



*The Bulletin*  
of the  
Virginia Section  
AMERICAN CHEMICAL SOCIETY

SEPTEMBER MEETING NOTICE

● TEACHER AWARDS ●

*Virginia Commonwealth University  
Richmond, Virginia*

*Friday, September 19, 2014*

**RECEPTION:** 5:30 p.m.  
The Scott House  
909 West Franklin Street

**PROGRAM:** 7:00 p.m.  
Auditorium (Room 1107)  
Academic Learning Commons (MCALC), 1000 Floyd Avenue

**MENU:** Heavy Hors-d'oeuvres (many kinds, hot and cold), Cookies, Brownies, Lemon Bars, Cream Puffs, Iced Tea, Lemonade, Beer and Wine

**PRICE:** Members/Guests - \$17.00; Students, High School Teachers and Spouses - \$9.00; Retired ACS Members and Spouses, Retired Teachers and Spouses - \$12.00

**RESERVATIONS:** Please make reservations by **4:00 p.m. on Friday, September 12** by calling Rhea Miller at (804) 827-0352 or by e-mail to [rmiller3@vcu.edu](mailto:rmiller3@vcu.edu)

**HOST:** Dr. Scott Gronert, (804) 828-1298, [chemistry@vcu.edu](mailto:chemistry@vcu.edu)

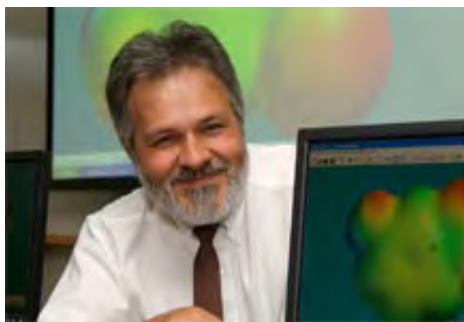
**SPEAKER:** Dr. Tracy P. Hamilton, University of Alabama, Birmingham

**TOPIC:** "Zymurgy: The Art and Science of Brewing Beer"

**SEPTEMBER 2014**

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
					reservations due	
14	15	16	17	18	19	20
					meeting	
21	22	23	24	25	26	27
28	29	30				

## Dr. Tracy Hamilton



Tracy P. Hamilton is a theoretical chemist by profession, with a PhD from the University of Arkansas in 1987 (Peter Pulay) and a post-doc at the University of Georgia (Henry F. Schaefer III). He is currently an associate professor of chemistry at the University of Alabama at Birmingham. Brewing beer is his only outlet for chemical synthesis. He has been brewing since 1997, and is a certified beer judge ([www.bjcp.org](http://www.bjcp.org)). Dr. Hamilton is a member of the Birmingham Brewmasters, a group dedicated to the appreciation of all beer styles, and to brewing them.

### ***Zymurgy: The Art and Science of Brewing Beer***

The presentation will present the history of brewing, followed by how to brew beer step by step. The chemical processes at each step are discussed (in simpler terms than he does for professional chemistry audiences), making connections to various undergraduate topics such as kinetics and organic chemistry. The talk will be capped off by a list of important flavor compounds (both desirable and undesirable) in beer.



## **THE DISTINGUISHED ELEMENTARY SCHOOL SCIENCE TEACHER AWARD**

### **Rita Larson**



Rita Larson is originally from Pontotoc, MS, but is currently living and teaching in Northern Virginia. She has been married for 31 years to her husband Ed. She has two daughters - Bethany 27 and Britney 24, who both attend George Mason University. She has followed her husband's U.S. Navy career and has taught elementary school at places such as: Guantanamo Bay, Cuba; Naples, Italy; West Ruislip, England; and Prince William County, Virginia. She earned her bachelor's degree from the University of North Florida and has done some graduate work at Shippensburg University. At Martin Luther King Jr. Elementary School, she has been the lead science contact as well as the science fair lead for the past 10 years. In 2009, she was selected as a NOAA Teacher at Sea and served on the Hydrographic Ship *Rainier*. In 2013, she was selected as the

Prince William County Science Elementary School Teacher of the Year. In 2012 and 2013 she was the recipient of a Teachers Incentive Performance Award. In 2014, Kathryn Keesee, the Administrative Coordinator for Prince William County Schools, gave special recognition to the King Elementary Science Fair and remarked, "Out of my 29 years of education I have never seen more prepared 5th grade students for a science fair."

In science, Mrs. Larson always starts new concepts with what the students already know and understand. Then she "dramatically" uses ordinary items such as water balloons, hair gel, riddles, and foam brains, and connects and cements them to the understanding of the world of vacuoles, cytoplasm, cell membranes and nucleus. If her students have never been to the ocean, she creates an ocean out of a plastic bubble with sea life painted on the inside for them to crawl into to learn about it. If they still don't understand, she goes and lives on a NOAA ship for a month and brings the ocean back to them by sharing her experiences. She freely gives up her Saturdays to attend student events, write books, and make home visits, and she allows all 84 students to call her at home in the evening if they need a question answered. Her philosophy is to create a tapestry of teaching styles and to weave her students' learning into everything they see, do, say, hear, touch, and smell. Her motto: "It's all about the Kids!"

## **THE DISTINGUISHED MIDDLE SCHOOL SCIENCE TEACHER AWARD**

### **Nate Shotwell**



Nate Shotwell grew up in Fairfax, Virginia. He set off to college intent on becoming a math teacher, but it only took one semester of Geology labs for him to realize that he would have much more fun teaching science. He earned his bachelor's degree at the College of William and Mary and his master's in Educational Leadership from Virginia Commonwealth University. In the fall of 2013 he achieved National Board Certification. He has been an active contributor to the professional community, presenting at both local and national conferences. Nate spent ten years teaching Earth Science, Biology and Oceanography in high school before making the decision to give middle school a try. In 2010, he joined the inaugural faculty and helped open the doors of Holman Middle School in Henrico County. He is in his fifth year working with middle school students and he loves working with energetic kids to understand the world around them. In recent years, Mr. Shotwell has

worked with his student to take what they have learned in their own middle school science classes and develop hands on lessons that the students then have a chance to share with local elementary school classes.

Einstein's quote "Imagination is more important than knowledge" guides Nate and his students through their study of science, recognizing that science is more interesting when you realize that it is a collection of questions, not a collection of facts. Through frequent labs and demos, Mr. Shotwell's students start with the question, and are able to form their own answers as they experience science.

Nate lives in Henrico with his wife Jennifer, daughter Riley Anne, and dog Bella.

## **THE FRANKLIN D. KIZER DISTINGUISHED HIGH SCHOOL CHEMISTRY TEACHER AWARD**

### **Heather Warkentien**



Originally from the town of Pleasant Grove, a community just south of Birmingham, Alabama, Heather Warkentien graduated from Auburn University with a degree in Chemical Engineering. After college, she served ten years with the United States Navy as a Civil Engineering officer, during which time she completed her Masters of Environmental Engineering at Old Dominion University and followed that accomplishment with a Professional Engineering License in the state of Virginia. Heather left the Navy and pursued employment for a few years as a Project Manager for the Civil Engineering Research Foundation, specializing in "green" construction. But her real passion was to become a teacher. Fortune smiled on her when a colleague who knew of her desire to teach showed her a newspaper article that was advertising a new Career Switcher Program being offered by the state of Virginia through Old

Dominion University. Mrs. Warkentien applied, was selected, and after five weeks of full-time training was ready to pursue her dream job – teaching.

Since becoming a teacher over 13 years ago, Heather has taught a variety of math and science courses, including an Integrated Math and Science class combining Algebra II with Physics disciplines. Although she welcomes the diversity and challenge of teaching additional curricula, Heather remains loyal to her first love, Chemistry.

Away from the classroom, Heather enjoys gardening, travel, camping, SCUBA diving, and when the opportunity presents itself, she will ride into the sunset on her snowmobile.

## DIRECTIONS

The Reception will be held in The Scott House located at 909 West Franklin Street on the Virginia Commonwealth University-Monroe Park Campus. This is just northeast of the Chemistry Department which is housed in Oliver Hall, 1001 W. Main Street. There is parking on the streets around The Scott House (mainly Franklin St.) and in the West Broad Street Deck, 1111 W. Broad Street. The lecture and Teacher Awards Program will be held in Room 1107 (auditorium) of the new Academic Learning Commons (MCALC), located at 1000 Floyd Avenue (next to the Cabell Library). Detailed campus maps are on the VCU website: <http://www.vcu.edu>.

## MAP



The Scott House



Academic Learning Commons (MCALC)

# *The Chemistry of Beer* *Legend Brewing Co.*

321 W 7th St, Richmond, VA 23224



**Thursday, September 25 at 6:00 pm**

*AMERICAN CHEMICAL SOCIETY, VIRGINIA SECTION*

*YOUNGER CHEMISTS COMMITTEE*

***Please join us for the fall YCC event!***

***All scientists, chemists, students, and young professionals are welcome to join!***

***We will be touring the brewery downstairs, and then beer tasting for only \$5 per person will be taking place upstairs at the pub (must be 21+ to participate).***

***Please RSVP by September 10***

*Space is limited!*

*RSVP to Kathleen Sink at [kms2uu@virginia.edu](mailto:kms2uu@virginia.edu) by September 10*

*Like us on Facebook:*

*Virginia Younger Chemists Committee- American Chemical Society*

*Event details can be found at our Facebook event:*

*<https://www.facebook.com/events/755188091210043/?ref=22>*

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## **FUTURE MEETINGS OF THE SECTION**

DATE: October 24, 2014  
LOCATION: **James Madison University**  
Harrisonburg, Virginia  
HOST: Dr. Thomas DeVore  
PHONE: (540) 568-6672  
E-MAIL: devoretc@jmu.edu  
SPEAKER: **Dr. Daniel Downey, JMU**  
TOPIC: "North Branch Simpson Creek Water  
Chemistry: Effects of Acid Rain and  
the Rich Hole Wilderness Fire"



DATE: November 4, 2014 (tentative)  
 LOCATION: **University of Mary Washington**  
 Fredericksburg, Virginia  
 HOST: Dr. Janet Asper  
 PHONE: (540) 654-1143  
 E-MAIL: [jasper@umc](mailto:jasper@umc)  
 SPEAKER: Dr. Gregory Petsko, Brandeis University  
 TOPIC: "The Coming Epidemic of Neurodegenerative Diseases  
 and What Science Is – and Should Be – Doing About It"



\*\*\* **VIRGINIA SECTION NEWS** \*\*\*

## VAS FALL UNDERGRADUATE RESEARCH MEETING

The Virginia Academy of Science Fall Undergraduate Research Meeting will be held on Saturday, October 18 at Virginia State University in Petersburg. Sessions will be held from 9:00 a.m. through 3:00 p.m. in the L. Douglas Wilder Building (Cooperative Extension). At the conclusion of the meeting, five \$500 research grants will be awarded to undergraduate students to support their research during the 2014-15 academic year. In order to be eligible for a research award, the student(s) must submit an application electronically to [mcmullck@jmu.edu](mailto:mcmullck@jmu.edu) by **October 1, 2014**. Note that the faculty mentor for the project must be a member in good standing of the Virginia Academy of Science by the October 1 deadline for submission of the application. Application and other meeting information can be found on the VAS website: <http://www.vacadsci.org>.



## CHEMISTRY SEMINARS AT THE UNIVERSITY OF VIRGINIA

- Sept. 5 - **Professor Miriam Freedman**, Pennsylvania State University, "The Structure of Atmospheric Particles & Impacts on Atmospheric Chemistry and Climate"
- Sept. 26 - **Professor Matt Kanan**, Stanford University
- Oct. 10 - **Professor Rory Waterman**, University of Vermont, "Advances in  $\alpha$  Elimination: Catalytic Organoelement Synthesis"
- Oct. 17 - **Professor Helmut Schwarz**, Technical University of Berlin
- Oct. 24 - **Professor Alex MacKerell**, University of Maryland
- Oct. 31 - **Professor W. Carl Lineberger**, University of Colorado
- Nov. 7 - **Professor Gary Pielak**, University of North Carolina at Chapel Hill

All seminars are held at 4:00 p.m. in room 304 of the Chemistry Building.  
 The full seminar schedule can be found at <http://chem.virginia.edu/events-seminars/fall-2014/>

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## SEMINARS AT VIRGINIA COMMONWEALTH UNIVERSITY

September 11 - **Dr. Antonio Checco**, Brookhaven National Laboratory

September 18 - **Dr. David Hudson**, University of Virginia

September 25 - **Dr. Holly Kerby**, Madison Area Technical College

September 30 - **Dr. Kenner C. Rice**, National Institutes of Health, "Medicinal Chemistry as an Enabling Art in Biomedicine" - **J. D. Smith/Larry Winters Lecture** (joint seminar with Medicinal Chemistry)

October 2 - **Dr. Eric Herbst**, University of Virginia

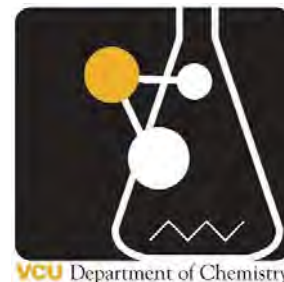
October 9 - **Dr. Jennifer Aitken**, Duquesne University

October 14 - **Dr. Anthony Bell**, University of Southern Mississippi

October 23 - **Dr. Phillip Geissler**, University of California at Berkeley, "When Soft Interfaces Go Still: Fluctuating Roughness as a Driving Force in Nanoscale Assembly"

November 6 - **Dr. Scott E. Lewis**, University of South Florida

November 13 - **John B. Fenn Memorial Lecture**



Seminars are held at 3:30 p.m. in the Kapp Lecture Hall, Room 1024, in the Physical Science Wing of Oliver Hall, 1001 West Main Street, Richmond.  
For more information, call (804) 828-1298 or email Rhea Miller at [rmiller3@vcu.edu](mailto:rmiller3@vcu.edu).

## 2015 OFFICER NOMINATIONS

Dr. Joseph Crockett, Chair of the Nominations Committee for the Virginia Section, has announced the slate of nominees for officer, trustee, and councilor positions for the year 2015:



Chair - Todd Koch (Pfizer)

Chair-Elect - Denise Walters (Pfizer)

Vice Chair - Colleen Taylor (Virginia State University)

Secretary - Dustin Haddenham (AlBiotech)

Treasurer - Thad Hannel (Altria)

Trustee (2015-2017) - James Demas (University of Virginia)

Councilor (2015-2017) - Linette Watkins (James Madison University)

Alternate Councilor (2015-2017) - Joseph Crockett (Bridgewater College).

Biographical information and ballots will be sent by e-mail to all active members of the Section in October. For more information, contact Joe Crockett at (540) 828-5431; [jcrocket@bridgewater.edu](mailto:jcrocket@bridgewater.edu).

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**WORDS OF WISDOM FOR SEPTEMBER: "GOOD WORK TODAY  
IS THE BEST PREPARATION FOR GOOD WORK TOMORROW"**

## THE CHAIR'S CORNER



As the summer closes, our thoughts turn to the start of a new school year and all the memories associated with first days of school. Whether in academics or in the industrial world, we continue to feel the impacts of the educational calendar, which tells us that Labor Day brings the end of the vacation season. It is appropriate that during the September meeting the Section will celebrate three terrific chemistry and science teachers from the communities within its borders. Their success and that of their colleagues in K-12 education is critical to development of the next generation of scientists. As always is the case, these teachers have a solid knowledge of the subject, well-developed teaching strategies, and a sincere dedication to their students. Please join us on September 19 at VCU to celebrate these exceptional teachers and to start the Fall season of Section meetings.

...Scott Gronert, 2014 Chair of the Virginia Section, [sgronert@vcu.edu](mailto:sgronert@vcu.edu)

## METRO RICHMOND STEM FAIR WINNERS

The 2014 Metro Richmond STEM Fair (formerly the Metro Richmond Science Fair) was held on March 23 at Hanover High School. The Virginia Section provides support for chemistry winners. **Siena Hart**, the first place winner, received a \$100.00 gift card. Siena is a student at the Math & Science High School at Clover Hill in Chesterfield County. The Section also gave \$100 to Clover Hill School. The second place winner was **Lindsay Rotz** who attends the Science, Math & Technology Center at Godwin High School in Henrico County. She received a \$50.00 gift card and Godwin High received \$50.00.



The STEM Fair is an affiliated regional fair of the Intel International Science and Engineering Fair (Intel ISEF) and is Central Virginia's qualifying fair for the Intel ISEF and the Broadcom MASTERS Competition. It is hosted by the MathScience Innovation Center (MSiC). Martha Vogel ([mvogel@mysic.org](mailto:mvogel@mysic.org)) is the Director of the Metro Richmond STEM Fair. Information can be found at <http://sciencefair.msinnovation.info/index.htm>.

## NATIONAL CHEMISTRY WEEK 2014



**Celebrate National Chemistry Week (NCW) 2014!** Each year National Chemistry Week reaches millions of people with positive messages about the contributions of chemistry. The ACS will celebrate National Chemistry Week on **October 19 – 25, 2014**. The theme for this year is “The Sweet Side of Chemistry—Candy.” Visit [www.acs.org/ncw](http://www.acs.org/ncw) for more information on NCW 2014. There are free educational resources, including a special hands-on activity publication, *Celebrating Chemistry*. Join in the celebration of NCW 2014!

As usual, the Virginia Section will be participating in NCW. Dr. Kristine Smetana will be coordinating the Section activities and is soliciting volunteers to assist with the program. Contact her for more information and to offer your help: [ksmetana@jtcc.edu](mailto:ksmetana@jtcc.edu); (804) 706-5153.



## **REPORT ON THE 2014 CHEMISTRY OLYMPIAD**

Seventeen schools asked to participate in the 2014 Chemistry Olympiad with over 600 students nominated to take either the first year or the second year exam. From the 17 schools, one school withdrew, three schools were put into the small school category with less than 600 student enrollment, while the remaining were classified as large schools. Some students competed in the first-year competition and others in the second-year competition. The results for each test are given below. At each school, the student with the highest score within each class received a National Olympiad pin. The following students were the highest scorers from each participating school. Many schools have more than one teacher participating; the highest student score for each teacher is listed (teacher names in parentheses). Teachers from each school also received a pin.

<b>School</b>	<b>First Year</b>	<b>Second Year</b>
Academy of Science - Loudoun County		Keithen Orson (Tomlinson)
Albemarle High School	Nathaniel Saxe (Oliver); Maggy Comberg (Peters); Sesler Braxton (Gearhart)	Quinn Legallo-Malone (Gearhart)
Clover Hill High School	Robert Gunter, Jr. (Ramsdell); Gabrielle Jones (Lloyd)	Mansoor Syed (Klein)
Harrisonburg High School	Daniel Roth (Smith)	Julie Raab (Smith)
James River High School	Katie Swenson and Jenna Wilkey (Brunyansky); Kaylyn Wertz and Nick Burns (Back); Maybelline Calles (Edwards)	Matthew Guyer (Brunyansky)
Monacan High School	Bowen Schechter and Abigail Staub (Anzelone); Taylor Rice (Rice)	
Patrick Henry High School	Emily Cannon and Cassandra Robertson (Buckalew); Evan Typanski (Embrey)	Amy Dunham (Embrey)
Prince George High School	Nicholas Tritschler (Moore); Whitney Sherrick (Brooks); Tyneshia Griffen (Winterson)	Trey West (Moore)
St. Stephen's & St. Agnes School	Eric Karsten (Fusina); Helen Cunningham (Oakes); Caroline Curran (Chan)	Rice H. Tyler (Oakes)
The Covenant School	Yuxuan Dai (Jenkins)	
The Governor's School of Southside Virginia at Alberta	Joel Wilson (Williams)	
The Steward School	Daniel Eakin (Kovach)	Daniel Kovach (Kovach)
Waynesboro High School		Riley Stevens (Konizer)
Western Albemarle High School		Lillian Xu (Stutzman)

Over twenty students were invited to fill the slots for the National Olympiad exam that was given on April 26, 2014 at J. Sargeant Reynolds Community College in Richmond. No more than two students can participate from each school and each student must be a U.S. Citizen or hold a green card to be eligible for the IChO

study camp. Of the following students who were nominated, twelve students participated in the National Exam:

Quinn Legallo-Malone\* and Sarah Alshawi with alternates Jacob Beiter and Andreas Ravichandran - Albemarle High School

Mansoor Syed\* and Evan Washington\* with alternates Theodore Lutge and Bryce Badura - Clover Hill High School

Julie Raab and alternate Michael Walton\* - Harrisonburg High School

Matthew Guyer\* and Jonathan Hostetler\* with alternates John Solari, Emily Branch and Paul Armstrong - James River High School

Amy Dunham\* - Patrick Henry High School

Trey West and Gwen Dunn - Prince George High School

Tyler H. Rice\* and alternates Wallace Burnette and Khalil Hoque - St. Stephen's & St Agnes' School

Daniel Kovach\* and Adam Mickle\* with alternates Kristen Cashwell and Joshua Zhou - The Steward School

Riley Stevens\* - Waynesboro High School

Lillian Xu\* - Western Albemarle High School

\* Students who participated in the National Olympiad Examination.

The students with the three highest scores from all participating schools, separated by category and by test, received gift certificates (first place \$50, second place \$25, and third place \$10). Those students who took the National Chemistry Olympiad exam also received \$50 certificates.

### First Year Chemistry Olympiad Local Examination Results

Small School and Governor's School Category:

First (\$50) - **Eric Karsten** and **Helen Cunningham** – St. Stephen's & St. Agnes' School and **Yuxuan Dai** - The Covenant School (tie)

Second (\$25) - **Joel Wilson** – The Governor's School of Southside Virginia at Alberta

Large School and Governor's School Category:

First (\$50) - **Braxton Sesler** – Albemarle High School

Second (\$25) - **Nicholas Tritschler** – Prince George High School

Third (\$10) - **Daniel Roth** – Harrisonburg High School

### Second Year Chemistry Olympiad Local Examination Results

Small School and Governor's School Category:

First (\$50) - **Daniel Kovach\*** – The Steward School

Second (\$25) - **Keithen Orson** – Academy of Science Loudoun County

Third (\$10) - **Rice H. Tyler\*** – St. Stephen's & St. Agnes' School

Large School and Governor's Schools Category:

First (\$50) - **Lillian Xu\*** – Western Albemarle High School

Second (\$25) - **Quinn Legallo-Malone\*** – Albemarle High School

Third (\$10) - **Matthew Guyer\*** – James River High School

## SCHOOL AND TEAM AWARDS:

**The School Award**, is given to the school with the highest overall average, separated by test, but not category. The school must have at least seven participants, the highest and lowest scores are discarded, with the average score determined from the remaining scores.

### School Awards:

First Year Exam - **The Covenant School**

Second Year Exam - **Albemarle High School**

**Team Awards** are given to the schools having the highest combined total for three students separated by category and year. These schools are invited to attend a meeting of the Virginia Section and receive a plaque.

### First year Team Award:

Small School & Small Governor's School - **The Covenant School**

Large School & Large Governor's School - **Albemarle High School**

### Second Year Team Award:

Small School & Small Governor's School - **The Steward School**

Large School & Large Governor's School - **Albemarle High School**

More information on the Chemistry Olympiad in the Virginia Section can be found on the Section website <http://virginia.sites.acs.org/>. Dr. Ann Sullivan is Chair of Virginia Section Olympiad Committee and prepared this report of the 2014 Olympiad results: [asullivan@reynolds.edu](mailto:asullivan@reynolds.edu).



Dr. Ann Sullivan and the twelve students from the Virginia Section who took the national Chemistry Olympiad exam at J. Sargeant Reynolds Community College on April 12

## INTERNATIONAL OLYMPIAD RESULTS

The 46<sup>th</sup> International Chemistry Olympiad was held July 20-29 in Vietnam. Singapore was the overall team winner while Russia earned the most gold medals (3), The U.S. team earned one gold and three silver medals. Teams from 75 countries participated in this year's competition in Hanoi. The U.S. team consisted of Robert Kao from Storrs, Connecticut; Andrew Chen from Plainsboro, New Jersey; Stephen Li from Troy, Michigan; and Derek Wang from Wexford, Pennsylvania. The 47<sup>th</sup> International Chemistry Olympiad will be held in Baku, Azerbaijan in July, 2015.



Li (from left), Chen, Kao, and Wang

## CHEMISTRY AT VIRGINIA COMMONWEALTH UNIVERSITY



The Virginia Commonwealth University Department of Chemistry has 32 faculty members, approximately 75 graduate students and 550 undergraduate chemistry majors. The department brings in about \$3 million annually in research and educational grants. The department offers full-time undergraduate programs leading to the Bachelor of Science. The degree concentrations allow students to focus on different aspects of chemistry, depending on their specific interests. The concentrations include chemical science, professional chemist, professional chemist with honors, chemical modeling, and biochemistry.

The department also offers full- and part-time graduate programs leading to the Master of Science and Doctor of Philosophy degrees in analytical, inorganic, organic, and physical chemistry and to the doctoral degree in chemical physics. A wide range of graduate courses is offered; the classes are small in size and personal in nature. The recent addition of new faculty and laboratories and the acquisition of new instrumentation provide a firm basis for continued excellence in both teaching and research.

A program of studies is tailored to the individual student and is designed to provide a sound background in all areas of chemistry, with emphasis on the student's area of research. The low student-to-faculty ratio ensures that each student receives personal attention.

An important and distinctive feature of the department is close interaction between faculty and students. This interaction, in an active and friendly environment, is designed to promote scholarship, develop experimental ability, and stimulate creative thought. Students work side by side with faculty members in small research groups. They are encouraged to present the results of their research at regional and national meetings of the American Chemical Society and other professional organizations.

The department is committed to excellence in both research and teaching. The faculty actively conduct research in the areas of analytical, inorganic, organic, physical, and polymer chemistry and, in cooperation with the Department of Physics, chemical physics. Faculty members have received training and experience at leading universities, industrial laboratories, and national research laboratories. Their excellent and diverse backgrounds ensure a graduate program of quality and balance, one that can meet the varied needs of future professionals. John B. Fenn, Nobel Laureate 2002, was a member of the Department of Chemistry faculty.

State-of-the-art instrumentation used by faculty, graduate students, and undergraduate students in courses and research includes magnetic resonance spectroscopy, infrared, uv-vis, and fluorescence spectroscopy, mass spectrometry, and liquid and gas chromatography.



A weekly seminar program brings distinguished speakers to the department from academia and industry. Arrangements are made for the speakers to meet with students to discuss research and other topics. The program results in graduates who are well-prepared for careers in industry, academics, and national research laboratories. In addition to the regular seminar program, the annual Mary E. Kapp Lecture in Chemistry brings a chemist of international reputation to the department. This lecture honors Kapp, the first chairman of the department, who guided the department through its formative years. Kapp established an endowment for the department from her estate. The department also hosts the John B. Fenn Memorial Seminar that honors VCU's only Nobel Prize winner.

## QUESTIONS FROM THE PAST

This question was asked in the Summer Bulletin: The Governor of the Commonwealth of Virginia spoke at a Virginia Section meeting in 1952. This was a joint meeting with the Virginia-Carolina Chemical Corporation and was held at the Hotel John Marshall in Richmond. The governor's topic was "Scientific Research and Our American Way of Life." **Who was the governor who spoke to the Virginia Section? Colgate Whitehead Darden, Jr.** was the 54<sup>th</sup> Governor of the Commonwealth of Virginia, serving from 1942 through 1946. He was a U.S. Representative from Virginia in 1933-37 and 1939-41, and the Chancellor of the College of William and Mary in 1946-47. When he spoke to the Virginia Section on April 25, 1952, he was serving as the third President of the University of Virginia (1947-59). When he was elected Governor in 1941, he received nearly 81% of the vote, defeating Republican Benjamin Muse, Communist Alice Burke, and Socialist M. Hilliard Bernstein. As governor, he created a pension plan for state employees and teachers.



A new question from the past: Here is the composition of an *ad hoc* committee of the Virginia Section that was formed in 1987: Seaton Fulghum (Hermitage High School), Mark Hellberg (A. H. Robins), Mary Hobbs (Lee-Davis High School), George Kirvan (DuPont), William Rademaker (Midlothian High School), Barry Riddle (Reynolds Metals), Sarah Rutan (VCU), Donald Shillady (VCU), William Soine (MCV/VCU), Eddie Thomas (Philip Morris), Lidia Vallarino (VCU), Jim Beck (Virginia State College). **What was the purpose of this committee?**

## CAN YOU IDENTIFY THESE PERSONS?



The photograph was taken at the Annual awards Meeting of the Virginia Section, held at Whitehall-Robins in Richmond on September 24, 1999. Dr. James N. Demas received the Section's Distinguished Service Award and spoke on "A Random Hike (or Ski) Through Chemistry." Dr. William J. Welstead received an Outstanding Innovator Award at the same meeting. Both of the 1999 award winners are shown in the photo. They have something in common with the other eight subjects.



The "mystery person" shown in the Summer issue of the Bulletin is Larry White. He is currently an Adjunct Instructor of Chemistry at Bridgewater College. Larry received the Virginia Section's Distinguished Service Award for High School Chemistry Teaching in 1991. The photograph on the left is from April, 1992; the one on the right is more recent.





## SERMACS 2014

TUNE IN TO CHEMISTRY IN MUSIC CITY

October 16 – 19, 2014, Nashville, Tennessee

[www.SERMACS2014.org](http://www.SERMACS2014.org)



**October 16 - 19, 2014**  
**Sheraton Music City Hotel**  
**Nashville, Tennessee**

The 66<sup>th</sup> Southeastern Regional Meeting of the American Chemical Society will be held in Nashville, Tennessee, October 16-19, 2014. "Tune in to Chemistry in Music City."

- SYMPOSIA – GENERAL SESSIONS – POSTER SESSIONS – EXPOSITION – SCI-MIX –
- HIGH SCHOOL PROGRAMS – UNDERGRADUATE PROGRAM – TEACHERS PROGRAM –
- GRAD SCHOOL FAIR – BUSINESS RELATED SEMINARS – AWARDS LUNCHEON –
- WORKSHOPS – CAREER ACTIVITIES – CONCERT BY THE STEEL DRIVERS

**HOTEL RESERVATION DEADLINE - September 24**  
**ADVANCE REGISTRATION DEADLINE - September 25**

For more information, visit the SERMACS 2014 web site: [www.SERMACS2014.org](http://www.SERMACS2014.org).

### **...A LOOK BACK...**

Some past meetings of the Virginia Section:

**One Year Ago:** **Sam Kean**, "The Disappearing Spoon: True Tales of Madness, Love, and the History of the World from the Periodic Table," Virginia Commonwealth University - September 20, 2013

**Five Years Ago:** **M. Samy El-Shall**, "CNN: Clusters, Nanoparticles and Nucleation—From Astrochemistry to Nanocatalysts" and **Will Lewis**, "A Chemist's Stroll Down Memory Lane," Virginia Commonwealth University - September 25, 2009

**Ten Years Ago:** **John Fenn**, "Electrospray Wings for Molecular Elephants," Virginia Commonwealth University - September 17, 2004

**25 Years Ago:** **J. Samuel Gillespie**, Distinguished Service Award Address, Virginia Commonwealth University - September 22, 1989

**50 Years Ago:** **Robert Lutz**, "Steric Influences on Reactions of Conjugated Systems," Richmond, September 25, 1964

**60 Years Ago:** **W. L. Gore**, "Design and Analysis of Experiments," Medical College of Richmond, September 10, 1954

### **ACS WEBINARS**

ACS Webinars® is a free, weekly online event connecting ACS members with subject matter experts and global leaders in chemical sciences, management, and business. Each webinar is about 60 minutes in length, comprising a short presentation followed by a question and answer session. The live webinars are scheduled on Thursdays at 2 p.m. Recordings of past webinars are available online. For a schedule of upcoming events and more information on ACS Webinars, go to <http://acswebinars.org>. Here are a few upcoming webinars:

- Sept. 11 - **The Lore and Chemistry of Garlic and Onions**
- Sept. 18 - **What Went Wrong at the Keen Energy Power Plant**
- Sept. 25 - **The Economics of Drug Development**
- Oct. 2 - **The Chemistry of Death**
- Oct. 7 - **Speaking Simply: Communicating Your Science**
- Oct. 23 - **A Planet of Viruses**
- Oct. 30 - **The Future of Drug Discovery—Challenges, Risks, Rewards**
- Nov. 6 - **Cannabis Chemistry 201**

### **CHEMLUMINARY AWARDS**

Each year, the American Chemical Society recognizes outstanding achievements by local sections and divisions through a series of ChemLuminary Awards. Although the Virginia Section was nominated for five ChemLuminary awards this year, the Section's name was not called when the winners were announced on August 12 at the ACS National Meeting in San Francisco. This follows the Section's outstanding work in 2013 when it was a finalist for a record eight awards and won five of those. The Nashville Section was the big winner this year with five awards. The Brazoport and Louisiana sections each took three awards.



### **PAPER COPIES OF THE BULLETIN**

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