



The Detroit Chemist

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May Detroit Section ACS Meeting Joint with the Canadian Society for Chemistry International Awards Banquet



When: Tuesday, May 28, 2019

Where: The Windsor Club

2072 Riverside Drive East
Windsor, Ontario, CA
<https://windsor-club.com>

Time: 5:30 pm - Cash Bar Mixer
6 pm - Dinner
7 pm - Awards & Presentation

Speaker: Don Livermore
Master Blender for Hiram Walker & Sons
“The Chemistry and Science Behind Making Whisky”

RSVP: By Tuesday, May 20th to Denise Grimsley
At denise.grimsley@basf.com or (734) 324-6539

This year, our colleagues from the Chemical Institute of Canada (Canadian Society for Chemistry) will be hosting the event on the Canadian side of the river. On May 28th, we will honor students, volunteers and members at The Windsor Club (see address and website link above). We will recognize Chemical Institute of Canada Student Awards, our ACS 50, 60, and 70 year Members, Volunteers, Salutes to Excellence Award Recipients, Volunteer of the Year Award Recipient, Section Distinguished Service Award Recipient, and Detroit Section Undergraduate Student Awards. The evening will include a cash bar at 5:30 pm, dinner at 6 pm, awards, and a presentation. The cost of dinner will be \$20 per person.

A letter from the Detroit Section Chair

As chairperson of the Detroit Section of the American Chemical Society I would like to invite all members to get involved in the section activities. We have our Brewing Chemistry talks on the third Tuesday of each month at Traffic Jam restaurant in Detroit. We host special programs with the national POLY division and Women Chemist Committee. There are opportunities to volunteer with the Kids and Chemistry group to do outreach with the community at the Detroit Zoo, Cranbrook museum, the Rouge Water festival at University of Michigan – Dearborn, and more. This year we are holding an event at the Michigan Science Center in June to have fun and network with the society members. Our next general meeting is on May 14 at 7 PM at the University of Michigan – Dearborn, Natural Science Building, Room 2012, prior to our executive committee meeting. If you would like to see what we are doing, suggest a program, or get more involved in one of our committees, please join us.

Thank you,

Denise Grimsley

Detroit Section Chair, American Chemical Society

NOMINATIONS FOR 2020 SECTION OFFICERS AND COUNCILORS

The Section's Nominating Committee has selected a slate of candidates to run for the Detroit Local Section 2020 officer election. Councilors and Alternate Councilors normally serve three-year terms. This year, we have an additional Alternate Councilor position that needs to be filled for a one-year term. Nominations may also be made by petition. Section members interested in running for an office can submit a Petition to the Section Secretary stating the office for which they wish to run. The Petition must be endorsed by 1% of the Section Membership (i.e., 13 members) and sent to the Section Chair, Denise Grimsley, postmarked on or before July 31, 2019. For more information or for help in obtaining the necessary endorsements, please E-mail the Section Chair, Denise Grimsley at: denise.grimsley@basf.com

Slate of Nominees for Fall 2019 Election (2020 Officers)

Chair:	Shannon Timmons (current Chair-Elect)
Chair-Elect:	Matt Smith
Treasurer:	Amy Hamlin
Secretary:	Sue White
Councilor:	Jim Landis
Alternate Councilor (3-year):	Charlene Hayden
Alternate Councilor (1-year):	Michele Williams-Harry



American Chemical Society – Detroit Local Section – Younger Chemists Committee Presents:

Brewing Chemistry

Detroit, Michigan

Brewing Chemistry is a monthly lectures series. These informal talks are designed to make science fun and accessible for all. The lectures take place at 7 p.m. on the third Tuesday of every month at:

Traffic Jam & Snug, 511 West Canfield Street, Detroit, MI 48201

There is no admission charge, and free parking is available.
Feel free to join us before the talk at 6:00 PM for a dutch-treat dinner.

For more information, contact Meghann at 313.993.1259 or meghann@brewingchemistry.com

Tuesday, May 21st, 2019 at 7 PM

Risk Assessment in the Teaching Laboratory

Presented by:

Monique Wilhelm, Laboratory Manager and Chemical Hygiene Officer,
University of Michigan-Flint

The ACS recommends that a risk assessment be completed prior to performing work in the lab. Many chemical educators worry about teaching this concept to their students when they never learned how to do it themselves. An easy to implement approach to adding risk assessment throughout the curriculum will be discussed and aids will be shared.

www.brewingchemistry.com

June 4-8, 2019 | Midland, MI | www.acscerm2019.org



The Midland Section of the American Chemical Society (ACS) is excited to announce the ACS 2019 Central Regional Meeting (CERM 2019), to be held in Midland, MI on June 4-8, 2019.

2019 marks the 50th CERM meeting and the 100th anniversary of the Midland ACS section. To celebrate, CERM 2019 boasts a lineup of world class speakers, an expanded technical program, and a host of networking, educational, and community outreach events.

CERM 2019 will be the premier scientific meeting in the Midwest this year, bringing together industry, academic, and government researchers for a meeting that is both personal—with ample opportunities to connect with speakers, vendors, and fellow attendees—and high impact—featuring participants from leading companies, colleges & universities, and government laboratories.

Registration and **Abstract** submission are currently open, with **March 4th**, 2019 being the deadline for abstracts. Listed below are some of the exciting speakers, symposia, and events at CERM 2019. We hope to see you there!

www.acscerm2019.org

CERM 2019 Plenary Speakers:

- Prof. Tobin Marks (Northwestern U.)
- Prof. Craig Hawker (UC Santa Barbra)
- Prof. Melanie Sanford (U of M)
- Dr. A. N. Sreeram (CTO, DOW)

CERM 2019 Featured Events:

- Astronaut Capt. Scott Kelly (NASA) Lecture
- Chemistry & the Arts Expo @ MCFTA.
- Art Conservation Lecture by Mark Golden
- Citizen Experiment on Water Quality
- Melanie Cooper (Education – MSU) Lecture
- Mentoring Panel & STEM night at the Minor League Baseball Game
- Joseph DeSimone (NC State & CEO of Carbon): Lecture on Entrepreneurship.
- National Historic Chemical Landmark Dedication: Mass Spectrometer
- Excellence in Chemistry Awards and Banquet
- National ACS Board of Directors tour of Dow labs
- ACS Leadership Institute workshop
- Vendor Expo

Brewer/Midgley Family-Friendly Event Hopefully will be the First of a Series



On the afternoon of Sunday, June 23rd from 1-5 pm, the Detroit Local Section of the ACS is presenting a new family-friendly event that we, the Executive Committee, hopes will attract sufficient member support to justify it becoming the first of a series of annual family-friendly events. If this type of program appeals to you, please show your support by attending.

First, a word about the event. The event has a fee (\$11 for adults and \$6 for children, including Eventbrite fees) to partially offset the cost and to help provide a reliable estimate of attendance for catering purposes. Included in your fee is admission to the Michigan Science Center and, for the first 110 registrants, a ticket to the planetarium show (for reference, adult admission plus planetarium show cost the public \$16.50). In addition, we have planned what promises to be a very nice reception in a private area with hors d'oeuvres, cheese, fruit and non-alcoholic beverages – giving you an opportunity to meet and mix with fellow chemists and their families. *Please note that tickets must be purchased through the Eventbrite link on the attached flyer by Thursday, June 20th!*

Major financial support for this program comes from an endowment established by the late Dr. George E. F. Brewer, a prominent chemical engineer and inventor, former Chair and long-time Councilor for the Detroit Local Section of the ACS. The endowment was originally setup to support the section's Midgley Medal. Because in recent years the Midgley Medal has not been awarded annually, the Executive Committee decided to use the income from the endowment to support an event of significance in years in which the Midgley Medal is not given. The upcoming June 23rd program is our first attempt to carry out this mandate. Below you will find brief biographies of both Drs. Brewer and Midgley.

Dr. George E. F. Brewer: Dr. Brewer, was a chemical engineer (PhD, U. Vienna), inventor (Ford Motor Co.), and Marygrove College professor, who was a long-time officer and councilor for the Detroit Local Section of the ACS. He was highly regarded in the electro-coatings research community and was the fifth recipient (1969) of the Midgley Award, being honored for inventing an electro-chemical process that was widely used in the industry for electro-coating metal body parts. (Dr. Brewer also received a number of awards from within the coatings industry for his achievements.) Dr. Brewer subsequently chaired the Detroit Local Section's Thomas Midgley Award committee for many years and it became one of his cherished projects. In his will, he left a bequest to provide additional support to the Midgley Award. Several years later a good friend of his added significantly to the endowment.

Dr. Thomas Midgley Jr.: Dr. Midgley was a mechanical engineer by training (Cornell), but spent much of his professional life involved in chemistry. He played a major role in developing leaded gasoline (tetraethyllead) and some of the first chlorofluorocarbons (CFCs), better known by its brand name, Freon. He was granted more than 100 patents over the course of his career, which was sadly cut short at the age of 51. Dr. Midgley was active in the American Chemical Society for 25 years. During his lifetime, in addition to being active in the Detroit Local Section, he served the national ACS as Director for 14 years, as Chairman of the Board of Directors for 10 years, and as President in 1944.



ACS Social Event at the Michigan Science Center!

Sunday, June 23rd from 1-5 pm

This family-friendly event will include:

- Heavy hors d'oeuvres and beverages at 1 pm
- Free exploration of the Michigan Science Center
- A planetarium show for the first 110 guests to register!

Advance tickets are required! Deadline: Thursday, June 20th

Please visit the following link to purchase your tickets:

<https://www.eventbrite.com/e/michigan-science-center-ac-s-social-event-tickets-60138520935>

Tickets: \$11 for adults & \$6 for children, including Eventbrite fees

Please come bring your families and meet fellow ACS members!

Questions?

Please contact Shannon Timmons at stimmons@ltu.edu.



2019 U.S. National Chemistry Olympiad

Detroit Local Section Competition

On Thursday, March 21, 160 students representing 24 area high schools descended upon the University of Michigan-Dearborn campus for the Local Section exam for the US National Chemistry Olympiad. The two-hour exam is the first step in the process of selecting the four-person team to represent the United States in the International Chemistry Olympiad, to be held this year in Paris, France. The challenging exam consists of seventy multiple-choice questions and a free response question to break ties. While the students were completing the exam, their teachers attended a meeting sponsored by SEMCTO and the Section's Education Committee. Special thanks are due to Kathy Kitzmann for organizing the SEMCTO meeting.

The top eleven students on the Local Section exam were selected as Nominees of the Detroit Section; the next nine students were named as Runners-up. In addition, Yajvan Ravan and Matthew Wang were automatic Nominees by virtue of having attended the Olympiad study camp in 2018. The complete list of Nominees and Runners-up appears below.

The Nominees returned to UM-Dearborn on April 25 to sit for the National Exam. The grueling National Exam includes a multiple-choice portion, free response questions, and two laboratory problems. From the more than one thousand persons nationwide who completed the National Exam, twenty will be chosen to attend the Olympiad Study Camp in Colorado Springs. Results on the National Exam were not available at press time. Following the exam, the Nominees, their families, and their teachers enjoyed the annual Awards Dinner. Through the generosity of the Detroit Section, the Nominees received cash prizes of \$150 and the Runners-up received \$75. Troy High School (Bill Hevel, Chemistry teacher) was recognized with the 2019 Olympiad Achievement Award for having compiled the highest average score on the Local Section exam.

The Chemistry Olympiad program is organized locally by Dr. Mark DeCamp, with the able assistance of Professors Simona Marincean, Sheila Smith, and Steve Scribner at the University of Michigan-Dearborn and the Section's Education Committee.

NOMINEES

Name	Hometown	High School	Teacher
Srihari Ganesh ++	Novi	Novi High School	Rand Helmkamp
Kyler Hwa	West Bloomfield	West Bloomfield H.S.	Mervet Ismail
Jae Woo Kim	Troy	Troy High School	Bill Hevel
Timon Lwo #	Novi	Northville High School	Tom Silak
Kevin Masel	Northville	Northville High School	Tom Silak
Vishal Nayak #	Canton	Canton High School	Derek Kendall
Yajvan Ravan #	Westland	Churchill High School	Robert Upton
Atharv Relekar	Troy	International Academy East	Roger Winn
Pratham Soni +	Troy	Troy High School	Bill Hevel

Balasz Szamosfalvi	Bloomfield Hills	Bloomfield Hills H.S.	Dennis Kwasny
Matthew Wang ##	Troy	Troy High School	Bill Hevel
Linda Weng +	Novi	Novi High School	Rand Helmkamp
Alan Zhang	West Bloomfield	Bloomfield Hills H.S.	Dennis Kwasny

RUNNERS-UP

<u>Name</u>	<u>Hometown</u>	<u>High School</u>	<u>Teacher</u>
Alex de la Iglesia	Howell	Howell High School	Angie Kynast
Abhimanyu Deshpande	Canton	Canton High School	Scott Milam
Ashwat Dhamotharan +	Novi	Novi High School	Rand Helmkamp
David Lewis	Grosse Pte Woods	Univ. of Detroit Jesuit H.S.	Priscilla Oshikiri
Aneesh Sabnis	Canton	Plymouth High School	Scott Milam
Pranhav Sundarajan	Livonia	Churchill High School	Robert Upton
Sahil Suneja #	Novi	Detroit Country Day	Marc Drougel
Kevin Wang	Troy	Troy High School	Bill Hevel
Alex Xu	Troy	Troy High School	Bill Hevel

Nominee 2017, 2018

Nominee 2018

++ Runner-up 2017, 2018

+ Runner-up 2018

Ravan and Wang are automatic Nominees by virtue of having attended the USNCO Study Camp in 2018.

National Rule #4: No more than **two students per teacher** or **per high school may be nominated** to take the National Exam. Automatic Nominees do not count against this total.

PARTICIPATING SCHOOLS (24)

Athens High School	Inter-city Baptist School
Bloomfield Hills High School	International Academy-Okma
Brighton High School	International Academy-East
Canton High School	Northville High School
Churchill High School	Novi High School
Cranbrook Kingswood Upper School	Oxford High School
Crestwood High School	Plymouth High School
Detroit Country Day School	Rochester Adams High School
Franklin High School	Stoney Creek High School
Grosse Pointe South High School	Troy High School
Harrison High School	Univ. of Detroit Jesuit High School
Howell High School	West Bloomfield High School

Expanding The Project Summer Educational Experience for Disadvantage Students (SEED) Experience: Community Service

Written by Felicia A. Benson

STEM Educational Services

Project SEED is a high-impact investment as part of the American Chemical Society (ACS) since 1968. More than 10,000 students have experienced research since **ACS Project SEED** was founded in 1968, and the impact has been phenomenal. Results from participation surveys show that 82% of students come from families with incomes of \$35,000 or less

The ACS-National just celebrated its 50th anniversary in 2018. The Summer Educational Experience for Disadvantaged Students (SEED) has supported students in a host of ways such as providing research experience, funding for economically disadvantaged students, college scholarships, and opportunities to present their research at the society's annual meetings. While these are all wonderful features the Detroit section's committee for Project SEED felt the need to develop a community service component.

At the local level, Keith Williams has led the section's program since 1992. Over the years, the Detroit Section Project SEED Committee has found the need to enhance the summer experience for its participating students. Initially, this was in the area of academic enrichment. Short courses were designed to enhance reading comprehension, mathematics, and study skills. Over the years many of these features were integrated into the Project SEED Friday Workshop sessions. As a result of this change, the local Project SEED Committee looked at other areas of student development that could impact students as well as enhance college admission personal statements. The Detroit section implemented the Community Service component. The committee found during the student interviewing process that few students were actively involved in community service, although it was a high school graduation requirement. The few students involved in community service found it a burden instead of an opportunity to engage with others and be of services to members of their community. Providing a platform for engagement and exploration has been a beacon to students as they find their individual niches.

Community service was added because its forerunner, an educational enrichment program, did seem to provide the impact of community service. Through this effort, the committee felt SEED participants could develop inter-personal skills and civic responsibility.

The areas of community service have been diverse. During the summer research experience, students generally support some type of academic activity as an instructor's assistant. These assignments afford SEED participants to:

- Enhance current academic study skills while enhancing laboratory skills
- Develop new skills, academic and social
- Reinforce subject matter
- Exposure to new subject material
- Access to next level, college course, expectations and responsibilities
- Moreover, allows for student expression and social engagement with their peers

Detroit Section Project SEED students have worked in support of grade schoolers, mostly other high school students as well as college students with programs such as the Wayne State University Upward Bound Chemistry and Physics components, the Wayne State University (WSU) Excel program, the WSU Louis Stokes Alliance Minority Participation (LSAMP) program, and the WSU APEX program (study skills). Past students have worked as editors in the weekly information device for the WSU IGERT effort and the Summer Undergraduate Research Academy (SURA). Also, the students have worked with elementary school students to develop science projects at the Wayne County Community College District. Some have served as support for symposia for University of Michigan LSAMP and the REBUILD collaboration at UDM. Furthermore, this pool of students has served as support at the high school level within summer school science classes offered by the Detroit Public Schools Community District as well as at the college level at Henry Ford College.

As a result of these additional experiences over the years, Project SEED participants have been able to include these community service projects in their admission essays for college. Moreover, some students have used these experiences as a framework to develop their own community service efforts. It should be noted that the community service projects that the SEED students in the past have occurred either in the mornings prior research or after 5:00.

This year's research projects have already been approved by ACS-national. The Detroit Section's program is looking to place four first-year students in positions as student researchers. Appointments to SEED are paid stipends: \$2,500 (year-1)-\$3,000 (year-2). These awards are funded partially through the section, donations, and ACS-national. Project SEED appointments are competitive and requires an income stipulation. The student must be defined as "disadvantaged"; a total family income below \$34,000. Ideally, the student should have completed at least a year of chemistry and have completed the 10th grade.

As stated, these slots are competitive, meaning the committee reviews all application packages and develops a short list of students who are to be interviewed. A list of primary and alternate candidates is generated, and then offer letters are sent to students. Selected students have two years of eligibility.

As the local program begins its 27th year under Keith Williams, we are always looking for students, funds, speakers, field trips, etc., to assist with this worthwhile effort. Selected high school researchers will be offered a stipend for participation in an 8-10 week program, scheduled to begin in late June 2019.

For further information contact Keith Williams at ac1573@wayne.edu

Events Calendar
Available at detroit.sites.acs.org

Date	Program	Presenter	Location	Time
April 27	Greenfest at the Zoo	Hands-on program volunteers	Detroit Zoo	9 am – 3 pm
May 2	Rouge Water Festival		University of Michigan-Dearborn	
May 21	Brewing Chemistry	Monique Wilhelm “Risk assessment in the teaching lab”	Traffic Jam and Snug, Detroit, MI	Talk 7 pm
May 28	International Awards Banquet		The Windsor Club, Windsor, Ont.	Drink 5:30, Dinner 6, Awards 7
June 4-8	ACS Regional Meeting	Various Speakers	Midland, MI	
June 18	Brewing Chemistry	Chemistry show and tell	Traffic Jam and Snug, Detroit, MI	Talk 7 pm
June 23	Reception and Social for ACS Members		Michigan Science Center	TBD
June 28	ACS Career Day Registration opens May 13 th		TBD	8 am – 4 pm
July 16	Brewing Chemistry	Dave McCall “TBD”	Traffic Jam and Snug, Detroit, MI	Talk 7 pm