



2017 BRAUDE AWARD



~ **Dr. Tracey Mason** ~ Professor Stevenson University

"Trans-isopropylamine-triphenylphosphine diiodine Pt(II): Challenging the paradigm of cis-geometry for platinum chemotherapeutics"

Wednesday, October 25th, 2017
6:00 pm-8:30 pm
SoLVE Center, Manning Academic Center
Stevenson University
Owings Mill North
11200 Ted Herget Blvd
Owings Mills, MD 21117



Volume 74, Number 4, Oct, 2017

2017 Section Officers:

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2015–2017 Stephanie J. Watson, N.I.S.T., stephanie.watson@nist.gov
2015–2017 Dana Ferraris, McDaniel College, deferraris@mcdaniel.edu

2015–2017 Jan Kolakowski, US Army Edgewood Chemical Biological Center, jan.e.kolakowski.civ@mail.mil

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2017-2019 Sandra Young, RDECOM, sandra.k.young26.civ@mail.mil

2017–2019 Pumtiwitt McCarthy, Morgan State University, Pumtiwitt.McCarthy@morgan.edu

2017–2019 Charles M. Zapf, retired, smzsail@verizon.net

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Sandra Young, RDECOM, sandra.k.young26.civ@mail.mil

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Remsen Award - Dana Ferraris, McDaniel College, dferraris@mcdaniel.edu

Braude Award – Louise Hellwig, Morgan State University, louise.hellwig@morgan.edu

Maryland Chemist Award-Angela Sherman, Notre Dame of Maryland University, asherman@ndm.edu

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Education - Beatrice Salazar, US National Chemistry Olympiad, USNCO, <u>beatricesalazar1@gmail.com</u>; Co-chair Eric C. Cotton, C.C.B.C., <u>ccotton2@ccbcmd.edu</u>

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Environmental – Beatrice Salazar, Earth Day Events, beatricesalazar1@gmail.com

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Message From the Chair:

Welcome back after a busy, but hopefully restful summer. With fall in full swing, we are in the throes of the last half of the year for the Section. We held a brew tour at Flying Dog Brewery in Frederick MD on September 18 and got a very good turnout. Our Section will start to get busy this month for National Chemistry Week events and for the Braude Award to be held on October 25. Elections will be held in short time. If you have interest in participating as an officer, please contact me, stephanie.watson@nist.gov.

Hope to see you at our events! Stephanie Watson Chair and Councilor

~ Dr. Tracey Mason ~

Professor Stevenson University

"Trans-isopropylamine-triphenylphosphine diiodine Pt(II): Challenging the paradigm of cis-geometry for platinum chemotherapeutics"

Wednesday, October 25th 6-8:30 pm SoLVE Center, Manning Academic Center Stevenson University Owings Mills North 11200 Ted Herget Blvd.* Owings Mills, MD 21117

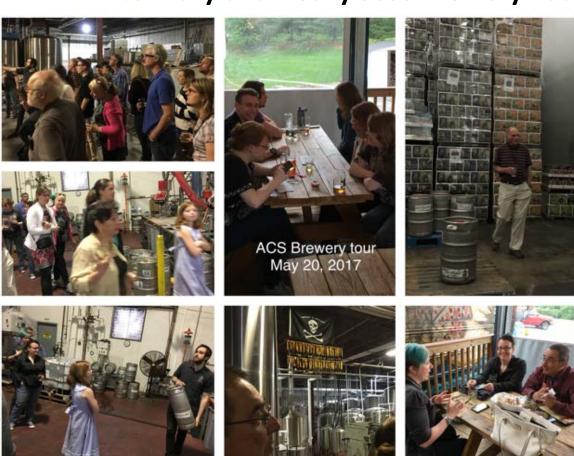
*Note: Some mapping services may still use the former name of Gundry Lane

Speaker Bio: Tracey McGregor Mason joined the faculty at Stevenson University in January 2008. Prior to Stevenson, she earned her Ph. D. with Prof. Nicholas Farrell (VA Commonwealth U. 1996-2001) doing work on di platinum chemotherapeutics, and completed post-doctoral work with Prof. Richard Karpel (U.MD Balt. Co 2001-2002) working on Gene 32 protein and with Prof. Paul Miller (JHPSH/BMB 2002-2007) where her work focused on DNA repair of interstrand cross-links. She earned her teaching stripes with the United States Peace Corps as a secondary education in science volunteer in the Fiji Islands (1994-1996). At Stevenson, she mentors 2-6 undergraduate students per year and advises graduate students in the Forensic Science program on their research methods.

Speaker Abstract: Despite developments in novel cancer therapies, Cisplatin is often the initial therapy administered for a variety of tumors. Unfortunately, innate or acquired Cisplatin resistance is a very real problem. *Trans*- platinum complexes have classically been dismissed at ineffective, but modifications to the classical diammine/ dichloro motif have produced some promising *trans* candidates. In collaboration with Prof. Adoracion Quiroga of the University of Madrid, we are attempting to characterize the mechanism of action of *trans*- isopropylamine-triphenylphosphine diiodine Pt(II). We have assayed the cytotoxicity, cell cycle and apoptosis of this complex in several human cell lines, some with Cisplatin resistance. Undergraduate researchers in chemistry are learning the valuable cross-disciplinary technique of mammalian cell culture and flow cytometry. Future work includes Pt uptake and interstrand cross-linking.

Price	\$20 members/nonmembers \$10 students. Payable at event.
6:00-6:30 pm	Registration/networking
6:30-7:30 pm	Dinner
7:30-8:30 pm	Presentation by Professor Mason
8:30 pm	Presentation of Award
RSVP	contact-us@mdchem.org

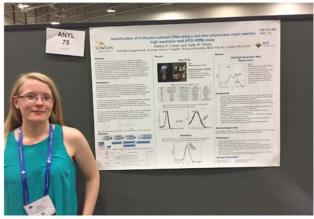
Recent Events ACS Maryland Heavy Seas Brewery Tour

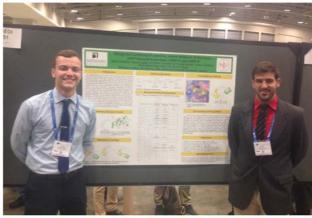


Nineteen of us met at Heavy Seas Brewery in Halethorpe. We went on a 30 minute tour of the manufacturing facilities and were given four tickets for beer samples. Food was available from a food truck. It was a great time of socializing for all ages!

Congratulations to Maryland ACS Student Travel Awardees!

Travel awards were awarded to students attending either the ACS Middle Atlantic Regional Meeting held in Hershey, PA June 4-6th, 2017 or the ACS National Meeting held in Washington, DC August 20th-24th, 2017.





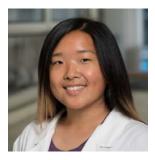


A sampling of student experiences:

"I had a great time in DC. Both poster presentations went off without a hitch, and I was able to get plenty of networking done. Thanks for helping make it happen!" "It was a busy and enriching 4 days of presenting my research as well as viewing/discussing others and attending workshops to better inform myself on current Chemistry innovations. . . Thank you again for making this experience possible."

My Experience as a SEED Program Intern

Summer 2017 Shun Shueh Centennial High School

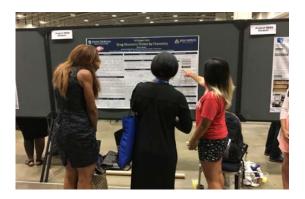


This summer, I was given the opportunity to work at Johns Hopkins Drug Discovery through the ACS Project SEED program. My mentor, Dr. Takashi Tsukamoto, oversees the medicinal chemistry operation of this drug discovery unit. During my summer, I worked on several projects with two staff scientists, Bridget Duvall and Niyada Hin, who helped me gain exposure to the types of modern chemistry practices that take place in laboratories of drug discovery research.

Under the close supervision of my mentors, I was exposed to many aspects of experimental chemistry including the planning and set-up of organic reactions, purification of crude reaction products, and characterization of those products using a variety of analytical methods. Through this experience, I also learned proper laboratory safety techniques, appropriate waste disposal procedures, documentation of my experiments, and the use of modern synthetic/analytical equipment.

One of the most rewarding experiences of my summer internship was definitely attending the American Chemical Society's National Meeting in Washington, DC, where I was invited to participate in the Sci-Mix poster session. At this session, I had an opportunity to talk about my summer research project to attendees from a variety of chemistry fields. Many of them provided me with valuable advice for my future academic and professional choices. I was also able to meet in person with other Project SEED students and learn about their summer projects. This experience allowed me not only to develop strong presentation skills but also to broaden my views on the different areas of research in chemistry.





Finally, I would like to express my gratitude to the Project SEED Office and the Maryland Local Section of the American Chemical Society for the generous financial support that made my scholarship possible. I am also grateful to Bridget Duvall, Niyada Hin, Takashi Tsukamoto, and the rest of the Johns Hopkins Drug Discovery group, all of whom created a supportive and enjoyable environment for my summer projects.

Sincerely,

Shun Shueh

NEW PARTNERSHIP

ACS MARYLAND '



CCBC

http://www.ccbcmd.edu/











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Dean of Instr, SOMS, School of Mathematics and Science
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It is a pleasure to welcome the CCBC team made of chemists and administrators to work with the Maryland Section of the American Chemical Society. CCBC was invited to host the U.S. National Chemistry Olympiad, (USNCO) starting in 2018. We are delighted they have accepted and we look forward to strong partnership between the ACS Maryland Section and CCBC to make USNCO a success. Thank you and Welcome! *Beatrice Salazar, USNCO Coordinator*

"we at CCBC would love to help out with this [Host the U.S. National Chemistry Olympiad] I will work with Eric Cotton on preparing for the day." From: Dr. Jean Ashby, Jean

"This is [a] great opportunity to expand opportunities for two-year students by engaging with the ACS and its members. I'm excited to be involved with the Chemistry Olympiad." From: Dr. Eric Cotton Cotton, C Eric

^{*}Salazar, Beatrice ACS maryland beatricesalazar1@gmail.com USNCO Coordinator/Vice Chair ACS MD

^{*} Principal Contact 443-840-3728 at CCBC / ACS Maryland

34th Annual Mid-Atlantic Plant Molecular Biology Society



The 34th annual meeting of the Mid Atlantic Plant Molecular Biology Society was held on August 14 and 15th, 2017 at the Patuxent Research Refuge in Laurel, MD. Dr. Jim Saunders, former Chair of the Maryland Section of the American Chemical Society, served as Director of the Organizing Committee for the meeting. Registration for the two day symposia included lunch for all participants in a casual atmosphere which promoted interaction among participants. Approximately 100 regional scientists attended the event

sponsored by the non-profit Scientific Society to promote plant based scientific interaction in the mid-Atlantic region. The meeting featured students and professionals from academia, government, and industry scientists delivering research presentations, participating in poster sessions, and networking with their peers. The scope of the research covered includes plant biochemistry, plant, microbial and viral molecular biology, genomics, and bioinformatics. Program booklets from previous meetings are available at the website at http://wp.towson.edu/mapmbs. Awards and cash prizes were provided for the best poster presentation by a undergraduates, graduate student, technicians and postdocs are presented each year.

ACS Council Meeting Report

Report of Council Meeting held August 23, 2017 at the 254th ACS National Meeting, Washington, DC

The meeting was called to order at 8:00 AM. All five Councilors for the Maryland Section were in attendance. The theme of the 254th ACS National Meeting was "Chemistry's Impact on the Global Economy". A total of 12,904 were in attendance, including 2,997 students and 1,068 exhibitors. The electronic vote results for the Committees of Council are as follows:

The Council elected Karl S. Booksh, Mark D. Frishberg, Zaida C. Morales Martinez, and Linette M. Watkins for three-year terms (2018-2020), and Ella L. Davis for a one-year term (2018) on the Council Policy Committee.

The Council elected Michael Appell, Neil D. Jespersen, Mamie W. Moy, Eleanor D. Siebert, and Julianne M.D. Smist for three-year terms (2018-2020) on the Committee on Nominations and Elections.

The Council elected Mitchell R.M. Bruce, Jetty Duffy-Matzner, Martha G. Hollomon, Diane Krone, and Robert A. Pribush for three-year terms (2018-2020) on the Committee on Committees. Other Council actions were as follows:

A recommendation by the Committee on Membership Affairs that Council approve the Petition on International Chemical Sciences Chapters narrowly failed to achieve the two-thirds majority required to amend the Bylaws. The proposal would have amended Bylaw IX, Section 4, to permit financial support for International Chemical Sciences Chapters and to remove language from the Bylaws prohibiting Chapters from having representation on Council.

The Council defeated a proposal from the Committee on Divisional Activities that it establish a probationary Division of Space Chemistry, effective January 1, 2018.

Candidates for 2018 President-Elect are Bonnie A. Charpentier and Willie E. May. Candidates for Director of District III are Alan B. Cooper and Teri Quinn Gray. Ballots for the 2017 fall national election will be distributed on September 29, with a voting deadline four weeks later, on October 27. In a change of procedures, all members with an email address on file and eligible to vote will receive an electronic ballot with the option to request a paper ballot. Those members with no email address on file will be sent a paper ballot with the option to still vote electronically.

The ACS Budget and Finance Committee's 2017 Projection calls for a Net from Operations of \$25.3 million. Total revenues are projected to be \$553.0 million and total expenses are projected at \$527.6 million. Based on the Committee's recommendation, the Board subsequently approved funding for the ACS Online Course in Laboratory Safety and the New Faculty Workshop Series for inclusion in the 2018 Proposed Budget and the 2019-2020 Forecast.

The meeting was adjourned at 11:30 AM.

Respectfully submitted, Jan Kolakowski Councilor

ACS Maryland Flying Dog Brewery Tour September 17, 2017









Twenty-six attendees met at Flying Dog Brewery in Frederick. We were taken on a very informative and entertaining one-hour tour of the manufacturing facilities, with frequent samples of beer! Afterwards some of us enjoyed food and the lovely weather in the beer garden.

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Call for Nominees for Section Officer Positions

A common response from last year's election was the desire to choose between a number of candidates for each position. We want to follow through, but need your help to fill the positions.

Positions within the Section that are elected every year are:

- Chair-Elect
- Treasurer
- Secretary
- Members At Large (up to 5)

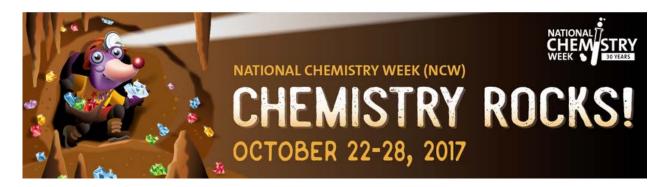
The Chair-Elect term is *3 years*: candidate is Chair-Elect for one year, and then moves to Vice-Chair for one year, followed by Chair for the last year. The Chair progression is designed to educate the candidate prior to entering the Chair position. A Councilor term is *3 years* and our Section has 5 Councilors. The next 3 Councilor positions will be up for election in *2017* (for 2018) and the remaining 2 Councilor positions were elected in *2015* (for 2016).

All persons interested in volunteering or know of members to nominate for positions, please contact **Stephanie Watson** (stephanie.watson@nist.gov; 301-975-6448) or Beatrice Salazar (beatricesalazar1@gmail.com).

Stephanie Watson Chair of Maryland Section

Upcoming Events

National Chemistry Week



Upcoming local National Chemistry Week events:

Chemistry in the Library: Chemistry Rocks!

Ages 7 & up (7-8 year olds must be accompanied by an adult); 60 min. Registration required.

Join a chemist from the Army Research Laboratory and the American Chemical Society for hands-on experiments and activities related to the chemistry of rocks (geochemistry).

Register through the library website or contact Rose Pesce-Rodriguez (<u>rose.a.pesce-rodriguez.civ@mail.mil</u>) for more information.

Howard County Library System, Central Branch

10375 Little Patuxent Pkwy, Columbia. MD 21044, Phone: (410) 313-7800

Sat, Oct 21 @ 2 pm (60 min) registration required

Howard County Library System, Miller Branch

9421 Frederick Rd, Ellicott City, MD 21042, Phone: (410) 313-1950

Sat, Oct 14 @ 1 pm (60 min each) registration required

Oct, 2017

Sat, Oct 14 @ 3 pm (60 min each) registration required

Wed, Jan 10 @ 7 pm (60 min each) registration required (open to adults without children)

Howard County Library System, Savage Branch

9525 Durness Lane, Laurel, MD 20723, Phone: (410) 313-0760

Sat, Nov 11 @ 2 pm (60 min) registration required

Sat, Nov 18 @ 2 pm (60 min) registration required

Enoch Pratt Free Library, Brooklyn Branch

300 E. Patapsco Ave, Baltimore, MD 21225, Phone: (410) 396-1120

Sat, Nov 4 @ 1pm, registration suggested



One excited participant with the shirt they created at the September 30th event held at the Glenwood Branch of the Howard County Library System

2017 Maryland Section Event Schedule

Event	Date	Location
National Chemistry Week	October 22-28, 2017	Everywhere
Braude Award	October 25, 2017	Stevenson University
Remsen Award	November	Johns Hopkins University
Maryland Chemist Award	December	TBD

If you have any ideas or suggestions about new events, let us know: contact-us@mdchem.org

REMINDER: Receiving the Chesapeake Chemist

Hopefully, if you are reading the Chesapeake Chemist this month, you are receiving it via e-mail from us. We went to electronic-only mailings to our MD ACS membership in October 2006.

Changing your e-mail address? Moving out of the MD ACS area? E-mail changes can be updated either by:

- E-mailing us at <u>contact-us@mdchem.org</u> give us your member #, full name, and e-mail changes and we can ensure that your records are updated with National ACS.
- Contacting the National ACS membership division: 800-333-9511 (US only) or service@acs.org
 To ensure that you receive the Chesapeake Chemist, please add the MD ACS e-mail (contact-us@mdchem.org) to your accepted e-mail address list IF you have a spam filter.

If you are a member who currently doesn't receive the Maryland ACS Chesapeake Chemist but download it from our website, it is possible that National ACS does not have your e-mail address on file. If you want to receive the Chesapeake Chemist via e-mail, please e-mail us at contact-us@mdchem.org — give us your member #, full name, and e-mail address and we can ensure that your records are updated with National ACS.

The current edition and previous editions of the Chesapeake Chemist can ALWAYS be obtained via our website: http://mdchem.org – please see the Newsletter Archive link on the left-hand side of the website.



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The Chesapeake Chemist is e-published monthly September through June by the Maryland Section of the American Chemical Society. Send submissions to the editor in electronic format. The Maryland Section is not responsible for opinions expressed herein. Editorials express the opinions only of the authors. The editor is not responsible for all unsigned material.