

The Blue Ridge Chemist

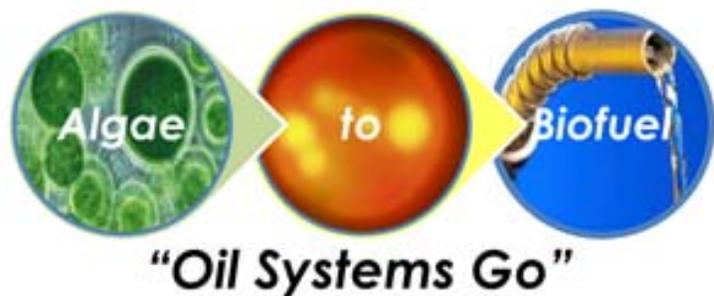
The Blue Ridge Chemist, since 1947 the
Official Local Section Publication of the
Virginia Blue Ridge Section, American Chemical Society



VOLUME LXVII

October 23, 2014

No. 7



Ferrum College hosts the October Meeting

<http://www.acs-vbrs.org>

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

666th SECTION MEETING

Hosted by Ferrum College

Thursday, October 23, 2014

PROGRAM:

5:30-6:01 Social Time, Room

6:02-7:03 Dinner, Blue Ridge Mountain Room

7:03-8:04 Talk, Blue Ridge Mountain Room

The social time and dinner will take place in the Virginia Room in Franklin Hall. The talk will take place in room 106 in Garber Hall. The evening speaker is Dr. Todd Allen from Liberty University. His talk is Algae to Biofuels: Oil Systems Go!

Dinner will be an Island Flatbread Buffet. Main dishes include jerked tilapia, mango-bbq chicken strips, and grilled vegetables. Fixings include coconut rice, black beans, tropical sweet potato salad, mango salsa, diced tomatoes, shredded lettuce, and cilantro lime sour cream. Water and tea will be served. Coffee is available upon request. Cost for the dinner is \$14.00, with students and retired ACS members being half price.

Reservations for the dinner must be made by WEDNESDAY October 16, (7 DAYS BEFORE THE MEETING). Contact Maria Puccio at (540) 365-4238, or email mpuccio@ferrum.edu, or write Maria Puccio, Ferrum College, GRB 309; 80 Wiley Dr. Ferrum, VA 24088.



Dr. Todd Allen, Associate Professor

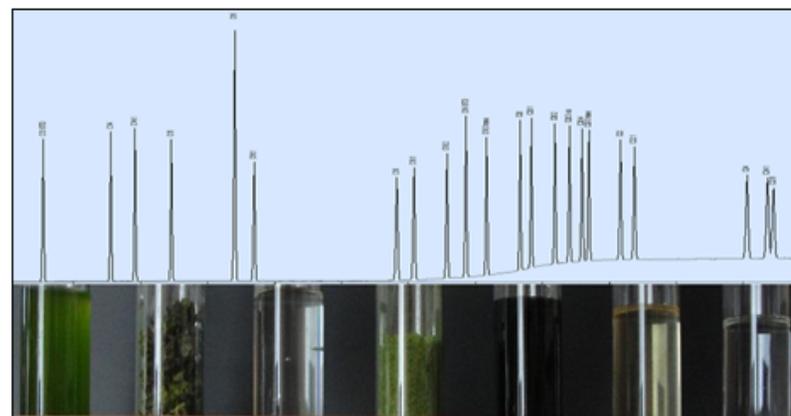
Liberty University

Dr. Todd Allen is an Associate Professor of Chemistry at Liberty University, where he teaches analytical and general chemistry courses. Prior to joining the Liberty University faculty in 2013, Dr. Allen worked in private industry for 15 years. In his most recent work experience he was the analytical laboratory manager for an algae to biofuels program at General Atomics. Other work experience includes the development of covert and overt chemical markers and taggants for deterring fraud, counterfeiting, and product diversion, and the development of sensors for chemical warfare agents and integration of sensor networks for homeland security threat detection. He earned a B.S. in chemistry from Gordon College in Wenham, MA and a Ph.D. in Analytical Chemistry from the University of California at Davis, after which he performed postdoctoral research at Los Alamos National Laboratory.

Algae to Biofuels: Oil Systems Go!

Abstract

Many microalgae have the ability to produce significant quantities of neutral lipids, which can be extracted and converted to biofuel, as well as many other products, such as natural dyes, nutraceuticals, and proteins. Depending on the algae strain and culture conditions, the neutral lipid portion of algae contains different amounts of triacylglycerols and free fatty acids. Rapid and robust analytical techniques, such as fluorescence and gas chromatography mass spectrometry (GC/MS), were developed for characterizing, monitoring and optimizing the neutral lipid content during algae growth, harvesting, extraction, and conversion to jet fuel (JP-8). The future success of commercial scale algae-to-biofuel production will be dependent upon these and other improved analytical techniques and methods.



Elections, Blue Ridge Section, ACS, for 2015

The Nominating Committee has prepared the following slate of nominees for the election at the November meeting. All have agreed to serve if elected. Other nominees will be accepted from the floor at that meeting. If you would like to nominate someone, please check with that person about his or her willingness to serve. You may also self-nominate.

Elected positions

Chair: Tim Fuhrer, Radford University

Chair Elect: Jim Ciszewski

Secretary: OPEN

Councilor: Gary Hollis, Roanoke College

Alternate councilor Maria Puccio, Ferrum College

Treasurer: OPEN

Newsletter Editor: Nancy Richardson, Liberty University

Non-elected (appointed) positions

Awards Chair - Chris Hermann

Teacher Relations - Steve Smith

Website Coordinator - Dana Harris

Chemistry Olympiad/National Chemistry Week - Kim Lane

National Chemistry Week 2014 (Oct 19-25)

The theme of this year's National Chemistry Week is "The Sweet Side of Chemistry" The mission of NCW is to reach the public, particularly students, with positive messages about chemistry and to provide a means of life. The Virginia Blue Ridge section again is participating in the K-12 poetry contest. Participants are encouraged to illustrate their poems related to chemical applications of energy. Please send the entries to Kim Lane, Radford University, 801 East Main St., Radford, Virginia 24142 or bring them to the October meeting. The deadline for receipt of entries is 6:02 p.m., October 23.

Request for Nominations for 2015 Esselen Award for Chemistry in the Public Interest

The Esselen Award for Chemistry in the public interest is one of the most prestigious honors provided by the Northeastern Section of the American Chemical Society. The award annually recognizes a chemist whose scientific and technical work has contributed to the public well-being, and has thereby communicated positive values of the chemical profession. The Awardee should be a living resident of the United States or Canada at the time of nomination, and the significance of this work should have become apparent within the five years preceding nomination.

The Award was established in 1987 to honor the memory of Gustavus John Esselen, a distinguished member of the Northeastern Section. A brief history of the Award as well as a biography of Esselen can be accessed from this web page. The first awardees were F. Sherwood Rowland and Mario J. Molina, who subsequently received the Nobel Prize. As can be seen by the list of past recipients, any field of chemistry is valid as long as the scientific work has clearly contributed to the public well-being and its value to society has become apparent within the last five years.

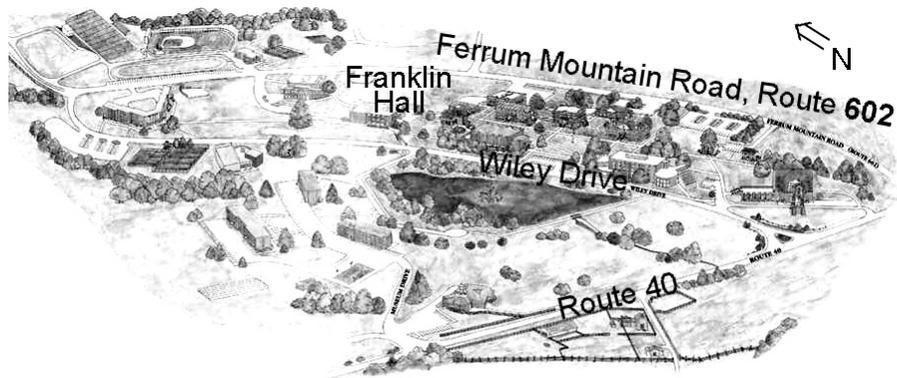
The award consists of a medal and a check for \$5,000. Travel expenses incidental to the conferring of this award will be reimbursed. The award ceremony will usually be held in Cambridge, Massachusetts at the April meeting of the Northeastern Section. The Awardee will deliver an address on the subject of the work for which the honor is being conferred, or for work in progress which is also directed to chemistry in the public interest.

The deadline for nominations is October 15, 2014. For further information, visit www.nesacs.org/awrds_esselen.html.

Directions to Franklin Hall, Ferrum College

From I-81 take I-581 South which turns into Route 220 South. Stay on Route 220 through Boones Mill to Rocky Mount. Take the second Rocky Mount exit to Route 40 West. Ferrum is 10 miles beyond Rocky Mount on Route 40 West. Pass Ferrum Mountain Road (Route 602) on your right, then take the next right into the college's main entrance. You will pass Garber Hall (with the greenhouse) on the right, then Stanley Library and Schoolfield Hall. The next building on the right is Franklin Hall, and parking is available below Franklin Hall across from the Fitness Center. The Blue Ridge Mountain Room is located on the upper level of Franklin Hall.

Map of Ferrum College



c/o Nancy Richardson , Editor
for VA Blue Ridge Section, American Chemical Soc.
Department of Biology and Chemistry
Liberty University
1971 University Blvd
Lynchburg, VA 24515

1B3005

Non-Prof. Org.
U.S. Postage
PAID
Lynchburg, VA 24502
Permit No. 493

Return Service Requested

The next meeting will be November 18th at Virginia Tech. The speaker will be announced in the next issue of the Blue Ridge Chemist.