

The Blue Ridge Chemist

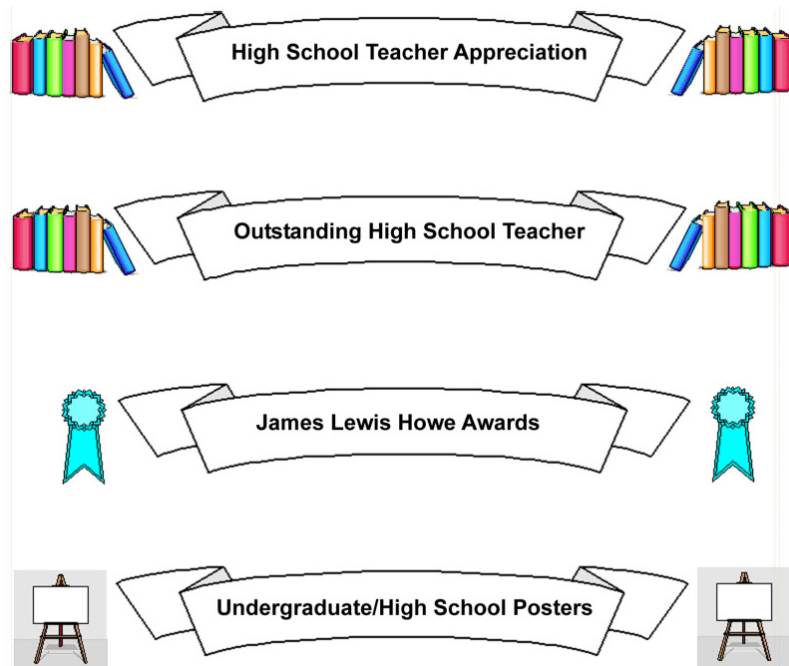
The Blue Ridge Chemist, since 1947 the
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Virginia Blue Ridge Section, American Chemical Society



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April 10, 2017

No. 4



Radford University hosts the April Meeting

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

685th SECTION MEETING
Hosted by Radford University
Monday, April 10, 2017

PROGRAM:

**5:30–6:45 For poster session with hors d'oeuvres,
Main Street level, Center for the Sciences**
6:45–7:00 Awards, Center for the Sciences M73
7:00–8:00 Talk, Center for the Sciences M73

All events will take place in Main Street level of Center for the Sciences. The speaker will be Edward Derrick, Director of the Center of Science, Policy, and Society Programs at the American Association of the Advancement of Science. He will speak science and government policy.

Heavy hors d'oeuvres will be served in place of dinner. There is no cost, however, please RSVP to enable planning.

Your RSVP is requested by MONDAY, APRIL 3, SEVEN DAYS before the meeting, by email to langell@radford.edu or phoning Mrs. Laura Angell at (540) 831-5515.

Edward Derrick

Chief Program Director, AAAS Center of Science, Policy, and Society Programs



Since July, 2011, Edward G. Derrick, Ph.D., has been Chief Program Director of the AAAS Center of Science, Policy, and Society Programs. The programs in the Center connect the science and engineering community with policy makers and the interested public through an array of activities. These address the interplay of science with religion, law, and human rights; they connect scientists and policy makers through programs in science and government, including the S&T Policy Fellowship program; and they address improvement in the conduct of science through activities promoting responsible conduct of science and through a peer review service. As Chief Program Director, Ed oversees the programs, which combined have a staff of about 50 and an annual budget over \$21 million, and serves as a member of senior management at AAAS.

Ed first joined AAAS in 1998 as a member of the AAAS Research Competitiveness Program (RCP), which provides review and guidance to the science and innovation community. He holds the Ph.D. from the University of Texas at Austin, with a dissertation in theoretical particle physics, and the B.S. from the Massachusetts Institute of Technology, with an undergraduate thesis in biophysics. Prior to joining AAAS, Ed spent two years as an Alexander von Humboldt Fellow in Germany. His past experience includes working for Ontario Hydro in the Nuclear Studies and Safety Division.



James Lewis Howe Awardees

We are again pleased to be able to honor the outstanding students who are majoring in an area of chemistry in the Colleges and Universities in the Virginia Blue Ridge Local Section. These students are listed below.

Tyler Harper

Concord University–Chemistry

HOMETOWN: Ghent, WV

ANTICIPATED DEGREE: BS in Pre-Professional Chemistry, May 2017



Tori MacKenzie Akers

Ferrum College–Chemistry

HOMETOWN: Bluefield, VA

ANTICIPATED DEGREE: B.S. Chemistry, Biology, Pre-Professional Science, May 2017



AWARDS AND HONORS: Who's Who, Dean's List, Boone Honors Program, Tri Beta, Alpha Chi, Alpha Psi Omega, Sophomore Scholar, Junior Scholar, Senior Scholar

Lauren Chin

Hollins College–Chemistry

HOMETOWN: Montego Bay, Jamaica

ANTICIPATED DEGREE: Chemistry with a Biochemistry Concentration; May 2017



AWARDS AND HONORS: Honorable Mention Judith Gregory Smith Award, CRC Press Chemistry Achievement Award, Dean's List.

Charles Edward (CJ) Wilson

Liberty University–Chemistry

HOMETOWN: Edgewood, MD

ANTICIPATED DEGREE: B.S. Chemistry, May 2017



AWARDS AND HONORS: Eagle Scout, Liberty University Honors Program Guide, NSF-REU at Baylor University.

Nancy Kierstin Reid

Lynchburg College–Chemistry

HOMETOWN: Concord, VA

ANTICIPATED DEGREE: B.S. Biomedical Science and Chemistry, May 2017



AWARDS, HONORS, AND MEMBERSHIPS: Deans list, American Chemical Society Richard Clark Somerville Scholar Finalist, Dean's list; American Chemical Society, Phi Kappa Phi, and Iota Sigma Pi

Samantha Van Shufflin

Radford University–Chemistry

HOMETOWN: Stephens City, VA

ANTICIPATED DEGREES: Pre-Health (Biochemistry Concentration) & Biology (General Concentration) Spring 2017

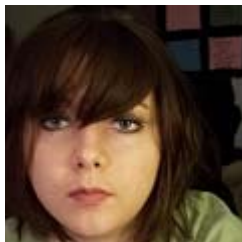


AWARDS AND MEMBERSHIPS: Summer Undergraduate Research Fellowship, LEAD Scholar, Dean's List, Phi Kappa Phi; UNICEF International; Covenant House International

Caitlin Donahue

Roanoke College–Biochemistry

HOMETOWN: Roanoke, VA

ANTICIPATED DEGREE: B.S. in
Biochemistry, May 2017

AWARDS and MEMBERSHIPS: Undergraduate Research Assistant Program, Summer Scholar, Baughman Scholarship, J.P. Woods Memorial Scholarship, Trustee Scholarship, Bolton Award, Kizer Award; American Chemical Society and American Society for Biochemistry and Molecular Biology

Jacob Hyde

Virginia Military Institute – Chemistry

HOMETOWN: Centreville, VA

ANTICIPATED DEGREE: B.S. in
Chemistry May 2017

AWARDS, HONORS, AND MEMBERSHIPS: Ralph Bowen Linville Award; AFROTC Det. 880 Commander's Award; American Legion Scholastic Excellence; Top Organic Chemistry Cadet Award; Top Inorganic Chemistry Cadet Award; Daughters of Founders and Patriots of America Award; Silver R.O.T.C. Award; 2015 Biochemistry Award; Gene Wise Memorial Award; Larry L. Jackson 1962 Undergraduate Research Grant Award; 4-year Air Force ROTC Scholarship recipient; Gamma Sigma Epsilon Chemistry Honor Society; American Dental Education Association

Hans Smith

Virginia Tech–Biochemistry

HOMETOWN: Galloway, NJ

ANTICIPATED DEGREE: B.S. in
Biochemistry, May 2017

AWARDS, HONORS AND MEMBERSHIPS: Summer Undergraduate Research Fellowship- Virginia Tech 2015, Summer Undergraduate Research Fellowship- The Scripps Research Institute 2016, William E. Newton Award, American Society for Biochemistry and Molecular Biology (ASBMB) Accredited Degree, Dean's List; Phi Beta Kappa Honor Society, American Society for Biochemistry and Molecular Biology (ASBMB) Member

Blake Finkenauer

Virginia Tech – Chemical Engineering

HOMETOWN: Yorktown, Virginia

ANTICIPATED DEGREE: B.S. Chemical
Engineering, May 2017

AWARDS, HONORS, AND MEMBERSHIPS: AIChE Donald F. Othmer Sophomore Academic Excellence Award, Dean's List with Distinction, Andrew Britton Scholarship and John & Bernice Brooks Scholarship, Gavin Starmer Memorial Scholarship and RH Bogle Scholarship, Thomas and Frances Irvin Scholarship, Pratt Engineering Scholarship; American Institute of Chemical Engineers (AIChE)

Louis Robert Hollingsworth
Virginia Tech – Chemistry

HOMETOWN: Springfield, VA

ANTICIPATED DEGREES: B.S. in chemical engineering, B.S. in biochemistry, and B.A. in chemistry, May 2017



AWARDS, HONORS, AND MEMBERSHIPS: Barry M. Goldwater Scholarship; Harry S. Truman Scholarship Finalist; ACS National Symposium COMP Workshop and Travel Grant High; Performance Computing Day: 1st Place Poster Presentation; Thermo Scientific Pierce Scholarship; University Honors Class of 1954 Odyssey Fellowship; Illuminator Award; ACC Creativity and Innovation Fellowship; ICAT Student Research Grant; OXE Sophomore Chemical Engineer Award; Department of Chemistry Academic Excellence Award; Department of Chemistry Poster Symposium: 3rd Place; Chem-E-Car National Poster Competition: 1st Place, 2nd Place; Chem-E-Car National Design Competition: 4th Place, 6th Place, 7th Place; Additive Manufacturing Grand Challenge: 3rd Place Ground Vehicle; American Chemical Society; American Association of Cancer Research; American Institute of Chemical Engineers; Mentor, Center for Enhancement of Engineering Diversity (CEED)

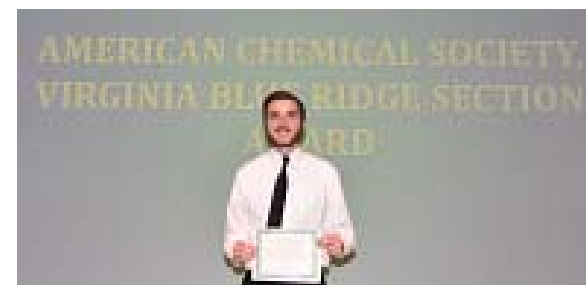
Ashley Alberta Ooms
Washington and Lee University –
Biochemistry

HOMETOWN: Whitehouse Station, NJ

ANTICIPATED DEGREE: B.S. in
Biochemistry, May 2017



AWARDS, HONORS AND MEMBERSHIPS: Johnson Scholar; Freshman Chemistry Achievement Award; James Keith Shillington Scholarship recipient; James Hold Starling Scholarship recipient; ODAC/Va. Farm Bureau Insurance Scholar-Athlete; Phi Eta Sigma National Honor Society; Alpha Epsilon Delta Premedical Honor Society; Phi Beta Kappa; American Chemical Society



The winner of the VBRS-ACS award at the Blue Ridge Highlands Regional Science Fair is:

Entry 503 Dawson Michel Little

The Effect of Pure Vegetable Oils on the Quality of Biodiesel Fuel, Southwest Virginia Governor's School, Sponsor: Jared Brown

Dr. James Lewis Howe
1859-1955



James Lewis Howe was for many years Professor of Chemistry and Head of the Department at Washington and Lee University. As one of the most distinguished chemists in the Blue Ridge Section, we have chosen to name our annual awards to outstanding students in his memory.

Dr. Howe was born in Newburyport, Massachusetts in 1859; this is the same year in which Svante Arrhenius was born, and during Dr. Howe's professional career he was to know many of the famous early chemists, such as Liebig, Wohler, Bunsen, and many others. He attended Amherst College, where he pursued his favorite subjects of chemistry, German, and religion. He was selected to deliver the graduation address on the subject of "The Scientific Method and Religion".

He earned his M.S. and Ph.D. degrees at the University of Gottingen, and published his first scientific papers on the subject of aromatic carbon chemistry. He then began an intensive literature search of the platinum metals, beginning a bibliography for which he was to become world famous. He decided that the most interesting and least known metal of the group was ruthenium.

In 1883 he married Henrietta Leavenworth Marvine of Scranton, Pennsylvania. This marked the beginning of a marriage of 60 years duration. The Howes became the parents of two daughters and a son (who was also a chemist). After Mrs. Howe's death in 1944, one of his daughters, Guendolen Howe, became her father's constant companion.

Dr. Howe's teaching career began at Brooks Military Academy in Cleveland, Ohio. From there he went to Central University in Richmond, Kentucky, where he was Professor of Chemistry (and later Physics and Geology as well). In 1894 he accepted the Chair of Chemistry at Washington and Lee University, and for almost half a century he was at that institution.

It was here that he began his intensive bibliographic study of the platinum group and his outstanding research on the element ruthenium. In 1917 he was appointed chairman of a special subcommittee on platinum of the National Research Council. His work led to the development of platinum alloys, and averted a potentially crucial shortage in platinum, threatening our efforts during World War I. He later received several presidential commissions dealing with the platinum metals.

Dr. Howe was beloved by his students and colleagues at W&L. For the first fifteen years he was a one person department. His lectures were informal, but completely up to date. He was known for his extreme congeniality, charming personality, mild manner, and even temper. He was unceasingly helpful, and believed that more could be learned in the laboratory than from lectures.

Dr. Howe's unflagging energy found him serving in many capacities outside the scientific field. He was an Elder of the Lexington Presbyterian Church, an active Mason, and held positions in the Town Council in Lexington and the People's National Bank of Lexington.

Outstanding High School Teacher Awardee

Mark Frazier



Mark Frazier is in his third year teaching chemistry and environmental science at Roanoke Valley Governor's School, having previously taught for Smyth County Schools. Mark holds a PhD in molecular biology from Vanderbilt University and did postdoctoral work at Fred Hutchinson Cancer Research Center in Seattle and St. Jude Children's Research Hospital in Memphis. He is an adjunct faculty member at Jefferson College for Health Sciences in Roanoke, teaching biochemistry. Mark is also an Episcopal Priest and serves as rector of St. Thomas Church in Christiansburg. He is a member of the American Chemical Society, the Virginia Association of Science Teachers, and the Society of Ordained Scientists. Mark is married to Amy Frazier, DVM, a freelance scientific editor. They are the parents of four daughters, Anna, Emilia, Evelyn, and Margaret.

As a part of the April 10, 2017 meeting at Radford University, the Virginia Blue Ridge Section of the American Chemical Society is sponsoring the twenty-first Annual Undergraduate/High School Poster Session. Note that poster boards will be provided.

If you have a student or students, who will be participating, submit the following information by email to Chris Hermann (chermann@radford.edu) by April 3, 2017. This is a firm deadline. No poster submissions will be accepted after this time. All students and faculty will get email confirmation. If you did not get an email reply, then your submission was not received and you cannot present.

Name of Project _____

Name(s) of Student(s): _____

Affiliation (name of high school, college, or university): _____

Class of Student(s) (freshman, sophomore, junior, senior): _____

Student(s) email address: _____

Advisor's Name, Address, Telephone Number, and email address: _____

48" by 48" poster board with tripod on table or just table will be provided. Please specify what you need.

_____ poster board with tripod on table

_____ table needed

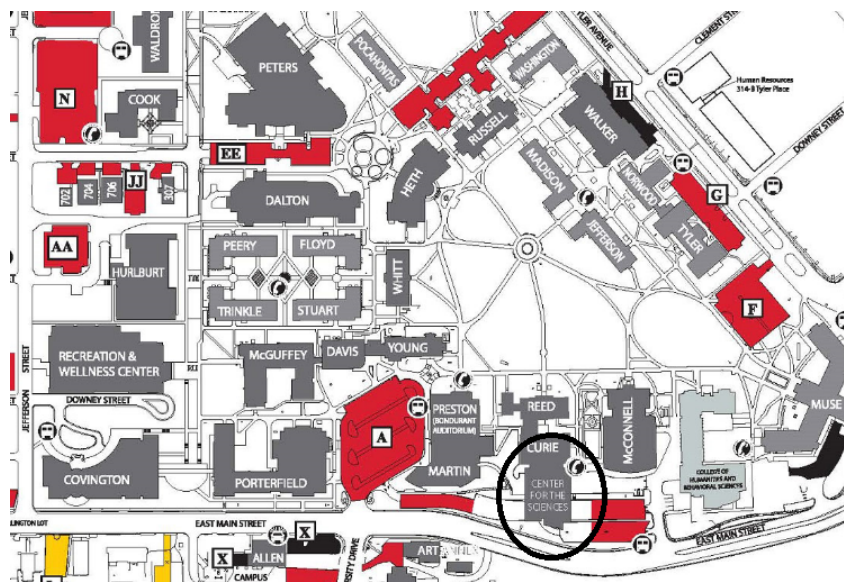
Directions to Radford University

Directions: Take I-81 to exit 109 and follow Route 177 (Tyler Ave) to Main Street. Make a right onto Main Street. Go into the first parking lot on the right -- it is besides College of Humanities and Behavioral Science building (under construction), in front of McConnell Library, and besides Center for the Sciences.

The parking pass for the meeting can be found at <http://chermann.asp.radford.edu/Chemical%20Society%202004-10-17.pdf>

A map to the campus is at <http://chermann.asp.radford.edu/CampusMap120716.jpg>

Map of Radford University



(Adapted from Radford University Website)