

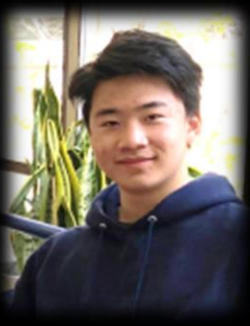
**U.S. National Chemistry Olympiad
Students Representing Maryland State
Win Highest Honors!**

Anurag Sodhi

**US National
Chemistry Camp Winner**

Akshay Kannan

National High Honors List



Congratulations on your Achievement! p. 5

**Maryland Local Section
 Newsletter**

Editor-in-chief: Beatrice Salazar

CONTENTS

3/Chair's Message

Sarah Zimmermann, Ph.D.

5/2022 U.S. National Chemistry Olympiad

8/HISTORY CORNER

Featuring Morgan State University

**12/Chemistry Camp Spotlight
 " Achievement"**

Student Anurag Sodhi

Article on Anurag's experience at Chemistry Camp and how he arrived at this honor position

15/Celebrating women Chemists at ACS

16/ Highlight of the 2022 ACS Fall Conference

17/Councilor's Report

19/ Pilot Research Project Seed Summer program

20/Announcements

21/ Reports-Block

22/Let's talk Chemistry

23/Earth Day celebration

25/BOOKS

25-27/ Leadership Institute

26/Laugh a little

28/Administration

29/ Events Contact

Cover :



From the Editor's Desk...

What makes us successful?

When I look at the cover page of this magazine, I see youth and success. What makes these students successful? What do all these high school students have in common? I see discipline, curiosity, and joy of learning and life. I do not think I am reading too much from the photos; I had the opportunity to interact with these students and I realized the pictures capture the intelligence, energy and audacity of their young years. This newsletter covers their journey to one of the most interesting science competitions, the U.S. Chemistry Olympiad, USNCO (Pages 4 -14). Congratulations to all students' USNCO nominees and especially to Anurag and Akshay for their high honor achievement in the 2022 USNCO (Pg. 5).

Welcome back to the Chesapeake Chemist Newsletter, CCNL Summer edition 2022! So much has happened in the last four months, and we wanted to get back with updates on USNCO, Earth Day Events, ACS leadership meetings and the ACS Maryland local section initiatives. The ACS National Meetings are not yet at the in-person attendance levels we had before the pandemic, but the number of in-person attendees has increased. ACS Maryland local section continues to have virtual meetings just for the convenience; this in turn prompt us for better ways to implement virtual communication and technologies. We are grateful for the wonderful group of coordinators we have who are bringing science in all forms to the community! We, the ACS Maryland coordinators of programs and events are making it possible to celebrate scientists and keep our programs vibrant. We will be featuring more of our scientific, fun and award events in the upcoming months. We are grateful for your contributions to our magazine.

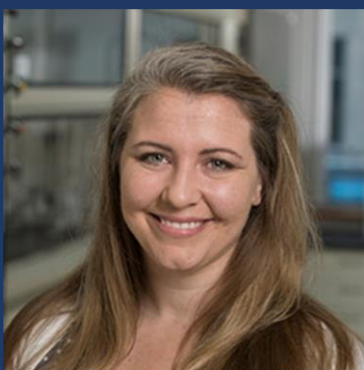
Thank you and we welcome back!

Beatrice Salazar

Editor-in-Chief, ACS Maryland Section



CHAIR'S MESSAGE



Dr. Sarah Zimmermann Chemist, FDA

Chair, ACS Maryland Section -
acsmaryland.org

Sarah Zimmermann, PhD
Chemist FDA
<https://www.fda.gov>
U.S. Food & Drug Administration
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Silver Spring, Maryland,
20903, United States

[\(92\) Sarah Zimmermann | LinkedIn](#)

Recent publication Feb. 2021
Journal [ONCOLOGIST](#)



Summer 2022

Dear Members,

The Summer is bringing warmer weather and blooms to Maryland.

We will continue to see improvements with the COVID-19 pandemic, and hope things will continue to improve.

We have several updates to report on:

- Our bylaws have been revised, please keep an eye out in the coming months for a vote for the revisions.
- Student Travel Awards to the National ACS Meeting
- This year we have 17 ACS Maryland members that have been participating for 50+ year; the Chicago National meeting will have updates on this program around all local sections
- We had 21 outstanding Student Awardees from Local Colleges and Universities, and their research presentations have been recorded, Listen to them! p20
- We initiated the pilot a 2022 program ACS-Maryland Research Project SEED, in supplement of the National ACS Project SEED p19
- We had 12 outstanding high school representing Maryland in the US National Chemistry Olympiad.
- Chemists Celebrate Earth Week was a successful event see the new website linked to the ACS Maryland website p23

If you are interested in becoming more active with the Maryland Local ACS Section, or have any ideas on how we can better serve the Maryland Chemist Community, please feel free to contact us at: acsmarylandsection10@gmail.com.

Thank you,

Sarah Zimmermann, PhD

2022 U.S. National Chemistry Olympiad Morgan State University

Maryland Olympiad Coordinator, Beatrice Salazar, MS
Mentors at Morgan Louise Hellwig, PhD, Camilo Rojas, PhD
and Jiangnan Peng, PhD.

April 30, 2022

"This unique experience was possible by the generosity of the members of the Chemistry Department at Morgan State University.



Dr. Hellwig and Dr. Peng are at each end of the row. Ms. Beatrice Salazar is on the r.h.s. and Dr. Rojas is taking the picture. Photo courtesy B. Salazar
Students' names in the following pages.

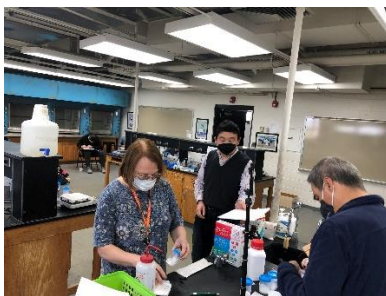
The administration of the ACS Maryland Local Section USNCO-Program wishes to thank Pumtiwitt McCarthy, PhD, Chemistry Department Chair and her lab technician Mr. Cole Grinnell for accepting to take part of this important competition.

In Addition, we want to thank Louise Hellwig, PhD, Organic Chemistry Professor, Camilo Rojas, PhD, Biochemistry Adjunct Professor, and Jiangnan Peng, PhD, Chemistry Professor who helped in proctoring the last two exams of the national competition and work expeditiously in the final laboratory preparations. This opportunity allowed students to obtain high honors representing the state of Maryland and their schools with pride in a nationwide competition of more than 1600 finalists".

*Beatrice Salazar,
USNCO Maryland Coordinator*



Dr. Rojas & Dr Hellwig preparing solutions



Dr. Peng, Dr. Hellwig and Dr. Rojas labeling unknown solutions



At the end of the competitions all enjoyed pizza, friends, and awards

**CONGRATULATIONS TO ALL
USNCO NOMINEES**

2022 U.S. National Chemistry Olympiad



More than 40 students were able to participate in the 2022 Local Maryland Chemistry Olympiad competition before the National Competition began. For the last three consecutive years, USNCO was able to continue the national exam by administering it virtually. Despite the COVID-19 pandemic the competition continued, and new students became interested in participating. Congratulations to the 12 students from the Maryland local section who qualified to take the 2022 US National Chemistry Olympiad exam, also congratulations to their high school chemistry teachers and parents for their encouragement and support. Two students from our section scored within the top 150 students nationally and Anurag Sodhi earned the highest honor, he has been nominated as one of the top 20 finalists that will attend to Chemistry Camp during the summer and has the opportunity to compete for the International Chemistry Olympiad, IChO. Special thanks to our USNCO proctors: Louise Hellwig, PhD, Jiangnan Peng, PhD, and Camilo J. Rojas, PhD at Morgan State University. Their collaboration with the USNCO Coordinator, Beatrice Salazar and their participation during the return to the in-person parts of the competition on April 30th, was invaluable.

Finalist to attend chemistry camp: best qualified student among 1600 competitors nationwide: **Anurag Sodhi**

Honors list: National Competition, Top ~150, **Akshay Kannan and Anurag Sodhi**

Maryland Nominees for the 2022 USNCO: Top 12 students, see their photos here.



[Anurag Sodhi](#)

2022 Finalist, one of 20 nominees to attend Chemistry Camp and compete for IChO

National Honors Participant in 2021 and 2022
Taught by Robert Astri at Centennial High School

His story at Camp begins on Page 12!

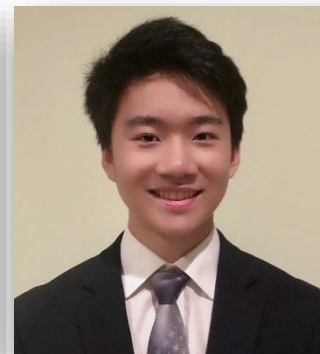
2022 Finalist, Akshay Kannan National Honors Nominee in 2022 (one of the first 150 in the National High Honors List)



Left: [Akshay Kannan](#), National Participant, *Taught by Kristen LeChevet at Marriotts Ridge High School*
 Middle: [Lars Lefkowitz](#), National participant *Taught by Aaron M. Simmons at Aberdeen High School*
 Right: [Brita Onomake](#), National Participant, *Taught by Aaron M. Simmons at Aberdeen High School*



Left: [Rithika Ramkumar](#), National Participants, *taught by Mary Ann Sankey at Mount Hebron High School*
 Middle: [Iris Zheng](#), National Participant, *taught by Adam Wishart at Baltimore Polytechnic Institute*
 Right: [Pragat Patel](#), National Participant, *taught by Mary Ann Sankey at Mount Hebron High School*
 Photo missing: [Nate Ratte](#) National Participant, *Taught by Jennifer Leffel at South River High School*



Left: [Alexander Gallagher](#), National Participant, *Taught by Thomas P. Michocki at Eastern Technical High School*
 Middle: [Jesse Zong](#), National Participant, *Taught by Robert Astri at Centennial High School*
 Third Right: [Aaban Sved](#) National Participant. *Taught by Angela M. Tatum at North County High School*
 End: [Jason Wang](#), National Participant, *Taught by Kristen LeChevet at Marriotts Ridge High School*

Feel free to contact the USNCO Nominees to congratulate them, their teachers, parents and schools

**PICTORIAL STORY OF THE US NATIONAL CHEMISTRY OLYMPIAD
DURING THE LABORATORY PRACTICAL**

STEP 1

**ANALYSIS OF THE EXPERIMENTAL
QUESTIONS AND DESIGNING OF A
FEASIBLE PROCEDURE**

STEP 2

**FOLLOW THE PROCEDURE CREATED
TO OBTAIN DATA AND ANSWER THE
QUESTIONS**



**PROBLEM
SOLVING
QUESTIONS
COMPETITION
PART-II**



HISTORY CORNER...

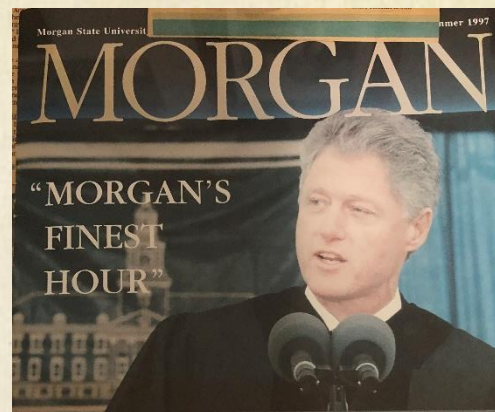
Morgan State University host the

U.S. National Chemistry Olympiad in 2022

Morgan State University is a plethora of knowledge and scientific achievement

By Beatrice Salazar,

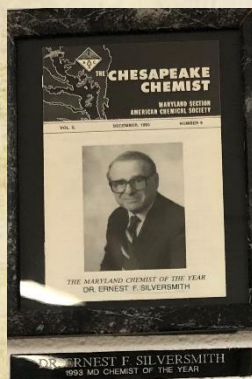
On the morning of Saturday April 30, 2022, twelve high school students gathered at the second floor of the Morgan State University Chemistry Department. These students were participating in the U.S. National Chemistry Olympiad. They were competing to qualify for the Chemistry Camp, a privileged chemistry study camp that prepares them for the International Chemistry Olympiad (IChO). We walked the long corridor of the chemistry department and to my surprise I found not only a chemistry museum and a chemistry library but a photographic collection of famous newspapers and documents of famous people, chemists, and politicians. This story must be shared with the community! I thought. Here we have some of the pictures that I believe the chemistry community, our Chesapeake Chemist's readers will enjoy.



I am pleased to present two unique instruments that are no longer seen in any laboratory but were used by all chemists in the past: A typewriter and our most accurate balance of the time.



History is one of the best instruments we have that help us remember where we were and where we come from. For instance, take for example the chairperson of the Chemistry Department Dr. Pumptiwitt McCarthy(2012), and Organic Chemistry teacher Dr. L. Hellwig (1990), both are here in this hall of fame when they arrived to Morgan State and the fun they had as a “NERdy” group.

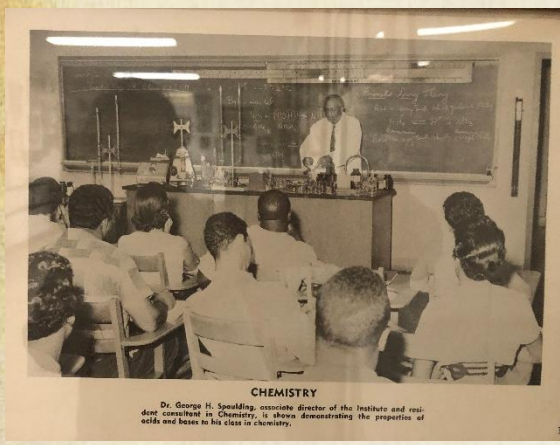




Group 1



Group 2



Group 3



Group 4



PHOTO DESCRIPTION of each group

- 1_ The year Morgan State College became University
- 2_ Distinguished members of the Morgan's Chemistry department
- 3_ Acid & bases chemical reactions demonstration class
- 4_ Tradition
- 5_ Chemistry Hall of Fame

1867 – 2022

"Growing the Future, Leading the World"

In 1867-1888, the university, then known as the **Centenary Biblical Institute**, changed its name to **Morgan College** (1888-1937) to honor [Reverend Lyttleton Morgan](#), the first chairman of its board of trustees and a land donor to the college. Named **Morgan State College** in 1937-1975. It became [university](#) in 1975.

BE CURIOUS!

In 2020, [MacKenzie Scott](#) donated \$40 million to Morgan State. The donation is the largest in Morgan State's history and one of the largest ever to a Historically Black College/University, HBCU.



The US National Chemistry Olympiad, USNCO started on March 1, 2022. The ACS Maryland Local Section competed virtually on March 26th at the local level. The students with best scores in their first round of the chemistry competition were nominated to participate at the national level. This competition had three parts ; Part-I was virtual, it took place on April 26th. The popularity of the virtual competition has increased but it is still not as large as the in-person competition from previous years. This year, 2022, we returned to the chemistry problem solving competition Part II and the Laboratory Practical Part III of the National competition in person. More details on the competition begin on page 4.

The USNCO STORY continues...

Students appreciate the time and effort of the proctors, here they give a token of appreciation to Dr. Rojas (by Lars L.), Dr. Peng (by Brita O.) and Dr. Hellwig (by Iris Z).



*A tribute to Parents, from all of us **thank you parents** for your support!*

We appreciate your time and patience. We feel great with your advice and encouragement.



Achievement



Magazine

**CHESAPEAKE
CHEMIST**

April-June 2022

Article by

Anurag Sodhi

Photographs by M. Thatcher



An interesting article on the experience of High School student Anurag Sodhi reveals the 2022 Chemistry Camp activities, the discipline and efforts to achieve this award, and the advice Anurag has for his classmates to continue striving to become good chemistry students. The Maryland Local Section of the American Chemical Society is proud to announce Anurag's accomplishments after more than a decade that one student from Maryland obtained this honor. Only 20 out of 1600 nationally were selected, Anurag was one of them!

The U.S. National Chemistry Olympiad (USNCO) is increasingly becoming an exemplary opportunity for these young chemists; the number of students achieving the honor list – among the first 150 Olympians out of 1600 national competitors- is increasing.

ACS Maryland Local Section Coordinator

Chemistry Olympiad Experience of Anurag Sodhi

An inspiring letter to all USNCO participants

My Chemistry Olympiad journey began in the summer of 2020 when I first heard about USNCO. At the time, I was passionate about chemistry; however, my knowledge stretched only as far as an introductory high school chemistry class. However, as a newly-minted teenager, I was confident that this new competition would be a piece of cake. That was until I took my first practice local exam, where I got destroyed - I barely got 50% of the questions right and took well over the allotted 110 minutes. However, my rather unsuccessful first attempts at USNCO only served to motivate me. After self-studying most of the AP Chemistry curriculum and taking many more practice tests, I made it past locals and into the National exams, where I earned Honors. I was thrilled at the time, but I knew I would only be happy the following year if I made it to the study camp.

That summer, I started taking classes from Dr. Jianping Huang; while many concepts taught in his class were already familiar to me from my self-studying from last year, I learned a lot of new things that I had minimal experience in, especially in the organic and inorganic chemistry fields. I also took AP Chemistry in school; despite knowing most of the content already, I still had loads of fun and still managed to learn a lot, especially about lab skills and techniques, something I attribute to the excellent teaching of my teacher Dr. Robert Astri at Centennial High School. After passing the local exam again and taking the national exams, I was very unconfident that I had done well enough to make camp. However, after an agonizing two-week wait, I got the “camp call” - I had made it!

At camp, I met many people just like me - we were not only passionate about chemistry but also shared many similar interests (including a common, extremely outdated sense of humor). Over the course of the camp, we played lots of pool, ping-pong, Science Bowl, and Mario Kart; for someone who's not very comfortable in new social situations, I was shocked by how quickly I felt welcomed and at home in this new community. However, the camp was also very busy. Every morning, we would start with 2-3 hours of lecture in organic, inorganic, and physical chemistry. We also had guest lecturers who shared their chemistry experiences, many of whom inspired me to pursue chemistry as a career. In the afternoons, we would have 4 hours of lab, where we learned many advanced lab techniques that I had never even heard of before. Adding on the many evening study sessions, camp exams, and laboratory practical exams, I often returned to my dorm exhausted. However, I learned so much due to the tireless effort the camp and peer mentors put in. While I didn't make the IChO team, I am incredibly grateful to have gotten the camp experience in the first place.

My experiences at camp inspired me to keep on going with Chemistry Olympiad - I plan to continue to study and hopefully get a gold medal at IChO in Switzerland next year. In the long future, I also plan to study chemistry in college and maybe even pursue a chemistry-related career. I want to thank my parents, Dr. Robert Astri and Dr. Jianping Huang, for all of their support and Ms. Beatrice Salazar and Morgan State University for organizing the MD Chemistry Olympiad and allowing me to succeed in the first place. I am looking forward to competing once again next year!

Anurag Sodhi



CHEMISTRY CAMP 2022

Four of these fortuitous young chemists will attend the international chemistry Olympiad, IChO in China!



COUNCILORS DUTIES

Committee on Committees, (CONC)

By Stephanie Watson

Stephanie Watson has been a member of National's Committee on Committees (CONC) for the past 6 years and will be terming off this year, 2022. CONC's members are elected by ACS Council and report to the Council. One of CONC's major mandates from the ByLaws is to assist and advise on appointments of Chairs and Members of Council-related bodies. CONC ensures that committees run well, have the talent and expertise needed to do their work, provide leadership development, and make sure operational polices and guidelines are followed. In short, the CONC member's role is to observe, scout, evaluate, recommend, and coach. CONC makes Committee appointment recommendations, and the ACS President-Elect and Board of Directors make Committee appointments. Stephanie has been a CONC liaison to the Committee on Chemical Safety and the Committee on Analytical Reagents. Each of these committees have undergone changes in both priority to National ACS and in its membership. (Any ACS member may apply to be CONC member)

Committee on Technician Affairs (CTA)

by Jan Kolakowski

Jan Kolakowski has been a member of the ACS Society Committee on Technician Affairs (CTA) for the past three years (2020-2022). The CTA represents the interests of Chemical Technical Professionals (CTPs) who hold AS, BA, BS, and MS degrees. These people comprise the majority of those who work in the laboratory. The committee's main functions are to: (1) Create, identify, and disseminate tools for professional development, (2) Highlight the accomplishments of CTPs through awards and recognition, and (3) Outreach to stakeholders inside and outside ACS. Jan is also the CTA Liaison to the ACS Society Committee on Economic and Professional Affairs. (Any ACS member may apply to be CTA member)

Women Chemists Committee (WCC)

by Beatrice Salazar

The 95th anniversary of this committee was celebrated during the 2022 Fall National Meeting on August 23rd. it was well attended, the music created a festive mood. Participants in the majority women gathered together to discuss the lectures, the diferent simposiums and to networking. WCC wants to attract women to leadership, it advocates for women in the chemical sciences to achieve success and impact society and the profession.



WCC Members
and co-chairs in
the Maryland Local
Section:
Kelly Elkins and
Sara Narayan

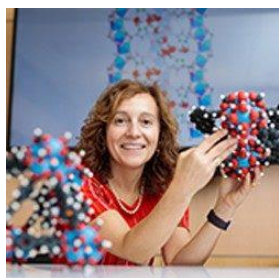


HIGHLIGHTS OF THE CONFERENCE



KAVLI LECTURE SERIES

The Fred Kavli Innovations in Chemistry Lecture



Dr. Laura Gagliardi

Richard and Kathy Leventhal, Professor of Chemistry and Molecular Engineering, The University of Chicago

Water scarcity, global warming, clean energy - the world is facing unprecedented environmental challenges. Dr. Laura Gagliardi believes theoretical chemistry can help solve these problems. She will explore how theory, computation, and machine intelligence can work together to help create a more sustainable world.

The Kavli Foundation Emerging Leader in Chemistry Lecture



Dr. Ellen Matson

Associate Professor of Chemistry, University of Rochester

The surface properties of redox-active transition metal oxides impact energy storage and conversion reactions. What is happening on these surfaces? Can we design materials that optimize performance? Dr. Ellen Matson will explain how she has used synthetic inorganic chemistry to study the kinetics and thermodynamics of heterogeneous catalysis.



Dr. Chad A. Mirkin

He is the George B. Rathmann professor of chemistry, professor of medicine, professor of materials science and engineering, professor of biomedical engineering, and professor of chemical and biological engineering, and director of the international Institute for Nanotechnology and Center for nanofabrication and molecular self-assembly at Northwestern University.

In 2018 he received the [Remsen Award](#) from ACS Maryland Local Section and Johns Hopkins University. We were happy to see him again during the ACS 2022 Fall conference and had the opportunity to remember those good times! ([See photos on pg.8 of the 2018 CCNL Issue](#))

Councilors' Corner

Dear Maryland Section Members,



On Wednesday morning of the Fall 2022 National ACS Meeting, ACS Council met in the Sheraton Grand Chicago Ballroom and Virtually (Hybrid-meeting) with Angela Wilson, ACS President, at the helm with support from the Council Policy Committee, Immediate Past-President H.N. Cheng, Chair of the Board of Directors Paul Jagodzinski, CEO Tom Connelly, President-Elect Judy Giordan, and Nominations and Elections Committee.

The Maryland Section was represented by Councilors **Kelly Elkins**, **Beatrice Salazar**, and **Stephanie Watson** in person and **Jan Kolakowski** virtually. Over 400 Councilors were present in person at tables and chairs spread across the Ballroom and virtually. This was the Society's first hybrid Council meeting and roughly half of the attendees participated virtually. The virtual portion went smoothly

and without technical difficulties. Wilson, Giordan and Cheng highlighted their activities over the past year including selected events and activities from the Chicago National Meeting that drew over 11,619 registered presenters and attendees (9355 in person and 2264 virtual). Several elections were held by electronic ballot using the Lumi platform.

- Elected to the Council Policy Committee for three-year terms: Raychelle Burks, Anne Gaffney, Will Lynch and Frankie Wood-Black. Lydia Hines will fill a one-year term.
- Elected to Nominations and Elections for three-year terms: Michelle Buchanan, Alan Cooper, **Kelly Elkins (Maryland)**, Ellene Tratras Contis and Kathryn Uhrich.
- Elected to the Committee on Committees for three-year terms: William Carroll, Ella Davis, Carmen Gauthier, Tom Lane, and Jason Ritchie.

The Vice Chair of the Council Policy Committee (CPC) reported that both Council meetings in 2023 will continue to be held in a hybrid manner. A virtual strategy event is planned for Councilors in September. Nine members were celebrated for their 15-year serving as councilors, among them was Maryland Councilor **Stephanie Watson**.

On the recommendation of the Committee on Divisional Activities (DAC), and with the concurrence of the Council Policy Committee, Councilors voted by electronic ballot to approve the Petition to Amend the Duties of the Committee on Divisional Activities, providing greater authority to step in and assist Divisions who have inactive Executive Committees. This recommendation generated significant discussion and debate of the term "inactive". This amendment will provide a path forward for a Division, which saw its established leadership resign this year.

The Councilors (97% in favor) voted to approve the continuation of the Committee on Public Relations and Communications (CPRC) as recommended by the Committee on Committees with the concurrence of the Council Policy Committee.

Additionally, Councilors voted to approve the Petition to Amend the Elections Function as recommended by the Committee on Nominations and Elections (N&E) with the concurrence of the Council Policy Committee. This action helps to clarify, consolidate and re-order existing requirements related to nominations and elections. Councilors voted to approve the Petition for a change in Section Name from the Northeast Tennessee Section to the Tennessee-Virginia Highlands Local Section as recommended by Committee on Local Section Activities (LSAC) and with the concurrence of the Council Policy Committee.

Councilors voted to approve the Petition to Amend the Application and Dues Process for Corporation Associates, allowing Corporation Associates to set fees based on a sales revenue model rather than number of employees as recommended by the Committee on Membership Affairs (MAC) with the concurrence of the Council Policy Committee. CEO Connelly has submitted his plans to retire at the end of 2022 and the Board is conducting a search for his replacement to begin in 2023 with the assistance of a search firm. The ACS Board of Directors voted amendments to the Board Regulations resulting in most Board Committee terms becoming three years with a maximum of two terms in alignment with other Society Committees.

President Wilson led Council in a discussion on “ACS for the Future.” Several Councilors were able to share their thoughts and ideas. Councilor Kelly Elkins expressed her ideas and support for a Division of Forensic Chemistry, assistance from National ACS staff in importing membership lists to conduct elections, a Leadership course focused on Ethical Decision Making, and a reviewer credit system to defray costs for ACS reviewers wishing to submit research papers to ACS open access journals. Other ideas included supporting regional meetings especially in regions of the country that do not receive national meetings and support for industrial international exchanges, to name a few.

In other ACS and National Meeting news, ACS Staff reported that ACS membership has increased by 3% with the new membership categories. ACS also offered reimbursement of meeting registration fees for members upgrading to a premium membership. ACS held ACS Leads (similar to the Lindau Nobel Laureates Meeting) to selected undergraduate, graduate students and postdoctoral scholars at an event with distinguished speakers including 4 Nobel Laureates.

The Committee on Committees reported that an outside firm, McKinley Advisors, will review the existing committees to determine if they should be eliminated, added, combined, or remain unchanged to maximize the volunteer experience, inclusiveness, and governance best practices. Committee on Committees (ConC) reviews each committee every five years. ConC shared that 640 users used the new Committee Preference Form which resulted in 347 submitted preferences and 109 new users. The form will open again to ACS members to declare their interest in serving on Committees for the upcoming year.

There will be a virtual meet and greet with Candidates for ACS President in September. The Board reported that ACS is on track to meet all its financial guidelines (e.g., current ratio, debt ratio, free cash flow, fund balance ratio, and financial sustainability).

Respectfully submitted,
Kelly Elkins
Councilor

Congratulations!
Kelly Elkins, PhD
Elected to
Nominations
and Elections
Committee
2023-2026

ACS Fall 2022 National meeting reports are found on: Pages : 15 - 18

ACS Maryland Local section 2022 New Pilot Program

CONGRATULATIONS!

The new Pilot Research Project Seed Program, PRPSP, established at the beginning of the current year to increase the high school opportunities for students to experience how scientists work in a laboratory setting was successful. This is a paid summer program with direct assistance from a Mentor, a Professor at any Maryland university or college.

Information on this new program can be found in our website ascmaryland.org under “outreach”.



2022 PILOT PROGRAM ACS-MARYLAND RESEARCH PROJECT Seed

OUR MISSION

To enhance the Core Goals and the Mission of ACS at the local level. To communicate and expand chemistry knowledge with the community to provide STEM research, learning and inspiration for the chemistry field in young high school students. To implement new ACS ideas in particular Diversity, Equity, Inclusion, and Respect, DEIR.

Announcement

All high school students that have taken chemistry are eligible to attend the Summer Research **Project Seed** program. This program is similar in content and context to Project **SEED**. However, the word **Seed** has a different meaning in the ACS Maryland local Section program, it refers to a germinating seed.

WELCOME

Apply

1. REQUIREMENTS/ Eligibility

- High School student 10-11 grade

2. COMMITMENT

WELCOME

Apply

1. REQUIREMENTS/ Eligibility

- High School student 10-11 grade

Contact:

ascmaryland.org
Outreach Programs

[Louise Hellwig](#), Morgan State University ACS-MRPS Coordinator

[Kelly Elkins](#), Towson University ACS-MRPS Coordinator

[Beatrice Salazar](#) ACS_MRPS Committee

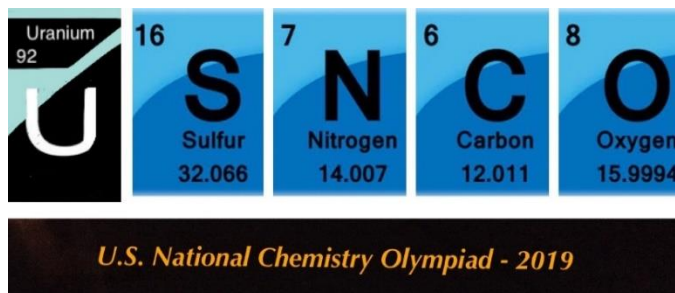
[Check the new PROJECT SEED Maryland Website for more information.](#)

See the report on page 21 where Benjamin , Tessa and Mansoor discuss their summer research and the first experience at the Pilot Program.

ANNOUNCeMeNTS

Program Name Change: The ACS-MD 2022 New Pilot Program was successful! The Name of the program is under review. Information on the new name will be available in the next Chesapeake Chemist Issue.

**2022
Successful
Activity**



U.S. National Chemistry Olympiad

Contact: [USNCO Coordinator-MD](#)

The STUDENT AWARDS' Lecture was another very **successful event**; before the lecture all awardees presented themselves and gave a short synopsis of their research, Then, the lecture presented by Dr. Tobin was attended by a large number of awardees, members of the Maryland local section and relatives and friends of the awardees. Associate Professor [Dr. Jay Tobin](#) from Stevenson University did an excellent job entertaining all with stories about forensics episodes. The Lecture was videotaped for further use of the attendees.

Lecture Recording:

https://american-chemical-society.zoom.com/rec/share/c_GKCqcpO_RSi7s-OW20tjU6G33Fc6IQFDJ1mk6FS3PH3-W-x51E6Z32J6p7Jfbq.s3Oxzg3UYf9HpcCV

Access Passcode: **S^47fj%R**

The Braude Award recipient has been selected. The announcement and information on the Lecture Award will be in the October issue of the Chesapeake Chemist. Please send all pertinent information as soon as possible and thank you for your contribution to the Chesapeake Chemist, the magazine and newsletter of the Maryland Local Section.

Nominee Selected: [Dr. Dianne Luning-Prak from Naval Academy](#). The celebration and lecture will take place October 24, 2022.



REPORTS

REPORT ON EARTH DAY

On April 22, 2022 pg. 23-24

PROJECT EARTH DAY

ISSUE NO 1 | APRIL 22, 2022 | VOL. 1



EARTH DAY CELEBRATION

Friday, April 22, 2022

12:00 P.M. - 3:00 P.M. EDT
Old Goucher Community Area
Baltimore, Maryland

REPORT ON WCC, Women Chemists Committee

Kelly and Beatrice attended some of the lectures and the 95th birthday Celebration. See page 15

REPORT ON Council National meeting/ and ACS 2022

Fall National Conference
See page 17 and page 18

REPORT ON

USNCO

[Join us!](#)

See Page 5

REPORT ON PROJECT SEED

Summer 2022 participants 4; see the names of students they presented their summer research experience at Towson University during a ZOOM meeting*

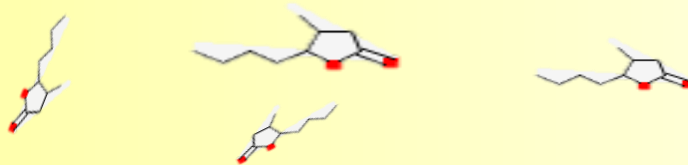
REPORT ON the 2022 Leadership Institute In Atlanta, GA

See pages 25-27

*PROJECT SEED SPEAKERS PRESENT THEIR 2022 SUMMER RESEARCH

- First speaker – **Youssef Tewala** (sponsored by ACS project SEED)
- Second speaker – **Benjamin Raufman** (sponsored by MD ACS)
- Third Speaker – **Tessa Snyder** (sponsored by MD ACS)
- Fourth Speaker – **Mansoor Johnson** (sponsored by MD ACS)

Let's talk chemistry



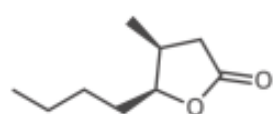
[C₉H₁₆O₂](#)

Whiskey Lactone, Cheers!

There are four stereoisomers of whiskey lactone, or β-methyl-γ-octalactone, found in nature—They are found in oak wood used to make barrels for aging whiskeys, wines, and brandies.

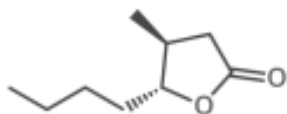
The (+)-*trans* isomer is shown.

Recently, whiskey lactone was [identified as the source of coconut-like odors](#) in grape-based brandies such as Cognac and Armagnac.



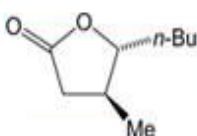
CIS-3-METHYL-4-OCTANOLIDE

The Cis gives a strong spicy coconut flavor

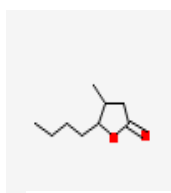


TRANS-3-METHYL-4-OCTANOLIDE

The Trans gives a woody coconut flavor



5-butyl-4-methyloxolan-2-one
-2-one
methyl octalactone
Oaklactone



[.beta.-Methyl-](#)
[.gamma.-](#)
[octalactone](#)

THE CHEMISTRY OF WHISKY



[Learn more about the easy process of making whiskey!](#)

[See earth day project website](#) for the entire article by Beatrice Salazar

Earth Day is every day... "I Love Earth"

The Picket Family

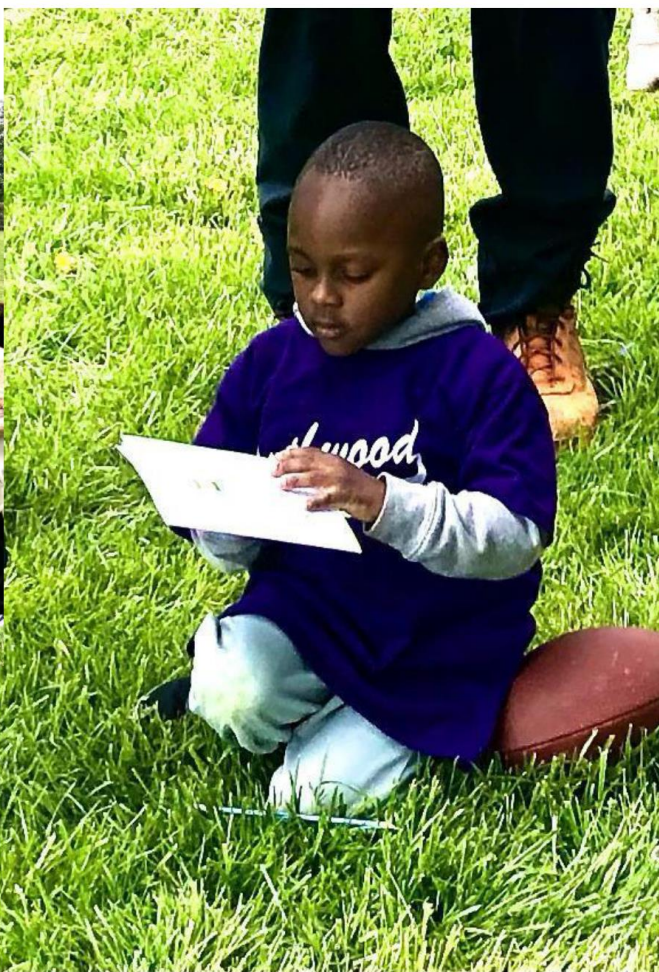
Enjoying a beautiful breeze day at the Montebello lake near the Baltimore Montebello Water Filtration Plant-I.

The family was enjoying clean air, the refreshing green of the spring days and a baseball game. They had time to share with me (ACS Maryland member), their earth day experience, see the picture with the poster "I love Earth." This poster was signed by Kaiya, Tremayne and OBD who are in Middle, Elementary and Kindergarten school respectively. Their parents and other people of the community have joined with signatures and pledged to take care of the earth, nature and the environment as part of the Earth Day Celebration. There is plenty of room for more signatures so we will continue signing in the years to come.

The Picket family is the perfect example of this year's ACS-Theme "[caring begins early](#)" (see p2).

The celebration of Earth Day, included cleaning, planting and learning about the environment. Parents and children received an ACS creative booklet, where they can draw or write their thoughts and have a fun memory of this day.





"Tam Unique" claims OBD as he gets the ACS-booklet and begins his serious writing...

See [Braiding a habiscus plant...](#)



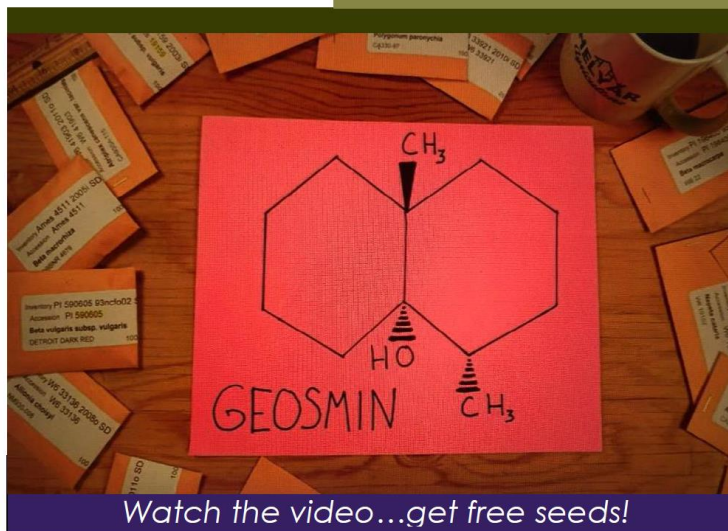
Interesting **CONCEPTS:** **Braiding seeds...**

Fellowships March 1st-May 1st. Is a project of Souls Fire Farm Institute in collaboration with the Federation of Southern Cooperatives, provides beginning farmers with resources, professional development, and mentorship to support their livelihood on land.

Breeding seeds...

Is the science driven creative process of developing new plants varieties, see [the national Association of plant breeders](#), NAPB.

- Geosmin earthy flavor of beets see the [Seed Scholar](#)-video
- [Plants-Proteins](#)-video





BOOKS...

by B. Salazar, Councilor

I selected this book to be mentioned in this section because of the efforts shown of all scientists and engineers involved in the designing of the instruments and conducting analyses of the earth at night. I learn about their work and the book through the book reviewer Dr. Jack A. Kye at the 2022 ACS Fall National Conference.

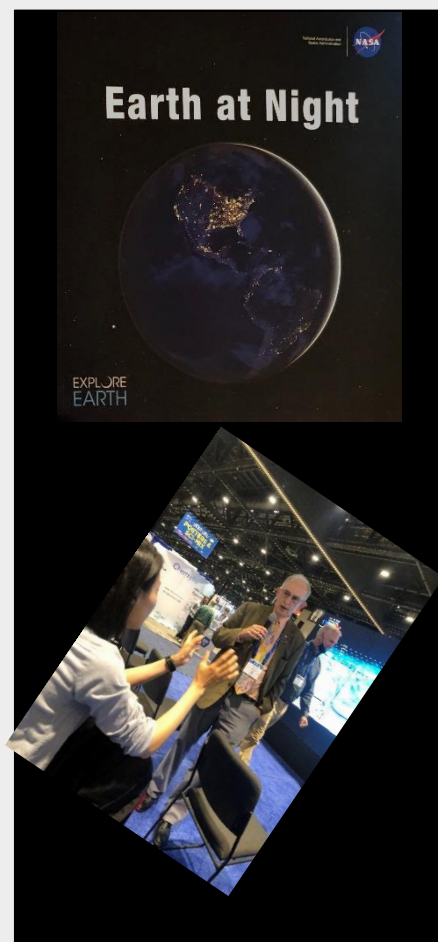
Thanks to Thomas Edison and many other Inventors and contributors, we enjoy through NASA the beauty of the Earth at Night. The book *EARTH AT NIGHT: Our Planet in Brilliant Darkness* is 180 pages beautifully illustrated book with lights, volcanos, lightning, auroras urban structures/developments, powers outages, effects of hurricanes, effects of war, mining...holidays lights and more. On page 7 we have a review of the electro-magnetic spectrum so through the understanding of waves we can compare soil, vegetation, water and more.

The images are amazingly clear like the picture of Chicago taken at night at 100KM taken with 2016 VIIRS photo equipment on p15. I look for Baltimore, but I didn't see it; only pictures from Hartford, CT to New York, NY. Were shown.

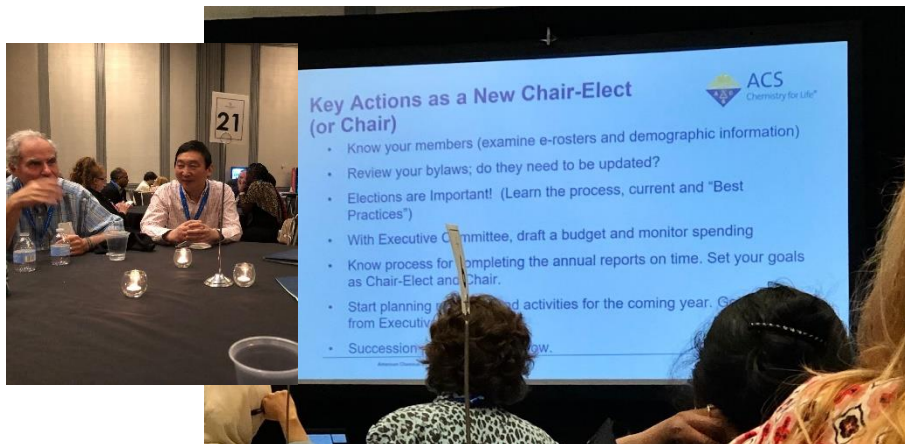
Paris, "the city of light" appears on page 97 like a spider web, beautifully connected. Interesting contrast with Las Vegas lights that appeared on p111, they look like a piece of polygonal shaped waffle. Page 141 was sad for me, the lights that appeared years ago illuminating beautiful zones are gone; now the large black spot showing the destruction is masked in red color to better visualize the magnitude of the disaster. This is a very interesting and informative book.

www.nasa.gov

NP-2019-07-2739-HQ



The Leadership Institute is FUN



Last May two members of the Maryland Local Section attended the leadership Institute at Atlanta GA. Dr. Jianguan Peng from Morgan State University was one of the attendees. He became the 2022 Chair Elect of the Maryland local section. He will be the leadership Institute are aimed at preparing new leaders to perform their leadership role at the local section. CONGRATULATIONS Dr. Peng!

Laugh a Little...



VS



Quarantine Jokes

- Nail salons, hair salons, waxing center and tanning places are closed. It's about to get ugly out there.
- My mom always told me I wouldn't accomplish anything by lying in bed all day. But look at me now, ma! I'm saving the world!
- If I keep stress-eating at this level, the buttons on my shirt will start socially distancing from each other.
- The World Health Organization announced that dogs cannot contract COVID-19. Dogs previously held in quarantine can now be released. To be clear, WHO let the dogs out.
- How did the health experts lie? They said a mask and gloves was enough to go to the grocery store. When I got there, everyone else had clothes on.
- What does eating raw garlic have to do with preventing COVID-19? It helps keep everyone at a safe distance.
- What did the astronauts say to NASA when they notified them that their mission was complete, and they could return to earth? Thanks, but no thanks.
- What's the difference between the Alpha and Delta variant? I don't know; it's all Greek to me.

The Leadership Institute Continues from page 25...

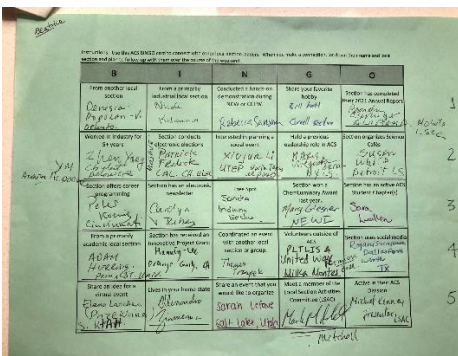
At the leadership Institute we had DEIR workshops to become aware of the immediate need to increase Diversity, Equality, Inclusion and Respect. It is not only important to be knowledgeable of the terminology but apply the knowledge for real with our ACS family. DEIR has become an urgent task for ACS, that is a responsibility of all members from the leadership to the newest members. We need to make it work, make visible and be proud of it.



Why is the leadership Institute important? During the meetings we meet our leaders³ and learn from their experiences. We connect (networking) with many other members from local sections nationwide and plan future collaboration among the local sections², we plan together and share experiences and expertise to design grant projects such as METT, IPG and DEIR¹. (Grants of \$2000, \$3000, \$4000 plus per year) in addition to other mini-grants for webinars, sci-café, etc.



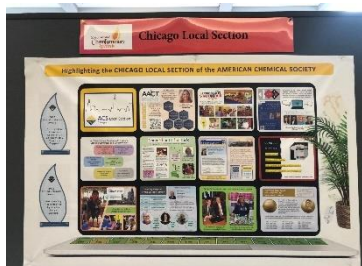
(1)



(2)



(3)



What else is done during the Leadership Institute meetings? We can be as free as we want; we could follow a sequential set of workshops and courses or change them if you feel other workshops are more beneficial to you as leader in the ACS local section.

Local section members present their work. If a local section was one of the nominee for the ChemLuminary award a poster should be presented as well.

Enjoy lunch with about what they do, why interesting people. Here his TV interview related to interesting research is nationwide. Watch the NOVA PBS <https://www.pbs.org/wgbh/nova/video/delta-8-legal-cannabis/>



DELTA-8
colleagues and learn some are so Dr. Kyle Boyar shares cannabis, his making him popular video-interview at



And in these pictures, we can see **the fun** that this member from WI local section displays. She is showing her daily chemistry attire. She was so popular; she became the center of attention for the most fun dressed up. Contact [Mary Glesner](#), Ph.D. Manager Chemistry Activities INNOVATION Institute at Georgia Pacific, Neenah, Wisconsin. To purchase chemistry dresses use: [Popular dresses](#).



2022 ADMINISTRATION OFFICERS

2022 SECTION OFFICERS

Chair 2022.....	Sarah Zimmerman, Web Master, scatzim@gmail.com
Vice-Chair 2022.....	Kelly Elkins Kmelkins@towson.edu
Chair-Elect (Chair 2024)....	Jiangnan Peng, jiangnanpeng@morgan.edu
Secretary 2022.....	Louise Hellwig, Morgan State University, louise.hellwig@morgan.edu
Treasurer 2022.....	Lee J. Lefkowitz, lee_lefkowitz@hotmail.com
Past Chair (2021).....	Eric C. Cotton, Community College, of Baltimore County, ccotton2@ccbcmd.edu

2022 SECTION COMMITTEE ON NOMINATIONS and ELECTIONS

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Additional 4 members:	Dana Ferraris, Chair-2019, dferraris@mcdaniel.edu
.....	Pumtiwitt McCarthy, Chair-2020, pumtiwitt.mccarthy@morgan.edu
.....	Beatrice Salazar, Chair-2018, beatricesalazar1@gmail.com
.....	Sara Narayan, Stevenson University, Chair-2015, SNARAYAN@stevenson.edu

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2. 2021-2023 Beatrice Salazar beatricesalazar1@gmail.com
3. 2021-2023 Jan Kolakowski jek6042@gmail.com
4. 2021-2023 Stephanie Watson stephanie.watson@nist.gov

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1. 2021-2023 Alexander Samokhvalov alexandr.samokhvalov@morgan.edu
2. 2021-2023 Rob Clapper rob.clapper@scioninstruments.com
3. 2021-2023 Michele Foss foss.michele@gmail.com
4. 2020-2022 Paul Smith pjsmith@umbc.edu

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1. Nirupam J. Trivedi, nirupam.j.trivedi@mail.mil
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3. Nicole Carbonaro, ncarbonaro@towson.edu
4. Rose A. Pesce-Rodríguez, rose.a.pesce-rodriguez.civ@mail.mil
5. Sara Narayan, Stevenson University, SNARAYAN@stevenson.edu

Maryland Section on the Website: www.acsmaryland.org

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Chesapeake Chemist Editor-in-Chief... Beatrice Salazar, Chair-2018, beatricesalazar1@gmail.com

Social Media Liaison..... Pumtiwitt McCarthy, Chair-2020, pumtiwitt.mccarthy@morgan.edu

CONTACT US: acsmarylandsection10@gmail.com

PROGRAM CHAIRS

AWARDS

Braude Award, L. Hellwig
Remsen Award, D. Ferraris
Maryland Chemist of the Year Award,
Open Position
Senior Chemist Award, M. Eiss / L. Gonzalez
Student Award, S. Narayan

PROGRAMS

Women Chemists Committee, S. Narayan/K. Elkins
Student Travel, L. Hellwig
High School Outreach: National Chemistry Olympiad & Chemists Celebrate Earth Day, B. Salazar
Middle and Elementary School Outreach (National Chemistry Week, Earth Day Week), R. A. Pesce-Rodríguez
Publicity, P. McCarthy / B. Salazar / R. Clapper
Entertainment/Tours, M. Foss / L. Hellwig

EVENTS CONTACT

The U.S. National Chemistry Olympiad
USNCO MARYLAND

URL: <http://www.beatricesalazarusncocoordinator.webs.com>

Jan - April

Student Travel Awards

<https://acsmaryland.org/travel-awards/>

Email: Louise Hellwig <Louise.Hellwig@morgan.edu>

Jan – March

Student Award <https://acsmaryland.org/student-awards/>

Email: Sara Narayan, SNARAYAN@stevenson.edu

Chemists Celebrate Earth Day - beatricesalazar1@gmail.com

April

Senior Awards

Email: Merle Eiss, meiss32@aol.com

Email: Linda Gonzalez <linda_gonzalez@mccormick.com>

May

National Chemistry Week Events

[Rose Pesce-](#)

[Rodriguez](#)

<http://www.beatricesalazarusncocoordinator.webs.com>

Beer Tours: Louise Hellwig <Louise.Hellwig@morgan.edu> & Michele Foss <foss.michele@gmail.com>

May - Sept.

Braude Award

<https://acsmaryland.org/braude-award/>

Email: Louise Hellwig <Louise.Hellwig@morgan.edu>

Oct.

The Remsen Award

<https://acsmaryland.org/remsen-award/>

Email: Dana Ferraris (dferraris@mcdaniel.edu)
<dferraris@mcdaniel.edu>

Nov.

The Maryland Chemist of the Year Award

<https://acsmaryland.org/maryland-chemist-of-the-year/>
Open position

Dec.

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- Provide your ACS member number, full name, and email changes and we can ensure that your records are updated with National ACS.
- **Contact the National ACS membership division:** 800-333-9511 (US only) or at service@acs.org

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