



The Bulletin
of the
Virginia Section
AMERICAN CHEMICAL SOCIETY

APRIL MEETING NOTICE

APRIL 2017

University of Virginia

Charlottesville, Virginia

Friday, April 14, 2017

POSTER SESSION: 5:00 - 7:00 p.m.
(STUDENT RESEARCH) Academic Commons
Gilmer Hall

DINNER: 6:00 - 7:00 p.m.
Academic Commons
Gilmer Hall

PROGRAM: 7:00 p.m.
Room 190
Gilmer Hall

MENU: Pizza (many varieties), Soft Drinks

DINNER RESERVATIONS: Please make reservations by calling Cindy Knight at **(434) 924-7995** or e-mail csk3a@virginia.edu by **NOON** on Wednesday, April 12.

PRICE: \$8.00 - members, guests, college students
\$4.00 - high school students

HOST: Dr. James Demas - (434) 924-3343, jnd@eservices.virginia.edu

SPEAKER: **Dr. Joseph Chipuk, Signature Science, LLC**

TOPIC: **"THREAT CHEMISTRY — WHAT'S THAT?"**

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DR. JOSEPH CHIPUK



As a Chemistry and Chemical Engineering student, Dr. Chipuk attended Texas A&M University and the University of Texas for his undergraduate education. He subsequently entered the work force and worked in an environmental laboratory as a mass spectrometrist before returning to graduate school at the University of Texas. While there, he pursued and was awarded a Master's Degree in theoretical chemistry. He ultimately completed his Doctoral Studies in analytical chemistry at the University of Texas, focusing on the development of ambient ionization methods. As a Director at Signature Science LLC, Dr. Chipuk has worked for more than 20 years in the area of Defense, Intelligence, and Homeland Security. Throughout his career, he has had to develop and utilize skills in synthetic, analytical, and computational chemistry to try and solve the problems related to narcotics and chemical threats, including explosives, chemical warfare agents, and related toxins. As a contractor, he currently leads an effort for DHS at the Transportation Security Laboratory in southern New Jersey.

“THREAT CHEMISTRY — WHAT’S THAT?”

The disciplines of chemistry, physics, computer science and engineering are prominent in the worlds of Defense, Intelligence, and Homeland Security. This talk focuses on how these skills are put to use to solve problems in threat detection, threat neutralization, and chemical forensics. The talk provides education and insight into critical areas of research, where improvements may lead to better pathways for protection and law enforcement. Throughout, the emphasis is placed on solving current problems and illustrating how so many skills from so many areas are needed to come together in dynamic team environments to do so. Ultimately, the goal is to demonstrate how scientists and engineers with the right intentions are desperately needed to counteract those whose mind is set on using the same type of information to cause harm.

COME EARLY ON APRIL 14 TO SEE THE UNDERGRADUATE RESEARCH POSTERS

AT THE APRIL 14 MEETING, AWARDS WILL BE GIVEN TO OUTSTANDING SENIOR CHEMISTRY MAJORS AND FOR EXCEPTIONAL POSTER PRESENTATIONS (SEE ARTICLES BELOW)

RECORDING OF THE APRIL 14 SECTION MEETING

A video recording of the Section meeting at UVA on April 14 will be available for on-line viewing after the meeting. Check either the UVA Chemistry Department website (<http://www.chem.virginia.edu>) or the Virginia Section site (<http://www.virginia.sites.acs.org/>) to obtain the link.

DIRECTIONS

Note that this year's meeting is in **Gilmer Hall** which is next to the Chemistry Building. Come around the front of the Chemistry Building, go left and enter the front door of Gilmer Hall.

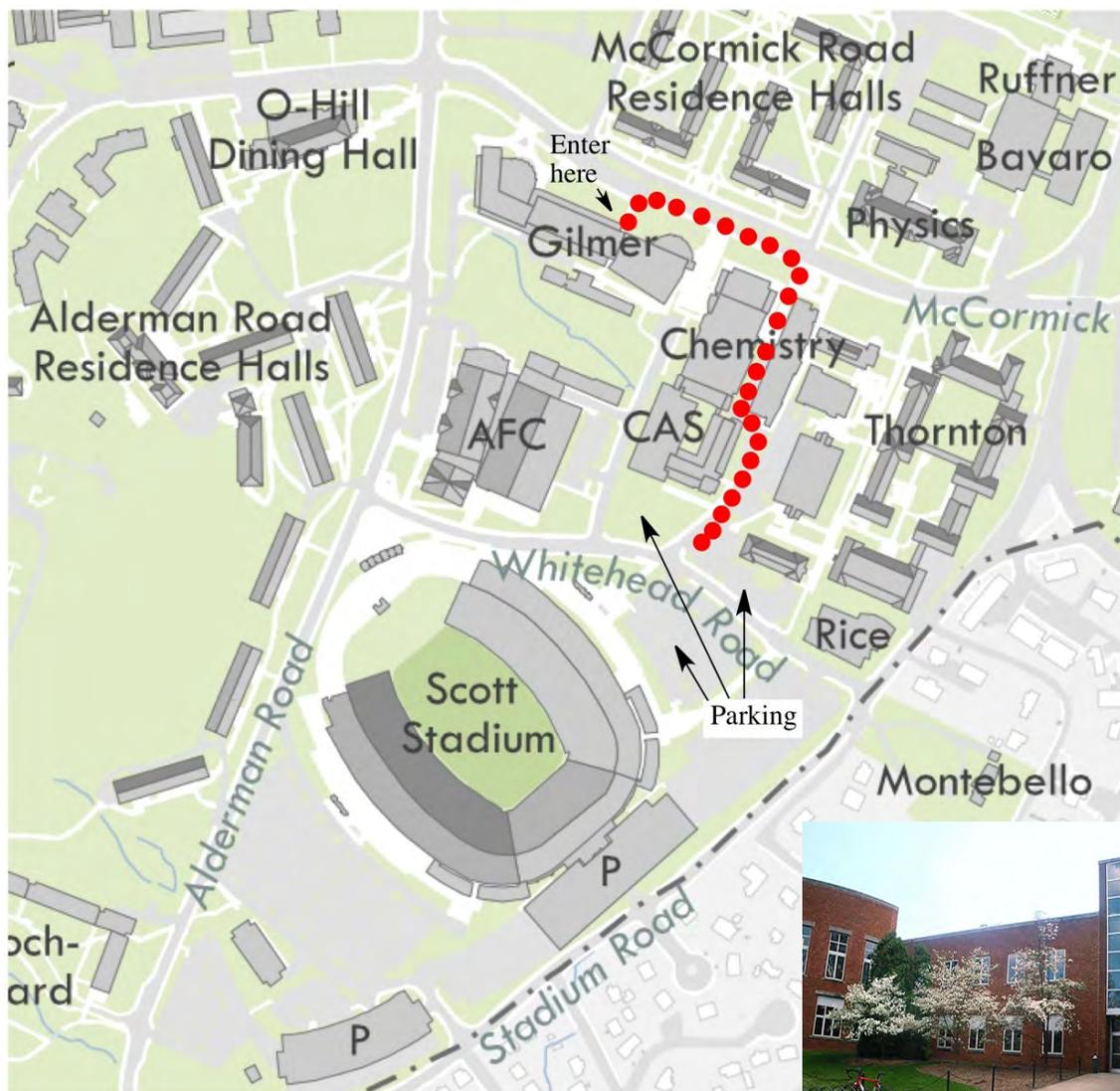
From 29N. Come straight into town past the Cavalier Inn (on your right), pass under two overhead bridges, and then bear right immediately afterwards onto Stadium Rd. Turn right at the stop sign at the top of the hill onto Whitehead Road. Parking is on the right and left. Do not park in the athletic center spots.

From I-64. Turn north on 29 at Exit 118. Immediately turn right at the Charlottesville/29 Business off ramp. Turn right to go into town, then turn left at the second light (filling station on your left). Turn right immediately after the stadium onto Whitehead Road. This brings you to the back or new wing of the chemistry building. Parking is on the right and left.

If you miss the first off ramp after I-64, turn right at the next exit (UVA information), proceed into town, turn right at the second light (Alderman Rd.), go through the first light, then make a left at Whitehead Road.

Until 5:00 p.m., all parking around the Chemistry Building is restricted and you will be ticketed. Please time your arrival so that you park after 5:00. It is most convenient to come by the Nanotech building on the east side, walk alongside the Chemistry Building to McCormick Road and then turn left to reach Gilmer Hall.

On-line map and directions at <http://www.virginia.edu/maps/>.



Gilmer Hall

*** VIRGINIA SECTION NEWS ***

POSTER SESSION

The Virginia Section will hold its annual poster session at the April 14 meeting at the University of Virginia in Charlottesville. The emphasis is on student research, especially work done by undergraduates. This is an excellent informal, low-stress environment for students to make research presentations. If you have a student who wishes to present a poster, please contact Cindy Knight at (434) 924-7995; csk3a@virginia.edu. More information can be found on this website: <http://chem.virginia.edu/undergraduate-studies/undergraduate-research/2017-american-chemical-society-poster-session/>. The deadline for registering a poster is **April 10**. See below for information on the Rodig Research Awards that will be given for poster presentations. We invite everyone to come early for the UVA meeting and to support these young researchers.

AWARDS TO COLLEGE SENIORS

Outstanding senior chemistry majors from colleges and universities in the Virginia Section will be honored at the April 14 Section meeting in Charlottesville. Each school has been asked to select a student to receive the Virginia Section award for undergraduate achievement. The awardees will be the guests of the Section at the meeting on April 14 and each will receive a certificate of recognition and a special gift from the Virginia Section. Chemistry departments must inform Chair Colleen Taylor of their nominees. If you have not submitted the name of your outstanding senior chemistry student, please contact Colleen at (804) 524-5481; ChairVAsectionACS@gmail.com.

THE CHAIR'S CORNER



At the April meeting and undergraduate poster session at the University of Virginia, the Virginia Section recognizes outstanding undergraduate seniors from the colleges and universities in the section. This event holds great significance for me personally, since I received the very same award many years ago. To this day, I have very fond memories of that event that encouraged me at a time when I needed it the most. I now have had the honor of bringing students to this meeting to present their work and/or receive an award for the past decade or so, as have many of my colleagues in the section. I want to thank **Cindy Knight** and **James Demas** for pulling this event off without a hitch, year after year. There have been some significant improvements in the program over the years including new poster stands (that do not require the use of a small hammer – inside joke), the opportunity for students to publish their work and the new Alpha Chi Sigma outstanding poster awards. I especially want to recognize the efforts of the faculty who promote, sustain and sometimes literally drive the students to UVA for this event each year. I know the effort and sacrifices involved in getting these students to the meetings is not always rewarded in tangible ways at the institutional level and it may be many years before the students understand how much they owe their research mentor for the work they put into their education in research. Without these research mentors, the event would never be as popular as it has been for these many years. I hope that this event continues to grow and I encourage faculty who may not always find time to come to this event to come out this year support the students and our colleagues who mentor them, while enjoying a tasty slice of pizza and some great company.

...Colleen M. Taylor, Section Chair for 2017

ChairVAsectionACS@gmail.com

ALPHA CHI SIGMA OSCAR RODIG UNDERGRADUATE RESEARCH AWARDS

The Alumni Advisory Board of the Alpha Kappa Chapter of Alpha Chi Sigma is pleased to announce that anonymous donors have funded Undergraduate Excellence in Chemistry Awards to honor the memory of **Professor Oscar Rodig**, beloved AXE brother and long-time Faculty Advisory of the UVA Chapter of AXE. Oscar was a friend, a scientific colleague, and a mentor to hundreds of UVA students who joined the AK chapter of AXE during their undergraduate years. He was also a well respected teacher for the countless undergraduates who took his courses. He was instrumental in helping the chapter purchase their house at 1713 JPA. Oscar would be honored by the impact this award carries in his name. Three awards for the **best undergraduate poster presentations** at the American Chemical Society meeting sponsored by the University of Virginia Chemistry Department will be given on Friday, April 14, 2017. The poster session is from 5-7 pm in the Academic Commons of Gilmer Hall. Cash awards of \$400, \$300 and \$200 for 1st, 2nd, and 3rd prize poster presentations will be presented shortly after 7pm at the program in Room 190 of Gilmer Hall.

EXECUTIVE COMMITTEE MEETING

The Executive Committee of the Virginia Section will meet at 9:00 am on **Saturday, May 6**. The tentative location is the Science Museum of Virginia, 2500 W. Broad Street, Richmond. Check the Virginia Section website to confirm the meeting site. Contact Colleen Taylor, Chair of the Section, for more information or to place items on the agenda: ChairVAsectionACS@gmail.com.

FOOL FOR THE ARTS FESTIVAL



The Student Affiliate Committee of the Virginia Section will be collaborating with John Tyler Community College in celebrating Earth Day on Saturday, **April 22** at the Midlothian campus of John Tyler Community College, as part of the annual *Fool for the Arts Festival* (see <http://www.jtcc.edu/foolforart/>). **Dr. Mike Iannuzzi** will be planning the activities for several tables with some assistance on supplies, t-shirts, and branding from the Virginia Section. In addition, students will be staging a very large periodic table in front of Hamel Hall as a trial run for constructing the "World's Largest Periodic Table" next year from recycled and reusable materials. The elements will be on individual king size bed sheets that will eventually be donated to a homeless

shelter. Students from student affiliate chapters, NOBCCHE, and Alpha Chi Sigma chapters are invited to create elements to enter in the best element contest. Prizes will be awarded. The coinage metals have been reserved for Alpha Chi Sigma chapters. Longwood University is making the copper element symbol, the University of Richmond will do gold, and Virginia State University is making helium. If you are a student affiliate, Alpha Chi Sigma or NOBCCHE member, please have your fellow members and mentors come for the celebration even if you do not want to participate in the periodic table construction. Contact Dr. Colleen Taylor at **ChairVAsectionACS@gmail.com** for more information on this **Chemists Celebrate Earth Day** event.

FALL MEETINGS OF THE VIRGINIA SECTION

September - Virginia Commonwealth University, Richmond - *Teacher Awards*

October - Mary Baldwin College, Staunton

November - University of Mary Washington, Fredericksburg

ACS MENTOR MEETING AND TRAINING



Wednesday, April 26
5:30 - 6:30 pm
Richmond Public Library
101 East Franklin Street
Richmond, Virginia

Please join us on **April 26** at the Richmond Public Library or via *Webex* (the link will be emailed at a later date) to learn more about this year's ACS **Mentor-Mentee Matching Program**. We will review the program goals, how to create your profile and get paired with your mentee, timelines, and other program details. Resources about how to start the conversation, mentoring expectations, and tips for the year will be provided. Light refreshments will be served.

Please RSVP to Kathleen Sink by **April 20** if you plan to attend or if you have questions about how to join the *Webex*: kms2uu@virginia.edu.

ACS BACKS MARCH FOR SCIENCE

The American Chemical Society is officially supporting next month's planned mass demonstration in support of science. The **March for Science**, scheduled for **Earth Day, April 22**, will take place in Washington, D.C. In addition, more than 320 satellite marches are scheduled throughout the U.S.—from Miami to Fairbanks, Alaska—and across the world. The March for Science organizers have tweeted that they hope to build a movement “to champion science that serves the public good and the need to protect such science.” (Excerpt from *C&E News*, March 15, 2017).

See <https://www.marchforscience.com> for more information.

On the same day, satellite Marches for Science are planned throughout Virginia, so there is likely to be one near you. Check <https://www.marchforscience.com/satellite-marches?state=Virginia> for more information on marches in Richmond, Charlottesville, Lynchburg, Norfolk, Winchester, Staunton, and Blacksburg, Virginia.

WOMEN CHEMISTS COMMITTEE ACTIVITIES

The Women Chemists Committee (WCC) of the Virginia Section of the ACS met at Baker's Crust in Richmond on February 23, 2017. While attendance was slight, the discussions were insightful. In attendance were (from left to right in the photo) Dione Tabb, Colleen Taylor, Denise Walters, Kathryn Deibler, and Stephanie Mabry. Ideas for future meetings and a summer event were discussed. The recent release of the movie "Hidden Figures" sparked discussion of how women continue to struggle with visibility and how that can be overcome.



The next meeting of the WCC will be Friday April 21 at 12:10 PM at the Chili's on the VCU campus (355 W Cary St). Please **RSVP by April 19** to Kathryn Deibler at kdd3@cornell.edu. If you would like to be added to the WCC email list, please send an email to kdd3@cornell.edu.

(photograph and article courtesy of Kathryn Deibler)

REPORT ON THE MARCH MEETING OF THE SECTION



Altria

Altria Client Services

On March 16, over 40 persons attended the Virginia Section meeting at the Altria Center for Research and Technology (CRT) in Richmond. **Dr. Willie J. McKinney**, Vice President, Regulatory Sciences, for Altria Client Services in Richmond, spoke on "A Journey: Idea to Market Authorization." **Ms. Kathleen Sink**, Chair Elect of the Section, presided at the meeting and introduced Dr. McKinney. His talk was followed by a spirited question-and-answer session and the presentation of the traditional engraved Jefferson Cup to the speaker. A selection of delicious repasts was enjoyed prior to the program. The Section thanks Altria for hosting this meeting and Regulatory Sciences at Altria Client Services for providing the food and beverages.



Kathleen Sink presents the Jefferson Cup to Dr. McKinney



Dr. McKinney admires his Jefferson Cup

MEMBER SURVEY ON SECTION MEETINGS

The March meeting was scheduled on a Thursday to align with the results of a member survey and the new Strategic Plan. Members having feedback on the monthly meetings, times, days of the week, lecture topics, prices, etc. can go to this link and fill out a short survey: <https://www.surveymonkey.com/r/R7F2MLJ>.

ILLUSTRATED POEM CONTEST FOR CCED 2017



The Virginia Section of the ACS is sponsoring an **illustrated poem contest** for students in Kindergarten through the 12th grade. Gift cards worth \$25, \$15, and \$10 will be given in each of four grade categories (K-2, 3-5, 6-8, 9-12). Winning posters will be posted on the Virginia Section website and will be entered in the national contest for a chance to be featured on the national ACS website and to win additional prizes! **All entries must be received by April 21, 2017 and each must be accompanied by an official entry form.** For more information, contact Dr. Kristine Smetana at Kristine-chris@msn.com.

Each poem must use the 2017 *Chemists Celebrate Earth Day* (CCED) theme of “Chemistry Helps Feed the World.” The poem must be **no more than 40 words** and in one of these styles: **HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE.**

Entries will be judged based on relevance to and incorporation of the theme, word choice and imagery, and colorful artwork. Go to the Virginia Section website - <http://www.virginia.sites.acs.org/> for contest rules and entry forms. **CONTEST DEADLINE - APRIL 21**



CHEMISTRY SEMINARS AT THE UNIVERSITY OF VIRGINIA

April 7 - Professor **Chris Jaroniec**, Ohio State University

April 14 - Professor **Daniel Chiu**, University of Washington

April 21 - **Dr. John Kozarich**, ActivX Biosciences, “ChemoProteomic Adventures in Nucleotide Binding Space” (**Hecht Lecture**)

April 28 - Professor **Claudio Turro**, Ohio State University

May 3 - Professor **David Allis**, Rockefeller University (**Jefferson Lecture**)

All seminars are scheduled at 4:00 p.m. in Room 304 of the Chemistry Building



CHEMISTRY SEMINARS AT VIRGINIA COMMONWEALTH UNIVERSITY

April 7, 4:00 p.m. - **Dr. Luisa De Cola**, University of Strasbourg, "Hybrid Inorganic Materials from Fundamentals to Applications" (Academic Learning Commons, Room 2100) -

Lidia Vallarino Memorial Lecture

April 20, 3:30 p.m. - **Dr. Heather Lucas**, VCU Department of Chemistry (Kapp Lecture Theater, Oliver Hall 1024)

YCC BOWLING SOCIAL AT SUNSET LANES



The ACS Younger Chemists Committee (YCC) of the Virginia Section held their first event of the year, a bowling social, at Sunset Lanes in Richmond on Sunday, February 26, 2017. Food and refreshments were provided while members enjoyed two hours of unlimited bowling. Attendees included college students from Virginia Commonwealth University and Hampden-

Sydney College and local young professionals from Afton Chemical, Evonik, Pfizer Consumer Healthcare, Altria, and JEOL. While at the event, attendees were informed about upcoming YCC and Virginia Section ACS events to help facilitate the involvement of college students and young professionals in the local section.

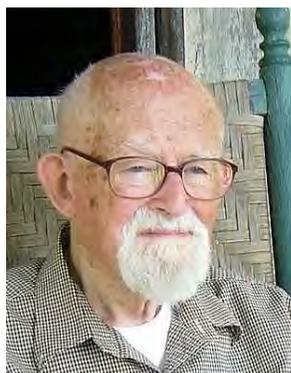


(article and photo courtesy of Heather Lourenco)

IN MEMORIAM

Dr. James B. Patrick

1923 - 2017



Dr. James Burns Patrick, professor emeritus of chemistry at Mary Baldwin University, died on February 26 at his home in Staunton. Dr. Patrick was chair of the Virginia Section in 1983 and received the Section's Distinguished Service Award in 1990.

He was a graduate of the Massachusetts Institute of Technology (B.A.) and of Harvard University, where he earned an M.A. and a Ph.D. He served as a combat engineer in the U.S. Army during WWII. His research work included positions at the National Institutes of Health and Lederle Laboratories, where he spent 16 years as a research chemist and group leader. In 1967 he joined the faculty of Mary Baldwin College where he remained until his retirement in 1992. He was the first holder of the Caroline Rose Hunt Distinguished Chair of Natural Sciences at Mary Baldwin and organized and directed the Young Women in Science program. He authored 29 technical papers and two books and held seven U.S. patents.



In addition to his service as Chair of the Virginia Section, Jim held the positions of Treasurer (1979), Secretary (1980), Vice Chair (1981), and Chair Elect (1982). He served for many years on the Executive Committee.



Often described as a "Renaissance man," Dr. Patrick had diverse interests, including military history, wood-working, chess, politics, languages (German, Latin, Greek, Russian, and Chinese), playing the violin, hunting, and biblical scholarship. Eleanor Patrick, his wife of 70 years, passed away in 2015. He is survived by two daughters, a son, and eight grandchildren. In his honor, former colleagues Elizabeth and Hampton Hairfield established an endowment at MBU.

CHEMISTRY AT THE UNIVERSITY OF VIRGINIA

The University of Virginia Department of Chemistry combines outstanding physical facilities with a close-knit community of scholars. With a faculty size of 36, a graduate student body of 122, and 17 postdoctoral associates, a stimulating atmosphere strongly encouraging interactive association has been created. Faculty research areas span a wide range offering a varied program of courses and research problems. Our faculty members include professors who are nationally and internationally recognized in their fields.

The list of recent honors received by faculty members includes the Distinguished Achievement Award in Proteomics from the Human Proteome Organization, the American Chemical Society's Award for Creative Work in Synthetic Organic Chemistry; Dreyfus Teacher-Scholar Awards for excellence in both teaching and research; Virginia Scientist of the Year awards, a Sloan Foundation Award, Alexander von Humboldt Research Prizes, an Analytical Chemistry Award in Chemical Instrumentation, a Presidential Early Career Award for Scientists and Engineers, a Coblentz Award, a MacArthur Genius Award, the Williams F. Meggers Award (from the Optical Society), and the Charles H. Herty Medal. Recent graduate student national fellowship awards include the Cognis Corporation Research Fellowship in Colloid and Surface Chemistry, the ACS Division of Medicinal Chemistry Predoctoral Fellowship Award, The Lilly Foundation Graduate Fellowship, The Science Application International Corporation Award, the Defense Forensic Science Center Fellowship, the Jefferson Dissertation Year Fellowship, and the Achievement Reward for College Scientists (ARCS).

The goal of graduate study in chemistry is to develop outstanding young scientists able to make significant contributions in their chosen fields. A graduate student can expect to have considerable input in both the design of his or her own degree program. Emphasis is placed on research that contributes to our fundamental body of knowledge. Also important is the exceptional opportunity to interact not only with fellow graduate students, research associates and faculty, but also with outstanding scientists from all parts of the country and world. This participation in the forefront of scientific discovery prepares the student for the role of independent contributor to the scientific community. Teaching and research in the Department of Chemistry have been considerably strengthened in recent years by a number of interdisciplinary centers and programs including Molecular Biophysics, Structural Genomics, Chemical Physics, Membrane Bound Proteins, Microfluidics, Biomedical Engineering, Neurosciences, Chemistry of the Universe and Catalysts for New Energy Processes. Faculty in the Chemistry Department participate in several research centers, including the Center for Nano-biosystems research, the Center for Molecular, Optical and Atomic Science, MAXNET Energy, the Center for Astrochemistry, the Center for Membrane Biology, the Cardiovascular Research Center and the UVA Cancer Center. These programs, along with ongoing research in analytical methods, synthetic inorganic and organic chemistry, chemical biology, spectroscopy and other areas of physical chemistry, provide the student with a choice of strong research areas over a broad range of the chemical sciences. The faculty attracts more than \$8 million per year in new outside funding to support these programs, an indicator of the vigor of research being carried out in the Department.



The graduate program is further supported by an extensive library system. The Barksdale Chemistry Library, established by private gifts provides fundamental references and resources. Most major journals and data bases are available on line. Graduate students are entitled to keys to the building and to the library for research and reading. Alderman Library has more than 1.6 million books as well as extensive collections of manuscripts, maps, prints, and microfilms. The Science and Engineering Library, the large library of the Medical School, and the Physics Library contain numerous additional books and journals in chemistry and allied fields.

CHEMISTRY DEPARTMENTS AT COLLEGES AND UNIVERSITIES IN THE VIRGINIA SECTION

<u>School/Location</u>	<u>Department Chair/ Program Coordinator</u>	<u>Phone/E-mail</u>
Bridgewater College Bridgewater, VA 22812	Dr. Kenneth S. Overway	(540) 828-5727 koverway@bridgewater.edu
College of William & Mary Williamsburg, VA 23187-8795	Dr. Chris Abelt	(757) 221-2540 cjabel@wm.edu
Eastern Mennonite University Harrisonburg, VA 22802	Dr. Tara Kishbaugh	(540) 432-4665 tara.kishbaugh@emu.edu
Hampden-Sydney College Hampden-Sydney, VA 23943	Dr. Herbert Sipe	(434) 223-6283 hsipe@hsc.edu
James Madison University Harrisonburg, VA 22801	Dr. Linette Watkins	(540) 568-6246 watkinlm@jmu.edu
Longwood University Farmville, VA 23909	Dr. Melissa Rhoten	(434) 395-2636 rhotenmc@longwood.edu
Mary Baldwin University Staunton, VA 24401	Dr. Maria Craig	(540) 887-7102 mcraig@marybaldwin.edu
Randolph-Macon College Ashland, VA 23005	Dr. Serge Schreiner	(804) 752-7206 sschrein@rmc.edu
Shenandoah University Winchester, VA 22601	Dr. Brett Kite	(540) 535-3401 bkite@su.edu
University of Mary Washington Fredericksburg, VA 22401	Dr. Charles Sharpless	(540) 654-1405 csharp@umw.edu
University of Richmond Richmond, VA 23173	Dr. Michelle Hamm	(804) 287-6327 mhamm@richmond.edu
University of Virginia Charlottesville, VA 22904-4319	Dr. W. Dean Harman	(434) 924-3060 wdh5z@virginia.edu
Virginia Commonwealth Univ. Richmond, VA 23284	Dr. M. Samy El-Shall	(804) 828-2753 mselshal@vcu.edu
Virginia State University Petersburg, VA 23806	Dr. Victor Vilchiz	(804) 524-5574 vvilchiz@vsu.edu
Virginia Union University Richmond, VA 23220	Dr. Dorothy Eseonu	(804) 257-5615 dneseonu@vuu.edu

VIRGINIA SECTION PARTICIPATES IN STEAM EVENT

On March 6, 2017, the Chemistry@VCU organization and Virginia Section Student Affiliate Committee Co-chairs, Drs. LaChelle Waller and Colleen Taylor, organized and implemented a day dedicated to Science, Technology, Engineering, Art and Math (STEAM) at Marguerite Christian Elementary School in Chesterfield County. Drs. Waller and Taylor were assisted by Dr. Kristine Smetana, the Virginia Section Community Affairs Committee Chair with activity suggestions and supplies. Other volunteers included Dr. Kristina Anthony (VCU Math department and Virginia Math/Science Center Member), Dr. Mychal D. Smith (VCU Chemistry), five chemistry students from Virginia State University, three VCU chemistry graduate students and over fifteen VCU STEM majors including the student affiliate executive board members. Approximately 500 students from grades K through five at the Marguerite Christian Elementary School participated in many activities such as an engineering mechanics experiment, the electric pickle and frozen banana experiments, a forensics table, art tables in painting and bead “water cycle” design bracelets, exploring diaper polymer, UV light beads, bouncy balls, slime, and the identification of bones in owl pellets. A raffle was held to award prizes for the students who visited five stations. The TRAKD community nonprofit organization provided STEAM raffle baskets, an art station, an engineering station, pizza and drinks during the event. Visitors to the event also included the Principal and Vice Principal of the school and members of the Chesterfield County Board of Supervisors. There was great enthusiasm for the event and its impact to the students involved. The first graders wrote thank you notes to the volunteers and there is a desire to continue to provide such outreach events to schools in the county.



(report and photos courtesy of Colleen Taylor and LaChelle Waller)

METRO RICHMOND STEM FAIR WINNERS

The Virginia Section supports the Metro Richmond STEM Fair by providing funds for gift cards for chemistry section winners. This year's STEM Fair was held on March 11 at Clover Hill High School.



The chemistry winners:

First Place - **Selik Morishetty**, Henrico High School - \$100.00; *"Alginate Hydrogel Beads on Controlled Drug Delivery Applications"* (Sponsor Teacher: Samantha Cope)

Second Place - **Julia Mudryk**, Clover Hill High School, Chesterfield County - \$50.00; *"The Effect of the Brand of Permanent Hair Dye on the Rate of Fading of the Color"* (Sponsor Teacher: Dana Johnson)

Third Place - **Grace Davenport**, Clover Hill High School, Chesterfield County - \$25.00; *"The Effect of Gluten Concentration (%) on Density (g/cm^3) of Bread"* (Sponsor teacher: Maria Klein)

The Section also provides cash awards to the teachers at the winners' schools. Note that **Maria Klein**, the sponsor teacher for Grace Davenport, was the 2016 recipient of the Virginia Section's Franklin D. Kizer Distinguished High School Chemistry Teacher Award.



Selik Morishetty



Julia Mudryk



Grace Davenport

(thanks to Rob Davidson for the STEM Fair report)

THE LIDIA M. VALLARINO SCHOLARSHIP FUND

The Lidia M. Vallarino Scholarship Fund provides financial assistance to worthy Chemistry graduate students at Virginia Commonwealth University. Donations to the Fund help to carry on Lidia's legacy. To make a tax-deductible contribution, please make your check payable to the VCU Foundation and write "Lidia M. Vallarino Scholarship" on the memo line. Send your donation to Bethanie Constant, Senior Director of Development, VCU College of Humanities and Sciences, P.O. Box 842019, Richmond, VA 23284-2019.

WORDS OF WISDOM FOR APRIL: *"Nothing Endures
But Change"*

CHEMFEST IN WAYNESBORO

Earth Day - Saturday, April 22 - 10:00 AM until 3:00 PM

A fun-filled day of chemistry demonstrations will be presented for children and their families at Westwood Hills Elementary school in Waynesboro. The demos will include balloon kabobs, silly putty, chemistry face painting, shaving cream art, silver pennies, elephant toothpaste, colored flames, etc. Stations will be set up around the gym for students to do hands-on activities. Every half an hour a large demonstration will be presented on the stage for the students to watch. The location is Westwood Hills Elementary School 548 Rosser Avenue, Waynesboro.

REPORT ON THE FEBUARY MEETING OF THE VIRGINIA SECTION

The auditorium of the Gottwald Center for the Sciences at the University of Richmond was overflowing on February 17 for the annual Powell Lectureship. They heard an enlightening presentation by Nobel Laureate **Dr. Robert Grubbs** of the California Institute of Technology who spoke on "Catalysis and Other Things." Dr. Grubbs was introduced by **Dr. Raymond Dominey**, the UofR meeting host. **Ms. Kathleen Sink**, Chair Elect of the Section, presented Dr. Grubbs with the traditional engraved Jefferson Cup. At the beginning of the program, **Dr. Colleen Taylor**, Section Chair, welcomed the guests and asked for a moment of silence in memory of **Dr. Lidia Vallarino**, who passed away on January 22, 2017.



VIRGINIA ACADEMY OF SCIENCE ANNUAL MEETING

**Virginia Commonwealth University
Richmond, Virginia
May 17-19, 2017**

The 95th Annual Meeting of the Virginia Academy of Science will be held at Virginia Commonwealth University in Richmond on May 17-19. Chemistry presentations will be scheduled for Thursday, May 18. There will be a Poster Session for all Sections that will be set up and stay up all day on Thursday, May 18. For more information on the chemistry program, contact **Thomas DeVore**, Chemistry Section Secretary, at devoretc@jmu.edu. Full information about the annual meeting and about Academy membership can be found on the Academy's website: <http://www.vacadsci.org>.

