

# The Blue Ridge Chemist

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## The 2020 James Lewis Howe Awards

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## VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

705<sup>th</sup> SECTION MEETING

Radford University

Originally Scheduled for Friday, April 03, 2020

has been **CANCELLED**

The Virginia Blue Ridge Section of the American Chemical Society has **cancelled** its final meeting of Spring 2020 due to the extraordinary circumstances of the coronavirus pandemic.

We thank Prof. Christine Hermann and her assistant, Laura Angell, both of Radford University, for their effort in preparing for the cancelled April meeting, which was to include our annual high-school and undergraduate poster session, as well as our awards ceremony.

We wish also to thank Prof. Carla Finkielstein of the Virginia Tech Department of Biological Sciences for her generous offer to serve as our lecturer for the evening.

The Section is currently planning its Fall 2020 meeting schedule.

The Executive Council is working presently with ACS National to work out a procedure for ratifying our revised bylaws electronically. Stay tuned for an email message on that subject.

## James Lewis Howe Awardees for 2020

### Emily Wandling

Sweet Briar College

Hometown: Mechanicsville, Virginia

Degrees: Biochemistry and Molecular Biology.



Honors: Susan Piepho 1st-year Excellence Award in Chemistry; Class of 1977 Sportsmanship Award; SBC Manson Memorial Scholarship; Whiteman Scholar-Athlete of the Year; Nancy Godwin Baldwin '57 Scholar; SBC Prothro Scholarship; SBC Presidential Scholarship; Google Cloud Academic All-District Tennis Team; 2<sup>nd</sup> Team All-ODAC; ODAC All-Academic Tennis Team; ITA Scholar-Athlete. Member of Iota Sigma Pi Chemistry Honors Society; Alpha Lambda Delta Honors Society; Omicron Delta Kappa Leadership Honors Society; ACS.

### Catherine Stricklin

Hollins University

Hometown: Frederick, Maryland

Degree: B.S. Chemistry, Concentration in Biochemistry; Minor in Physics.



Honors: Hollins Scholar Scholarship; Ella Faith Mode Student Research Award; Judith Gregory Smith Award for Excellence in the Natural Sciences; Presenter at ACS-VBRS, Hollins University Science Seminar; Mid-Atlantic Undergraduate Regional Conference of Undergraduate Studies; Inaugural Network for Undergraduate Research of Virginia.

### Rachel Bentz

Ferrum College

Hometown: Amelia, Virginia

Degree: B.S. Chemistry, 2<sup>nd</sup> major in Pre-Professional Sciences. Biology minor.

Honors: Member of ACS and the National Society of Leadership and Success (NSLS).



### Eric Holland

Liberty University

Hometown: Baldwin, New York

Degree: B.S. Chemistry

Honors: 3rd Place for poster presentation at LU Research Week 2019; Dean's List; member of United States Army National Guard. Quality Control Chemist at C.B. Fleet.



### Natacha Rangel Ribeiro

Radford University

Hometown: Midlothian, Virginia

Degree: B.S. Chemistry, Advanced Biochemistry Concentration.

Honors: Outstanding Student Award Spring 2017; Big South Conference All Academic Team; Dean's List. Member of Iota Sigma Pi.



**Darius Chernitsky**

Randolph College

Hometown: Haymarket, Virginia

Degree: B.S. Chemistry



**Mark Maust**

Roanoke College

Hometown: Joppa, Maryland

Degree: B.S. Chemistry



Honors: Roanoke College Summer Scholar; Undergraduate Award in Analytical Chemistry; ACS Student Affiliate Award; Academic Deans List. Member of ACS, Pi Kappa Phi Fraternity; Alpha Lambda Delta Freshman Honors Society

**Haley Smeltz**

University of Lynchburg

Hometown: Evington, Virginia

Degree: B.S. Chemistry



Honors: Outstanding Senior in Chemistry Award; Founder’s Scholarship; Sigler scholarship competition; Central Virginia Area Grant; Virginia Tobacco Scholarship. Member of ACS, Virginia Academy of Science

**Santiago Joaquin Lopez**

Virginia Military Institute

Hometown: Taunton, Maryland

Degree: B.S. Chemistry



Honors: OSS Israel Strategy and Policy Tour Attendee; Air Force ROTC Scholarship; HPSP Scholarship; Gamma Sigma Epsilon Honor Society Chapter Delegate. Undergraduate Researcher at Tufts University in the Thomas Lab

**Josh Kraus**

Virginia Tech – Biochemistry

Hometown: Mechanicsville, Virginia

Degree: B.S. Biochemistry and B.A. in Chemistry.



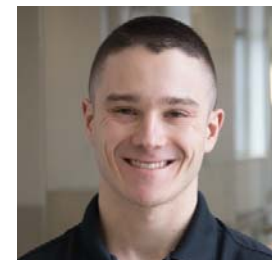
Honors: Dean's List; Dean’s List with Distinction; Certification of degree by ASBMB. Member of American Society for Biochemistry and Molecular Biology.

**Matt Hoch**

Virginia Tech – Chemical Engineering

Hometown: Chesapeake, Virginia

Degree: B.S. Chemical Engineering and B.A. in Chemistry.



Honors: Dean’s List with Distinction. Member of American Institute of Chemical Engineers.

## **Rachel Bradley**

Virginia Tech – Chemistry

Hometown: Yorktown, Virginia

Degree: B.S. Chemistry

Honors: Julius P. Bilisoly Scholarship; Dean's List; Vice President's Award (Thomas Nelson Community College); John R. Lawson Scholarship (Thomas Nelson Community College); President's Honor Roll (Thomas Nelson Community College). Member of ACS.



## **George Barker**

Washington and Lee University

Hometown: Salem, Virginia

Degree: B.S. Biochemistry and 2<sup>nd</sup> Major in Computer Science.

Honors: President's List; Phi Eta Sigma; BBB Honor Society; AED Honor Society. Member of ACS.



The Virginia Blue Ridge Section heartily congratulates the recipients of the 2020 James Lewis Howe Awards.

## **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.

Howe was born in Newburyport, Massachusetts in 1859; this is the same year in which Svante Arrhenius was born, and during 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".

Howe earned his M.S. and Ph.D. degrees at the University of Göttingen, 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.

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In 1883 How 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 at W&L that Howe 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.

## Blue Ridge Highlands Regional Science Fair

### VBRS-ACS Award Winner



**Allison Adams**

Allison Adams currently attends Southwest Virginia Governor's School, where her teacher is Jared Brown. Her winning project was entitled "Determining Concentrations of Lead in Jewelry Using Inductively Coupled Plasma." Congratulations, Allison!