SEPTEMBER MEETING NOTICE

● TEACHER AWARDS ●

Friday, September 17, 2021

NOTE: This will be a virtual meeting. You may participate via Zoom. See instructions on page 4.

PRE-MEETING SESSION: 6:30 p.m.

PROGRAM: 7:00 p.m.

HOST: Ms. Vanessa Lopez, vanessa.f.lopez@altria.com

SPEAKER: Dr. James N. Demas

TOPIC: “A Random Walk Through Sixty Years of Chemistry”

PRESENTATION OF TEACHER AWARDS

Dr. James N. Demas

Jim Demas received his B.S. and Ph.D. in physical chemistry from the University of New Mexico while doing much of his research at Washington State University. After an NSF Postdoctoral Fellowship at the University of Southern California, he joined the Chemistry faculty at the University of Virginia in 1971. He worked there until his “retirement” in 2017. He has been highly active in teaching instrumentation courses and mentoring undergraduate research. Of his over 200 research publications about a third have undergraduate coauthors with many being first authors. He was an active skier and martial artist for 30 years. Now his activities are less athletic but include photography where he sells an occasional photo. In 1999, he received the Distinguished Service Award from the Virginia Section.
“A Random Walk Through Sixty Years of Chemistry”

The techniques and instrumentation used in chemistry have evolved enormously in the last 60 years. I have been active in chemistry for this time, which is a time scale over which many of you will do science. I will show the evolution of some key advances during my scientific lifetime. At each stage, what we used was awesome and allowed us to do great science. I believe you will find changes that have occurred in a single lifetime amazing and amusing and will allow you to reflect on what you might be using in another 60 years. To tweak the younger generation’s interest, I'll show you a $10 scientific 3-4 digit calculator that had all the scientific functions including all the transcendental functions. This was carried by every scientist and engineer when I was an undergraduate and graduate student.

THE DISTINGUISHED ELEMENTARY SCHOOL SCIENCE TEACHER AWARD

David Thomas
Greensville Elementary School, Greensville County

David Thomas was born in Easton, Maryland, but has spent most of his life in Virginia. He moved between Emporia, Danville, and Warrenton, Virginia. He has been an avid reader and history buff since a kid. But he never really gave it any thought as to becoming a teacher. David was part of a family that valued education. His aunt taught high school in Lewes, Delaware. His uncle was a teacher, and then a principal, with the City of Manassas and Prince William County schools. He grew up not only hearing about the joys of teaching, but also the horror stories. All the while, David’s relatives planted the seed on making education his career. He had several teachers that helped him to see education as a career. Mr. Steve Frazier and Mr. Jan Ashbey were instrumental to his success at Warrenton Middle School. Dr. Bill Trakas at Averett College helped David to see education as a career.

David attended Averett College, where he earned his Bachelor’s of Art in Business Administration Marketing, with a minor in history. Upon returning home from college, David began volunteering his time as a youth soccer coach in Emporia. Through coaching, he realized he enjoyed passing on his knowledge to others and it was then that he decided to try his hand at teaching. He attended Saint Paul’s College to obtain his teaching endorsement in elementary education.

David is employed by Greensville County Public Schools where he has spent the last 23 years teaching fourth graders at Greensville Elementary School in Emporia, VA. He began his teaching career teaching reading, social studies, and science. But for the last 13 years he has predominantly taught math and science (always throwing in a little reading and history when able). David has also been heavily involved in planning curriculum, creating formative assessments, designing hands-on activities, and implementing STEM into each of the fourth grade science classes.

Teaching in a rural area like Emporia/Greensville County, the educational resources aren't as readily available as with larger, more affluent locales. His students come to him having a limited knowledge outside of their immediate surroundings. The socioeconomic disadvantage among many of his students is apparent as well. So, David's approach to teaching is simple. Make the educational experience fair and fun. Showing his excitement for a lesson, he finds the students engaged and can't wait until the next day to see what new things they can discover. Nothing is more rewarding than now having students he had taught, having children of their own, coming to fourth grade and saying “I am glad you have Mr. Thomas. He was my favorite.”
THE DISTINGUISHED MIDDLE SCHOOL SCIENCE TEACHER AWARD

Carolyn Wilkerson
Tomahawk Creek Middle School, Frederick County

Carolyn Wilkerson recently completed her 18th year of teaching in Chesterfield county. Wilkerson began her career teaching at Swift Creek Middle in 2003 before moving to Tomahawk Creek Middle when it opened in 2008. In 2009, she was honored to be named Tomahawk Creek’s very first Teacher of the Year and later was named the 2010 Region 1 Teacher of the Year in Virginia. She currently teaches physical science and Earth science to 8th graders, but has also taught life science and geometry in the past. Her teaching certifications include chemistry, biology, physics, Earth science, secondary math, and gifted education.

Wilkerson did not start her teaching career until later in life when she began to question what she could do to make a difference. A corporate engineer, Wilkerson decided to leave that career after 14 years to become a middle school science teacher – a move she has never regretted. She said, “To see a child’s eyes light up when they are successful and make that connection with science is so rewarding. I am so lucky to experience that most every single day!” Wilkerson earned her bachelor’s degree in electrical engineering from the University of Virginia and her master’s degree in business administration from the University of Richmond. She also completed the Gateway to Teaching Career Switcher Program at the University of Virginia School of Continuing and Professional Studies. She credits her amazing mentor, Leona Dooley, and her Swift Creek Middle science department chair, Betsy Ameen, for showing her how to make science exciting and relevant for middle schoolers.

Wilkerson believes that all successful teaching begins with building a good relationship with her students and that starts with finding out what interests them. She has attended many student events outside of school, like recitals and rec league basketball games, to see her students doing what they love. She even continues to attend their activities long after they have left middle school. “Once a student of mine, always my student!” is her belief.

Wilkerson also likes to stay involved with activities at her school. She has coached several FIRST LEGO League robotics teams at both Swift Creek Middle and Tomahawk Creek Middle during her career. She still continues to stay involved with the FIRST organization by volunteering to judge at competitions. When not teaching, Wilkerson can be found supporting the sports teams of Tomahawk Creek and the University of Virginia throughout the year. Her free time is currently being taken up training her Belgian Tervuren puppy, Vivi.

Wilkerson is very honored to be the recipient of the Distinguished Middle School Science Teacher Award presented by the Virginia Section of the American Chemical Society and would like to thank everyone for their support of educators.

THE FRANKLIN D. KIZER DISTINGUISHED HIGH SCHOOL CHEMISTRY TEACHER AWARD

Susan Saylor
Sherando High School, Sherando County
Dr. Susan Saylor has been an AP, honors, and general chemistry teacher at Sherando High School in Stephens City, Virginia for the past 23 years along with being an adjunct instructor at Lord Fairfax Community College since 2014. She grew up in a very small town called Rockwood, Pennsylvania. She is the proud daughter of two incredibly hard working parents who instilled morals, values, and hard work from a very young age to her and her two sisters, who also teach math and science. Her parents always valued the importance of education. In high school, she was lucky to have a high school chemistry teacher who inspired her to be great and she continuously aspires to do that for her students.

Susan is part of a distinguished science department who all believe in the philosophy of scaffolding and reinforcing skills in Earth Science and Biology that allow students to showcase their mastery once they advance to Chemistry. Due to this idea, her department has qualified 16 students for the Intel International Science Fair and she is the direct classroom teacher for eleven of those students. She has attended the International Science Fair seven times and would have attended the eighth last year, but unfortunately it was canceled due to COVID. Dr. Saylor has been recognized as a Summer Residential Governor’s School Outstanding Educator along with being recognized by the Virginia Chapter of the Society of Military Engineers for her support of science fair students. Dr. Saylor’s teaching practices center around hands-on, inquiry-based learning and collaboration amongst stakeholders. Her efforts support this approach by offering opportunities to students they may not experience if not in her class. Susan has taken students on field trips to Lord Fairfax Community College to use their Spec-20 spectrophotometer, Fournier-Transform Infrared spectroscopy (FT-IR) machine, and Mass Spectrometry Gas Chromatography (MS-GC) machines. She has also taken students on field trips to Fischer Scientific and Dupont to explore careers in the chemistry field. These partnerships in the community lay the foundation for students seeing a glimpse into the world of a science career.

Professional growth is important to Susan. She has attended the ISWEEEP conference in Texas and the VSSUP Conference in Charlottesville. She has written many grants over the years and has been very fortunate to be the recipient of over $20,000 in funds from the Frederick County Educational Foundation and STEM grants for technology based equipment to be used in the science classes. All of her knowledge and resources from these experiences funnel right back to the students and her department to once again provide opportunities to students they may not experience elsewhere.

Dr. Saylor understands dedication, hard work, and the value of education. It is always her goal to have the same type of impact on her students that was given to her by her high school chemistry teacher. She works diligently to instill a love of science and recognizes the possibilities in STEM careers.

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**INSTRUCTIONS FOR ACCESSING THE SEPTEMBER 17 MEETING USING ZOOM**

The online presentation of the September 17 meeting will use the **Zoom** format. **Ms. Vanessa Lopez** is the Zoom meeting host.

**Topic:** Virginia Section of the American Chemical Society (ACS) - September Meeting 2021  
Talk by **Dr. James Demas,** **Presentation of Teacher Awards**

You are invited to a Zoom meeting – **September 17, 2021 06:30 PM Eastern Time**

**Use this link to register in advance for this meeting:**

https://us02web.zoom.us/meeting/register/tZcscO6gpjksG91BRB677yasqnrA10GVYevS
After registering, you will receive a confirmation email containing information about joining the meeting.

If you have problems registering, contact Ms. Vanessa Lopez: vanessa.f.lopez@altria.com.

**PRE-PROGRAM SESSION**

The 6:30-7:00 pm period on September 17 will be a time for members to socialize. Also, there will be a slide show on Virginia Section teacher awards with information on the three teachers who will be receiving awards. The awards will be presented at 7:00, followed by the talk by Dr. James Demas.
NATIONAL CHEMISTRY WEEK (NCW)

National Chemistry Week (NCW) is a public awareness campaign that promotes the value of chemistry in everyday life. ACS members and chemistry enthusiasts celebrate NCW by coordinating events and communicating the importance of chemistry. NCW is a community-based program of the American Chemical Society (ACS). This annual program unites ACS local sections, student chapters, technical divisions, businesses, schools, and individuals in communicating the importance of chemistry to our quality of life.

Celebrate National Chemistry Week 2021 the week of October 17–23, 2021. The topic this year is Reaction Rates with the theme, "Fast or Slow...Chemistry Makes It Go!"

The Virginia Section is planning an event at the Science Museum of Virginia for National Chemistry Week, tentatively scheduled for October 17. Contact Dr. Kristine Smetana, Chair of the Community Activities for the Section, if you would like to participate in this activity. Ideas for other ways to celebrate NCW are welcome. Last year, our Section assembled more than 1,500 activity kits that were distributed to teachers in elementary, middle, and high schools in 16 counties. Dr. Smetana can be reached at kristine.smetana@southside.edu.

VIRGINIA SECTION SELECTED AS FINALIST FOR SEVEN CHEMLUMINARY AWARDS

In the Summer issue of the Bulletin, it was reported that the Virginia Section was selected as a finalist for five ChemLuminary Awards. This information has been corrected. The Section has been nominated for these SEVEN ChemLuminary Awards:

- Best Activity or Program Stimulating Member Involvement
- Most Creative NCW Celebration Using the Yearly Theme
- Outstanding Engagement with K-8 Students
- Outstanding Local Section Industry Event
- Outstanding NCW Event for a Specific Audience
- Outstanding Local Section Younger Chemists Committee
- Outstanding Local Section Career Program Award
ChemLuminary Awards recognize volunteer efforts by the society’s local sections and technical divisions. This year will be the 23rd time that the ACS has presented ChemLuminary Awards. The awards for 2021 will be presented at a special ceremony during National Chemistry Week, scheduled for October 17-23. The Virginia Section won three ChemLuminary Awards in 2020, giving the section a total of 22 of the awards during the 22 years that they have been presented by the national ACS. Also, the Section has received three Phoenix Awards (the predecessors of the ChemLuminary awards) and two “Best Local Section” awards (1969 and 1988).

CHEMISTRY SEMINARS AT THE UNIVERSITY OF VIRGINIA

September 3 - Dr. Brandi Cossairt, University of Washington
September 10 - Dr. Charles Machan, University of Virginia
September 17 - Dr. Ryan Fortenberry, University of Mississippi
September 24 - Dr. Kara Ben, University of Rochester
October 1 - Dr. Javier Grajeda, Eastman
October 8 - Dr. Kirk Trauner, New York University (Burger Lecture)
October 15 - Dr. Robert Gilliard, University of Virginia
October 22 - Dr. Marilyne Stains, University of Virginia
November 5 - Dr. Todd Marder, Universitat Wurzburg, Wurzburg, Germany
November 12 - Dr. Leah Dodson, University of Maryland, College Park

For 2021-2022, the Department plans to return primarily to in-person seminars. Locations are being determined. Friday seminars will be at 3:30pm. For more information, contact the Department of Chemistry at (434) 924-3344; chem@virginia.edu

CHEMISTRY SEMINARS AT VIRGINIA COMMONWEALTH UNIVERSITY

September 23 - Dr. Nils Walter, University of Michigan, Ann Arbor
October 7 - Dr. Mark Williams, Northeastern University, Boston
October 14 - Dr. Peter Finkel, Naval Research Laboratory, Washington DC
October 21 - Dr. Priya Banerjee, University of Buffalo
October 28 - Dr. Aaron May, Virginia Commonwealth University, Department of Medicinal Chemistry
November 4 - Dr. Martin Edwards, University of Arkansas
November 11 - Dr. Michael C. Fitzgerald, Duke University (Fenn Lecture)

All seminars are held via Zoom at 4:00 PM, unless otherwise noted. For more information, contact the Department of Chemistry at (804) 828-1298; chemistry@vcu.edu
Dr. Kathryn D. Deibler, Principal Flavor Scientist at GSK Consumer Healthcare in Richmond, has been named one of the 2021 ACS Fellows. The Fellows program began in 2009 as a way to recognize and honor ACS members for outstanding achievements in and contributions to science, the profession, and ACS. More information on the Fellows program can be found at www.acs.org/fellows. See below for a list of Fellows from the Virginia Section.

Dr. Deibler holds a B.S. in Food Science (Chemistry minor) from Clemson University, an M.S. in Food Chemistry (Organic Chemistry minor); and a Ph.D. in Food Chemistry (minors in Food & Beverage Management and Organic Chemistry) from Cornell University. She has been employed at GSK since 2015 and has been an active member of the ACS for over 28 years. The ACS recognized her for “outstanding expertise in Flavor Science leading to unique approaches for product application” and for “forging a multidisciplinary approach of combining chemistry, psychology, and neurobiology to understanding of flavors.” She was also recognized for volunteering on the Division level and section level of ACS including as Chair of the Division of Agricultural and Food Chemistry and leading several educational outreach programs.

On November 15, 2019, she was the speaker at the Virginia Section meeting held at the College of William & Mary in Williamsburg. Her topic was “Flavor Chemistry: Linking the Stimuli with the Perception.”

ACS FELLOWS FROM THE VIRGINIA SECTION

These members of the Virginia Section have been designated as ACS Fellows:

- Kathryn D. Deibler - 2021
- John T. Gupton - 2017
- Barbara A. Reisner - 2016
- R. Gerald Bass - 2015
- Carol A. Parish - 2015
- Linette Watkins - 2014
- Raphael Martin Ottenbrite - 2013
- Jeffrey I. Seeman - 2011
- Erik Fernandez - 2011
- Kenneth J. Wynne - 2009

JOINT YCC PARTNERSHIP PRESENTED TALK AT THE ACS FALL 2021 MEETING

On August 22, Dr. Julian Bobb and Dr. Isabella Goodenough co-presented an invited oral talk titled “Navigating Collaboration During Tides of Change” at the virtual portion of the ACS Fall 2021 Meeting. The session was hosted by the ACS Committee on Science with the aim of highlighting a chemical professional’s response to the COVID-19 pandemic. Dr. Bobb currently serves as Chair of the ACS Virginia Section Younger Chemists Committee and is a Postdoctoral Researcher at Virginia Commonwealth University. Dr. Goodenough is the
current Younger Chemists Committee Chair of the ACS Philadelphia Section and recently successfully defended her Ph.D. thesis in the Department of Chemistry at Temple University. Both speakers shared information with the 20 participants on the mission and goals of the YCC, about how the Eastern US YCC Partnership was formed, and how they are able to effectively manage a team that constitutes multiple local sections and international groups. They also provided information on the programs offered by the YCC Partnership and some recent accomplishments. The talk provided a great opportunity for them to highlight what the Eastern US YCC Partnership has done to connect and provide professional development for younger chemists. Moving forward, the partnership will continue to promote diversity and inclusion in STEM by collaborating with other ACS groups such women chemists and minority affairs, along with non-ACS organizations such as NOBCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers).

JOINT YCC PARTNERSHIP HOSTS PROGRAM ON ‘A DAY IN LIFE OF A MEDICINAL CHEMIST’

On August 18, the Eastern U.S. Younger Chemists Committee Partnership of the American Chemical Society hosted a webinar titled “A Day in the Life of a Medicinal Chemist’ virtually via Zoom with speaker Dr. Mark Hellberg. Dr. Hellberg is an Executive Director in Global Discovery Chemistry at the Novartis Institutes of Biomedical Research. He leads the Cambridge SynTech group and is passionate about all phases of drug discovery. He graduated with a Ph.D. in Medicinal Chemistry from Virginia Commonwealth University’s School of Pharmacy and holds a B.S. in Chemistry from Washington College. Dr. Hellberg shared with the approximately 35 participants information on his educational and career journey. This was followed by a Q&A session related to finding a job, current job trends, and interviewing. Tips were provided about job finding and advice was offered to the audience. The webinar was hosted by Dr. Julian Bobb from Virginia Commonwealth University and Ms. Georgia Dittemore, who is an undergraduate chemistry student at Skidmore College in New York. She is an executive member of the ACS Eastern New York Section Younger Chemists Committee. The goal of the ‘Day in the Life’ monthly series is to highlight various careers in the chemical profession.

A recording of this talk can be found at: https://www.youtube.com/watch?v=wcMjhDuEaOE

SOME PREVIOUS ‘DAY IN THE LIFE OF A CHEMIST’ PROGRAMS

A Day in the Life of a Green Chemical Engineer on April 19th by Ms. Katelyn Shell. Katelyn is a PhD candidate at Virginia Commonwealth University (VCU) in the Department of Chemical and Life Science Engineering. Her research focuses on developing bio-based electrode materials from agricultural residues for energy storage devices, particularly supercapacitors. A recording of her talk can be found at: https://www.youtube.com/watch?v=k_ek0cLg2DE&t=3s

A Day in the Life of a Cannabis Chemist on May 20th by Dr. Darryl Johnson. Dr. Johnson is the Laboratory Director at Enthalpy Analytical and the President of CH Lab Consulting.
A Day in the Life of a Patent Agent on June 23rd by Dr. Marisa Sanders. Dr. Sanders is a Patent Agent in the Biotechnology Chemical & Pharmaceutical Patents Group at Alston & Bird, LLP in Raleigh, NC. She graduated from Princeton University in 2017 with a Ph.D. in Chemistry and Materials Science and has B.S. degree in Chemistry from The College of New Jersey. She currently serves as a Member of the National Younger Chemists Committee of the ACS and is in Law School. A recording of her talk can be found here: https://www.youtube.com/watch?v=OOUDA95qGuw&t=3s

A Day in the Life of an Associate Editor of the Journal of the American Chemical Society on July 14th by Dr. Kara Bren. Dr. Bren is a Professor of Chemistry and the Program Director for an NIH Chemistry-Biology Interface Predoctoral Training Program at the University of Rochester in New York. Dr. Bren is a Fellow of the American Association for the Advancement of Science, a Kavli Fellow of the National Academy of Sciences, and an Associate Editor for the Journal of the American Chemical Society.

INTERNATIONAL CHEMISTRY OLYMPIAD RESULTS

The 53rd International Chemistry Olympiad (IchO) was held July 25-August 3, 2021. The competition was scheduled to take place in Japan, but COVID-19 restrictions required the participants to do online testing this year. Students from China took the top four positions, earning gold medals. The United states team received two gold medals and two silver medals. In all, more than 300 students from 79 countries participated this year. The U.S. team is sponsored by the ACS. It consisted of Kien Phuong from Chevy Chase, Maryland; Nikhil Seshadri from San Diego; Qiyang Zhou from Lawrenceville, New Jersey; and Yitian Zhu from Katy, Texas. Zhou and Zhu earned gold medals while Seshadri and Phuong received silver medals. Joseph Houch of the University of Pennsylvania was the head mentor for the team. Ester Hines of Billerica Memorial High School in Massachusetts and Laura Serbulea of the University of Virginia also mentored the U.S. team. In 2022, the Virginia Section plans to sponsor the Olympiad competition for students in this area.

THE U.S. TEAM IN THE 2021 IChO

left-to-right: Yitian Zhu, Laura Serbulea (mentor), Nikhil Seshadri, Esther Hines (mentor), Kien Phuong, Joseph Houck (head mentor), Qiyang Zhou

The U.S. team gathered in the Washington, DC offices of the American Chemical Society.
CHANGES IN CONTACT INFORMATION

If you have had a change in your personal information (mailing address, telephone number, email address), please let the membership office of the national ACS know. We use the information on their roster to communicate with our Local Section members. The correct email address is especially important since we use those to send our meeting notices and notification of the Bulletin postings on our website. To make changes, contact Member Services via email at service@acs.org or call them at (800) 333-9511 or (614) 447-3776.

GRANTS FOR SCIENCE EDUCATION

The Virginia Section provides small grants ($50 - $500) to teachers for projects involving science teaching. The grants can be used to purchase materials and equipment for activities in science classrooms and laboratories. No funds are provided for personnel costs. More information and a proposal form can be found on the Section website: acsва.org. Look for the Chemical Education tab under “About Us,” or contact Dr. Kristine Smetana at kristine.smetana@southside.edu.

VIRGINIA SECTION OFFICERS

Are you interested in serving on the Executive Committee for the Virginia Section or in being a candidate for one of the Section offices? Or do you know of other Section members who would be willing to serve? If so, contact Vanessa Lopez at vanessa.f.lopez@altria.com; (804) 920-3558. The Executive Committee meets twice a year to set general policy and direction for the Section and to develop the Section’s budget. The Section is soliciting candidates for the offices of Treasurer, Secretary, and Vice Chair and for the positions of Councilor, Alternate Councilor, and Trustee. Volunteers are needed to keep the Section strong and active.

SENIOR CHEMIST COMMITTEE

The Virginia Section is establishing a Senior Chemist Committee. Dr. Rob Davidson and Dr. Joe Pompano are leading the efforts to get the committee off the ground. If you are interested in working on this project, contact either Rob at robiradav@aol.com or Joe at pompano13220@gmail.com.