The Blue Ridge Chemist

The Blue Ridge Chemist, since 1947 the Official Local Section Publication of the Virginia Blue Ridge Section, American Chemical Society



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History Quiz

Submit your answers to this month's question by April 17, 2006 to Adele Addington (Addington@roanoke.edu)

- 1. Who was the first teacher to receive an award for high school chemistry teaching?
- 2. At what institution did James Lewis Howe spend the majority of his career?

Radford University Hosts April Meeting

http:/membership.acs.org/v/vbr

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

600th SECTION MEETING

Hosted by Radford University

Wednesday, April 19, 2006

PROGRAM:

5:00-5:30	Students setup posters on posterboards
5:30-6:30	Social Hour/Poster Session
6:30-7:30	Dinner
7:30-	Meeting and Awards

The social hour, dinner, and meeting will take place in the Heth Ballroom at Radford University. (See map). The speaker will be Dr. Atilla Pavlath speaking on "Local Section Activity: The driving force behind the ACS"

Dinner will consist of tossed salad with choice of three dressings, petite chicken breast Kiev, seasoned whipped potatoes, roasted fresh vegetable medley, country style green beans, fudge brownie pie, bread, iced tea, decaffeinated coffee, and regular coffee. Special diets can be accommodated by mentioning it when the reservations are made. Cost for the dinner is \$14.00, with students and retired ACS members half price

Reservations for the dinner must be made by WEDNESDAY, APRIL 12 by calling Chris Hermann at 540-831-5413 or by email to chermann@radford.edu, or regular mail to Department of Chemistry and Physics, Radford University, Radford, VA 24142.

The Outstanding High School Teacher award and the James Lewis Howe awards for outstanding college seniors will be given.

Dr. Attila E. Pavlath

Dr. Attila E. Pavlath received his education at the Technical University of Budapest in Hungary, where he became assistant professor. In 1956, he left Hungary first for Montreal, Canada (McGill University), then in 1958, he joined Stauffer Chemical Company in Richmond, California. Since 1967, he has been with the Western Regional Research Center of the U.S. Department of Agriculture, in Albany, California. He is leading a group



involved in research on various agricultural chemical problems. Dr. Pavlath's scientific career includes work on fluorine chemistry (30+ years), glow discharge chemistry (10+ years), textile chemistry (10 years), energy and biomass research (10 years), the freshness in fruits and vegetables (10 years) and most recently on biodegradable wrapping films. He has published over 120 scientific papers on these subjects, three books and has presented numerous lectures in the U.S. and abroad. He also holds 25 patents. Dr. Pavlath is also well-known for his activities in the ACS during the past 35 years to make the ACS more responsive to the professional needs of its members. He rose from his Section Treasurer to the Presidency of the whole ACS.

"Local Section Activity: The driving force behind the ACS"

The ACS was formed 130 years ago, but for 15 years it struggled with finding a way to become a Society for all chemical professionals in the country. Chemists even a few hundred miles away could not identify themselves with the ACS. The invention of the Local Sections started an exponential expansion. Today we have 189 Local Sections and we are the world's largest scientific organization. Local Sections are the bloodlines of the ACS. The lecture will describe not only the importance of the Local Sections but also will pay long overdue tribute to thousands of devoted volunteers who for 100 years kept the Society visible for the members.

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.

Chi V. Pham Randolph-Macon Woman's College

HOMETOWN: Vietnam

ANTICIPATED DEGREE: B.S. in Chemistry with ACS Accreditation

AWARDS AND MEMBERSHIPS: Dean's List Pan World Club member Environmental Club President Award for Globalization International Orientation Coordinator Club Asia, (Past-President, Historian) Campus Even Committee member International Orientation Leader



Iota Sigma Pi, National Honor Society for Women in Chemistry R-MWC representative of the 2006 State Championships Ethics Bowl Outstanding Behind-the-scene Contributor Ruby Harman Memorial Scholarship in Asian Studies Undergraduate Award for Achievement in Organic Chemistry **Kimberly A. Toops** Virginia Tech - Biochemistry

HOMETOWN: Melbourne, FL

ANTICIPATED DEGREE: B.S. in Biochemistry and B.A. in Chemistry

AWARDS AND MEMBERSHIPS: Phi Beta Kappa Walter B. Ellett Scholarship Claremont S. Jackson Scholarship Dean's list

Amy E. Ratliff Radford University

HOMETOWN: Sterling, VA

ANTICIPATED DEGREE: B.S. in Chemistry

AWARDS AND MEMBERSHIPS: Dean's List Iota Sigma Pi Alpha Lambda Delta Recipient of Melva Lunceford Harris Scholarship Recipient of Dale Snead Boxley Scholarship RU Ambassadors Rookie of the Year Radford University Highlander Scholar American Chemical Society Student Affiliate National Society of Collegiate Scholars



Stephen Waters Lynchburg College

HOMETOWN: Baltimore, MD

ANTICIPATED DEGREE: B.S. in Chemistry

AWARDS AND MEMBERSHIPS: ACS student affiliate Outstanding Chemistry Student award

Laura Virginia Salley Hollins University

HOMETOWN: Laurinburg, NC

ANTICIPATED DEGREE: B.A. in Chemistry

AWARDS AND MEMBERSHIPS: Batten Scholar Judith Gregory Smith Award for Excellence in the Natural Sciences

Angela Jean Kim Washington and Lee University

HOMETOWN: Martinsville, VA

ANTICIPATED DEGREE: B.S. in Chemistry

AWARDS AND MEMBERSHIPS: Phi Beta Kappa James Keith Shillington Scholarship Mary Louise Reid White Scholarship in Chemistry







Clark Allison Ramsey II Virginia Tech - Chemistry

HOMETOWN: Murrysville, PA

ANTICIPATED DEGREE: B.S. in Chemistry

AWARDS AND MEMBERSHIPS:

Ashley A. Hildebrand Concord College

HOMETOWN: Huntington, WV

ANTICIPATED DEGREE: B.S. in Chemistry, preprofessional

AWARDS AND MEMBERSHIPS: Presidential Scholar

Stephen R. Quinn Roanoke College

HOMETOWN: Roanoke, VA

ANTICIPATED DEGREE: B.S. in Biochemistry

AWARDS AND MEMBERSHIPS: National Dean's List Membership in Who's Who in American Universities Phi Lambda Upsilon National Honorary Society Beta Beta Biological Honor Society





Kimberly Anne Wilson Sweet Briar College

HOMETOWN: Austinburg, OH

ANTICIPATED DEGREE: B.S. in Biochemistry & Molecular Biology

AWARDS AND MEMBERSHIPS: Iota Sigma Pi Alpha Lambda Delta Betty Bean Black Scholar Dean's List Bausch & Lomb award winner



Student Affiliate of the American Chemical Society Member

Scott B. Donald Virginia Military Institute

HOMETOWN: Lexington, VA

ANTICIPATED DEGREE: B.S. in Chemistry with Honors

AWARDS AND MEMBERSHIPS: National Dean's List Gottwald Institute Scholar Lemuel MacKennie Long Jarmon Award CDC Press Freshman Chemistry

CRC Press Freshman Chemistry Achievement Award

ACS Division of Analytical Chemistry Award Larry L Jackson Undergraduate Research Award in Chemistry Honor Society of Phi Kappa Phi member **Robert E. Major**

Ferrum College

HOMETOWN: Charles City, VA

ANTICIPATED DEGREE: B.S. in Chemistry with Business Administration minor

AWARDS AND MEMBERSHIPS: Alpha Chi ISOC, Sergeant of Arms Sigma Alpha Kappa, Vice President Junior Class Vice President NSF Research Experience for Undergraduates, Virginia Tech Student Government Association secretary Who's Who Among American College Students



Virginia Blue Ridge Section's 75th Anniversary: Our BIG BASH Call for Posters

Attention SAACS advisors: As part of our celebration of our 75th anniversary, we would like each SAACS group to prepare a poster highlighting activities and achievements of our SAACS groups for the October meeting. This will be a wonderful opportunity to share your achievements and activities with other SAACS groups and to learn about what other students are doing in the area. More details about size limitations of your poster will be included in upcoming BRC publications, but start thinking about what you can present in your poster now!

Leah Johnson

Virginia Tech - Engineering

HOMETOWN: Alexandria, VA

ANTICIPATED DEGREE:

B.S. in Chemical Engineering with Minor in Food Science and Technology

AWARDS AND MEMBERSHIPS: President's List Dean's List with Distinction Honors Program Omega Chi Epsilon: CHE Honor Society Tau Beta Pi: Engineering Honor Society several departmental and/or college scholarship awards



Virginia Blue Ridge Section's 75th Anniversary: Our BIG BASH History Snippet

In preparation for our historical celebration in October, we will be sharing a brief snippet of our section's history each month in the BRC. Additionally we will include two questions for you to answer. Submit your answers to each question to Adele Addington (Addington@roanoke.edu); a winner will be randomly selected from correct all the correct entries received that month to win a free meal at an upcoming regular local section meeting!

The Virginia Blue Ridge Section has been recognizing student achievement since1952. Dr. Nan Thornton, reporting for a committee charged with studying student interest and scholarship in college chemistry, suggested that the section award a student affiliate membership to the outstanding student majoring in chemistry at each of the colleges in the Section's territory. Additionally, these students were treated at dinner as guests of the Section and awarded a certificate. As such, the ten students were recognized for their scholarly achievements in chemistry or chemical engineering at the February 1952 meeting.

The following month, it was proposed that the student awards become a permanent activity of the section, and that the award be named the "James Lewis Howe Student Affiliate Award". The first James Lewis Howe Awards were presented on Nov. 14, 1953 to ten students.

The section has also been long involved in recognition of high school chemistry teachers. In 1957, the section hosted a "High School Chemistry Teacher's Night", but it was not until 1969 that the section first presented an award for excellence in high school teaching.

(Information taken from "The Fifty Year History of the Virginia Blue Ridge Section of the American Chemical Society, 1932-1981"; E.F. Furtsch, August 1981)

Answers for March's Quiz:

1. What year did the "Blue Ridge Chemist" receive its name? 1948

2. Dr. J.A. Campbell suggested the name for our section's newsletter. Was he, or was he not a member of the Virginia Blue Ridge section?

No - he was from Oberlin, Ohio

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.

VBRS Honors Its 50-Year Members

We are pleased to announce that three of our local section members have been members of ACS for 50 years. Congratulations to each of them. They are:

> Dr. J. Brown Goehring Dr. Rogers F. Lambert Dr. Wilmer Joseph Stratton

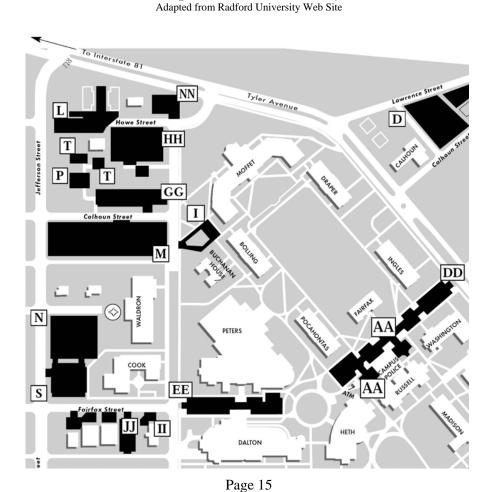


Directions to Radford University

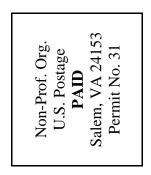
Take I-81 to exit 109 and follow Route 177 approximately 3.5 miles to Radford University. Before the campus take a right onto Jefferson Street and find a parking lot with open space. All events will take place in the Heth Ballroom.

CAUTION: Radford University police have been ticketing cars in lot DD and AA, particularly before 7:00 p.m. Also, with all the construction lately, various things are not as they used to be.

Map of Radford University



THE BLUE RIDGE CHEMIST Vern Miller, Editor Roanoke College Salem, VA 24153



The May Virginia Blue Ridge Section meeting will be Tuesday, May 9 at Virginia Tech. Dave Bevan will be leading tours of the "VT-Cave". The contact person is Adele Addington.