

The Blue Ridge Chemist

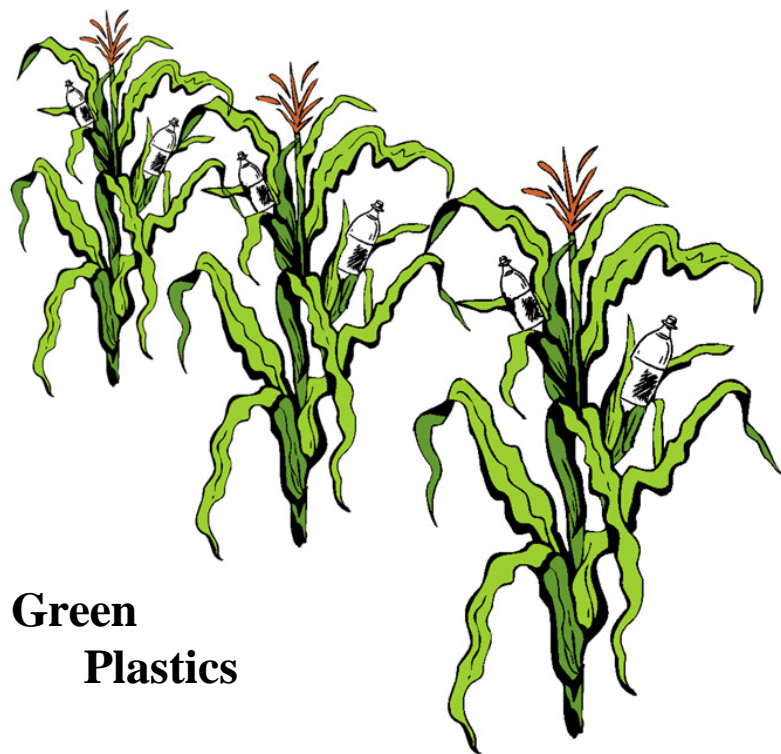
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**Green
Plastics**

Radford University Hosts April Meeting

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

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

592th SECTION MEETING

Hosted by Radford University

Wednesday, April 20, 2005

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 Prof. Eugene Stevens, speaking on "Green Plastics".

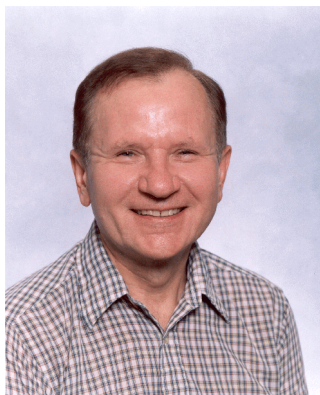
Dinner will be tossed salad with choice of three dressings, marinated London broil with Bordelaise sauce, roast turkey breast with gravy, smashed seasoned red skin potatoes, stir fried fresh vegetable medley, seasoned green beans, bread, chocolate mousse, iced tea, decaffeinated coffee, and regular coffee. Special diets can be accommodated by mentioning it when the reservations are made. Cost for the dinner is \$12.00, with students and retired ACS members half price.

Reservations for the dinner must be made by WEDNESDAY, APRIL 13 by calling Chris Hermann at 540-831-5413 or by email to chermann@radford.edu, or regular mailing 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 seniors will be given.

Prof. Eugene Stevens

E. S. Stevens is Professor of Chemistry at the State University of New York at Binghamton. His training includes a B.S. in Chemistry from Yale University, a Ph.D. from the University of Chicago, and an NSF Postdoctoral Fellowship at Harvard University. He has conducted research on biopolymers for more than thirty years and has published more than one hundred papers dealing with the conformational behavior of biomolecules, a topic he has explored through chiroptic methods. He is a member of the American Chemical Society, Biophysical Society, American Association for the Advancement of Science, American Society of Testing and Materials, and BioEnvironmental Polymer Society.



Green Plastics

New plastics are being developed, with characteristics not usually associated with plastic--plastics made from natural, renewable starting materials, plastics that are able to biodegrade completely in an environmentally benign manner. They are made from agricultural feedstocks like starch and vegetable oils rather than irreplaceable fossil fuels; they contribute little to the already burdensome problems of waste management; and they help prepare us for the time when fossil fuels become exhausted. This talk will describe the driving force behind the emerging bioplastics industry, survey the new technologies, and examine their prospects for the future

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.

Derek Evans

Concord University

HOMETOWN: Rainelle, WV

ANTICIPATED DEGREE:
B.S. Chemistry

Kathryn M. Rainsberger

Virginia Tech - Biochemistry

HOMETOWN: Tampa, Florida

ANTICIPATED DEGREE:
B.S. Biochemistry

AWARDS AND MEMBERSHIPS:

- Phi Beta Kappa
- Virginia Tech Biochemistry Club
- Virginia Tech Alumni Presidential Honors Scholar
- American Association for Biochemistry and Molecular Biology



Kierstin Liese Schmidt

Washington and Lee University

HOMETOWN: Gladstone, OR

ANTICIPATED DEGREE:
B.S. Special Attainments in Chemistry

AWARDS AND MEMBERSHIPS:

- Omicron Delta Kappa
- Phi Beta Kappa
- Freshman Achievement in Chemistry
- Honor Roll
- Dean's List
- ACS-SA



Robert Richards

Ferrum College

HOMETOWN: Roanoke, VA

ANTICIPATED DEGREE:
B.S. Chemistry and Environmental Science



Veronica Ann Pugh

Virginia Tech - Chemistry

HOMETOWN: Fredericksburg, VA

ANTICIPATED DEGREE:
B.S., Chemistry, Biochemistry minor

AWARDS AND MEMBERSHIPS:
Commonwealth Scholar (honors diploma)
Dean's list
Earthwatch Student Challenge Award
Residential Leadership Community
Student Government Association, College of Science Senator



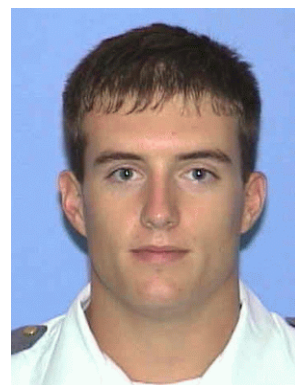
Ty Elliot Denby

Virginia Military Institute

HOMETOWN: Scottsville, VA

ANTICIPATED DEGREE:
B.A. Chemistry, Business concentration,
Spanish minor

AWARDS AND MEMBERSHIPS:
The Herbert E. Ritchey Award
Academic All-American
Academic All-Region
Sale Scholarship
ACS-SA
Phi Eta Sigma



Alia Huang Clark

Hollins University

HOMETOWN: Tulsa, OK

ANTICIPATED DEGREE:
B.A. Chemistry

AWARDS AND MEMBERSHIPS:

Sigma Xi
Judith Gregory Smith Award for Excellence in Natural Sciences
Elise Deyerle Lewis Award for Excellence in Mathematics
ACS Undergraduate Award for Achievement in Organic Chemistry



Katherine N. Whitley

Virginia Tech - Chemical Engineering

HOMETOWN:

ANTICIPATED DEGREE:
B.S. Chemical Engineering - Biomedical
Concentration, May 2005; B.S., Biology and
Chemistry, May 2006

AWARDS AND MEMBERSHIPS:

Mentorship Project, NASA Langley
Omega Chi Epsilon
Tau Beta Pi
Student Engineers Council
American Institute of Chemical Engineers
Eleanor Davenport Leadership Scholarship
William Conger Scholarship
National Starch and Chemical Company Scholarship
Robert C. Byrd Scholarship
National Merit Scholarship
College of Engineering Scholarships
Phi Kappa Phi



Mary Afrane
Radford University



HOMETOWN: Alexandria, VA (originally from Ghana, West Africa)

ANTICIPATED DEGREE:
B.S. Chemistry and Biology, Math minor

AWARDS AND MEMBERSHIPS:
National Science Foundation - Research Experience for Undergraduates (REU); summer internship in Molecular Biology
Coal Froth Flotation Research
Iota Sigma Pi
Radford University's Honors Academy
National Society of Collegian Scholars
ACS-SA (Vice-President)
Tri-Beta (Vice-President)
Phi Kappa Phi
Senior Excellence Award at Radford University

Ana Ciric
Sweet Briar College



HOMETOWN: Belgrade, Serbia, and Montenegro

ANTICIPATED DEGREE:
B.S. Chemistry

AWARDS AND MEMBERSHIPS:
Dean's List
International Students Scholarships
Tianaderrah Foundation
Red Top Scholarship
Alpha Lambda Delta
Honors Summer Research Scholarship, Sweet Briar College
Summer Undergraduate Research Fellowship, U of California, Riverside
Iota Sigma Pi

MaryAnne Gramling Gragg
Randolph-Macon Woman's College



HOMETOWN: Marietta, GA

ANTICIPATED DEGREE:
B.S. Chemistry

AWARDS AND MEMBERSHIPS:
Organic Chemistry award
Undergraduate Award in Analytical Chemistry
All-American ODAC awards
VFIC Abbott Laboratories award
Presidential scholarship
Macon award scholarship
Casual Male Big and Tall Co. Scholarship
Deans List
Iota Sigma Pi
ACS-SA

Amandaa K. Bostick
Roanoke College



HOMETOWN: Gainesville, Florida

ANTICIPATED DEGREE:
B.S. Chemistry

AWARDS AND MEMBERSHIPS:
Iota Sigma Pi
Pi Mu Epsilon
Roanoke College Honors Program
Roanoke College Summer Scholar
Bondurant Summer Scholar
Roanoke College Dean and Faculty list
SAACS

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 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.

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 them. They are:

Dr. William Scott Delicate
Dr. James E. McGrath
Dr. William Taylor



