  
Wed, **March 21, 2018**, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

Open

Wed, April 25, 2018, 6:00 p.m. dinner (optional), 7:00 p.m. presentation

**Mark Weick**, Dow Global Sustainability Director *Keynote Speaker Annual Spring Banquet*

*Sustainability: The Chemical Engineer's Role in the Future*

Tues, May 22, 2018 (tentative) venue to be confirmed

**MSU Master's Degree Program in Electrical Engineering in Midland, October 15 Deadline**

*Melanie Kauffman, Communications Manager, Michigan State University*

**EARN A MICHIGAN STATE MASTER'S DEGREE IN ELECTRICAL ENGINEERING IN MIDLAND**

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Steer your career toward the growing field of automotive electronics in the Michigan State University Midland Electrical Engineering Master of Science degree program. This new option within the MSU Department of Electrical and Computer Engineering will enhance your knowledge of Internet of Things (IoT) technologies, automotive electronics, robotics, signal processing and wireless technologies. Designed around your full time schedule with evening classes, MSU will work with you to develop an academic roadmap that best meets your career plans.

**LEARN MORE**

<b>What</b>	A two-year MS program providing the same advanced graduate-level engineering education available at MSU's East Lansing campus closer to home in the Great Lakes Bay Region.
<b>Format</b>	Two classes/week, two year program. Choose between two degree tracks: Option A (24 credit hours of course work + 6 credit hours of thesis) Option B (30 credit hours of course work)
<b>When</b>	<b>Application deadline for Fall Semester 2017 is August 10, 2017.</b> <b>Application deadline for Spring Semester 2018 is October 15, 2017.</b>
<b>Where</b>	Classes will be held at the MSU St. Andrew campus, 1910 W. St. Andrews Rd., Midland.
<b>Cost</b>	Application fee is \$75. MSU graduate credit tuition and fees apply.
<b>Who</b>	Open to students with applicable undergraduate degrees qualifying for MSU graduate school admission.

**Questions?** Learn more on-line at [ece.msu.edu/midlandms](http://ece.msu.edu/midlandms) or contact us directly:  
Department Chair John Papapolymouros [jpapapol@egr.msu.edu](mailto:jpapapol@egr.msu.edu)  
Professor Ed Rothwell [rothwell@egr.msu.edu](mailto:rothwell@egr.msu.edu)  
Assoc. Professor Nelson Sepúlveda [nelsons@egr.msu.edu](mailto:nelsons@egr.msu.edu)

 College of Engineering  
MICHIGAN STATE UNIVERSITY

## **In Past Issues of *The Midland Chemist***

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

**50 Years Ago, *The Midland Chemist* 1967, 4, No. 5 (Nov), 7.**

In *Dr. S. J. Strycker Spends Year at U. of Iowa*: “Dr. Stanley J. Strycker, Senior Research Chemist in the E. C. Britton Research Laboratory of Dow Chemical, is spending the present academic year with the Department of Pharmacology of the University of Iowa as a visiting research associate.

Dr. Strycker received his doctor of philosophy degree in organic chemistry from the University of Illinois in 1956 and has been with Dow since that date. Nine years were spent in the synthesis of biologically active compounds with potential agricultural utility. In 1966 he transferred to a group engaged in the synthesis of potential pharmaceuticals.

The purpose of the sabbatical is to obtain a background in pharmacology and physiology to increase the effectiveness of his synthesis program. Course work and research will be under the direction of Prof. L. A. Woods, head of the Department of Pharmacology.”

**40 Years Ago, *The Midland Chemist* 1977, 14, No. 9, 5.**

In *Midland Section Award to Young* by James K. Pierce: “David C. Young is the recipient of the second annual ACS Midland Section Award. The presentation of the award, a plaque given for “outstanding achievement and/or promotion of the chemical sciences,” was made by Section Chairman, Bruce Thill, at the opening session of the Fall Scientific Meeting on October 29.

David C. Young has a long history of service to chemistry both through the Midland Section and at the national ACS level. He has served as one of our Section councilors since 1966 and has represented our Section at national meetings. He is presently a candidate for director-at-large of the national Board of Directors. He has been Vice-Chairman of the Council Policy Committee, one of the top positions a member can hold at the national level, and he has chaired the Committee on Constitution and By-Laws. Through all of his ACS activities, Dave has sought local section members’ opinions and reported Council proceedings both in the *Midland Chemist* and at local board meetings. A complete record of his service is listed in the September 19, 1977 issue of Chemical and Engineering News.”

**30 Years Ago, *The Midland Chemist* 1987, 24, No. 7, 2 (insert).**

In *1987 Fall Scientific Meeting* by M. Peter Dreyfuss, General Chairperson, 1987 ACS Fall Scientific Meeting: “We are fortunate this year in having the Fall Scientific Meeting fall almost coincident with National Chemistry Day (November 6, 1987). National Chemistry Day is a program of the National ACS designed to project a better understanding of chemistry and its benefits to the public at large. Chemists and chemical engineers can use this opportunity to present a balanced perspective of the often overdramatized problems and risks associated with our science. This near coincidence of dates gave us an excellent opportunity to organize this year’s FSM about the theme of “Chemistry and the Quality of Life”. Our Keynote Speaker, Professor Fred Basolo of Northwestern University, will address this very topic.”

**20 Years Ago, *The Midland Chemist* 1997, 34, No. 8, 16.**

In *United States Post Office Helps Celebrate Midland Section Events*: “During the Regional ACS meeting in Midland, the U. S. Post Office in Midland arranged for three special postal cancellations on four artist designed postal covers commemorating Midland Section events. Artist, Cindi Pavaglio, designed four different cachets honoring the **10<sup>th</sup> anniversary of National Chemistry Week**, the planting of the **ACS National Chemis-Tree**, the **100<sup>th</sup> anniversary of The Dow Chemical Company** and the **ACS Historical Chemical Landmark** designation of the Dow Brine Well. To co-ordinate with these specially designed cachets, the U.S. Post Office provided official USPS cancels, also designed by Cindi Pavaglio. These were used to provide cancellation of the covers.

To further enhance these cachets, U.S. postage stamps from the 1950's, 1960's, and 1970's were used for cancellation. The three cancellations designed were the **National Chemis-tree** (silhouette of microscope superimposed on an apple), **Historical Chemical Landmark** (ACS logo), and **Celebration Station** (10<sup>th</sup> Anniversary National Chemistry Week logo)."

**10 Years Ago**, *The Midland Chemist* **2007**, *44*, No. 5, 3.

In *YCC and Friends "Kick It in the Park"* by Joel Kern: "On July 21, the Midland Section's Younger Chemists Committee and other groups for younger professionals kicked off the first "Kickin' It in the Park." This fundraiser for the American Cancer Society's Relay for Life featured a barbecue, kickball competition, kids' games, and all-around fun for the family. Held at the St. Charles Ball Diamonds in Midland, there were eight teams of players and lots of kids in tow. Over \$1000 was raised for Relay for Life while everyone had a good time."

### Upcoming Dates, Events, and Other Updates

- October 1 – **Deadline for submission of abstracts for the 2017 Midland Section ACS Fall Scientific Meeting.** For any questions, or to submit your abstracts, please contact Jay Liu at [JLiu7@dow.com](mailto:JLiu7@dow.com).
- October 1 – **Deadline for registration for the 2017 Midland Section ACS Fall Scientific Meeting.** Please register now for the 2017 ACS Fall Scientific Meeting at <http://www.midlandacs.org/fall-scientific-meeting/fall-scientific-meeting-registration/>. A buffet lunch will be available at the SVSU Marketplace (free for students, \$7.00 for ACS members, and \$9.00 for non-ACS members). Please purchase your lunch tickets at <http://www.midlandacs.org/fall-scientific-meeting/> (see bottom of webpage). For more information, or to volunteer, please contact Peter Bai, 2017 FSM Chair, at [PJBai@dow.com](mailto:PJBai@dow.com).
- October 2 (7:00 – 8:00 PM) – ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection at [Midland Section WebEx Board Meeting](#), meeting number/access code: 715 679 159, phone number: 989-633-1166.
- October 4 (11:30 AM) – Midland Section ACS Silver Circle retro lunch and discussion relevant to the 2019 Midland Section history exhibit project, Creative 360, 1517 Bayliss Street, Midland. Lunch will be FREE for all attendees, and you don't have to be a "senior" chemist to attend. For questions, please contact Joan Sabourin at [jmsabour2@gmail.com](mailto:jmsabour2@gmail.com) or 989-714-8203.
- October 6 (8:30 AM – 2:00 PM) – 2017 Dow Great Lakes Bay STEM Festival, Delta College, open to registered area middle schools to bus students to the event. For more information, please contact Cindy Drake at [cynthiadrake@delta.edu](mailto:cynthiadrake@delta.edu) or 989-686-9433.
- October 7 (10:00 AM – 4:00 PM) – 2017 Dow Great Lakes Bay STEM Festival, Delta College, free and open to the general public. For more information, please contact Cindy Drake at [cynthiadrake@delta.edu](mailto:cynthiadrake@delta.edu) or 989-686-9433.
- October 12 (2:00 – 3:00 PM) – ACS Webinar, *Metacommunication: Conveying Passion and Engaging Others*, presented by Matt Grandbois, please see detailed information at [ACS Webinars - Metacommunication](#).
- October 17 (6:00 – 8:00 PM) – MMAIChE sponsored lecture, *Polycrystalline Silicon Technology and Markets*, presented by Mark Bassett, Chairman and Chief Executive Officer, Hemlock Semiconductor. Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 7:00 PM presentation. More information is available or will be updated periodically in upcoming issues of the [MMAIChE Newsletter](#). Meeting times and locations are subject to change; please

check the [Mid-Michigan AIChE](#) website for updates. You may also contact Ron Leng (989-636-6158) or Ted Calverley (989-636-2881) for information.

- October 21 (8:00 AM – 5:00 PM) – 2017 Midland Section ACS Fall Scientific Meeting (FSM), Saginaw Valley State University (Curtis Hall). Please register now for the 2017 ACS Fall Scientific Meeting at <http://www.midlandacs.org/fall-scientific-meeting/fall-scientific-meeting-registration/>. A buffet lunch will be available at the SVSU Marketplace (free for students, \$7.00 for ACS members, and \$9.00 for non-ACS members). Please purchase your lunch tickets at <http://www.midlandacs.org/fall-scientific-meeting/> (see bottom of webpage). For more information, or to volunteer, please contact Peter Bai, 2017 FSM Chair, at [PJBai@dow.com](mailto:PJBai@dow.com). **The registration deadline is October 1, 2017.**
- November 6 (6:00 – 8:00 PM) – ACS Board meeting and Volunteer Appreciation Event, Creative 360, 1517 Bayliss Street, Midland. Plans for the evening include a free “thank you” dinner, the monthly Board meeting with committee updates, and a trivia game event. Contact Anne Kelly-Rowley, Chair, Midland Section ACS, for more information or for any questions at 989-636-3697 or [AMKelly-Rowley@dow.com](mailto:AMKelly-Rowley@dow.com).
- November 15 (6:00 – 8:00 PM) – MMAIChE sponsored lecture, *Adventures at a Start-up Company vs the Corporate Gig*, presented by Chris Rentsch, Head of Engineering, Origin Materials. Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 7:00 PM presentation. More information is available or will be updated periodically in upcoming issues of the [MMAIChE Newsletter](#). Meeting times and locations are subject to change; please check the [Mid-Michigan AIChE](#) website for updates. You may also contact Ron Leng (989-636-6158) or Ted Calverley (989-636-2881) for information.
- December 4 (7:00 – 8:00 PM) – ACS Board meeting, MCFTA Board Room (in person), or via a WebEx conference call connection at [Midland Section WebEx Board Meeting](#), meeting number/access code: 715 679 159, phone number: 989-633-1166.
- December 13 (6:00 – 8:00 PM) – MMAIChE sponsored lecture, *Hazard Analysis & Risk Analysis Tool Kit*, presented by Ken First, Retired Process Safety Leader, Dow AgroSciences. Location and time: Grand Traverse Pie Company, 2600 North Saginaw Road, Midland, 6:00 PM dinner (optional), 7:00 PM presentation. More information is available or will be updated periodically in upcoming issues of the [MMAIChE Newsletter](#). Meeting times and locations are subject to change; please check the [Mid-Michigan AIChE](#) website for updates. You may also contact Ron Leng (989-636-6158) or Ted Calverley (989-636-2881) for information.

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