

# The Blue Ridge Chemist

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Department of Chemistry and the College of Science at  
Virginia Tech Host the November Meeting

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

## VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

667<sup>th</sup> SECTION MEETING

Virginia Tech

Thursday, November 20, 2014

### PROGRAM:

5:30-6:00 Social Time, Hahn Hall South Atrium

6:00-7:00 Dinner, Hahn Hall South Atrium

7:00-8:00 Talk, Davidson Hall

The social time and dinner will take place in Hahn Hall South Atrium. The talk will take place in Davidson Hall. Amanda Morris will speaking. Her talk is titled "Perspectives on Next Generation Solar Energy Solutions".

Dinner will be tossed greens & dressings, fresh vegetables & sun-dried tomato vinaigrette, baked cod w/lemon pepper glaze, barbecued chicken (breast, leg, thigh), scalloped potatoes, country style green beans, honey glazed carrots, fresh baked dinner rolls w/butter, chocolate sheet cake, cheesecake w/fruit topping, iced tea, coffee, lemonade cost for the dinner is \$14.00, with students and retired ACS members being half price.

Reservations for the dinner must be made by THURSDAY, NOVEMBER 13, SIX DAYS before the meeting, by contacting Paul Deck at 540-231-3493, or by e-mail to [pdeck@vt.edu](mailto:pdeck@vt.edu).

*The Blue Ridge section is grateful for the financial support provided for this meeting by both the Department of Chemistry and the College of Science at Virginia Tech.*

**Dr. Amanda Morris, Assistant Professor**

**Department of Chemistry, Virginia Tech**



Amanda Morris is currently an Assistant Professor of Inorganic and Energy Chemistry at Virginia Tech University. Her research education conducted at Penn State University (B.S.), Johns Hopkins University (PhD), and Princeton University (Postdoctoral) has been focused on addressing critical environmental issues with fundamental science including water remediation, solar energy harvesting and storage, and carbon dioxide conversion. As her publication record shows, Morris is a classically trained photo-electrochemist with demonstrated success utilizing various techniques (cyclic voltammetry, spectroelectrochemistry, and pulsed-laser spectroscopy) to explore new frontiers in renewable energy. Her research group's current focus is on two aspects of solar energy conversion: solar energy storage through artificial photosynthesis and next generation solar cells. In 2012, she was awarded the Ralph Powe Junior Faculty Award in Physical Chemistry. In addition to her academic pursuits, Amanda has a

demonstrated record in service including the recruitment and retention of minority chemists. In recognition of this work, she was recently awarded the Alan F. Clifford Service Award. She currently serves as an American Chemical Society Expert in the area of Sustainable Energy and through this effort has worked to communicate science to the broader national audience with interviews on NPR, newspaper editorials, and press conferences.

### **Perspectives on Next Generation Solar Energy Solutions**

The finite supply and environmental impact of fossil fuels has led the scientific community to focus on the development of alternative fuel sources. The sun provides enough energy every 90 minutes to power human civilization for a whole year. However, two main challenges prevent us from using solar energy more effectively. The first challenge is to develop cheap and efficient materials to harvest solar energy, and the second challenge is to store solar energy so that we can use it when the sun is not shining. My research program at Virginia Tech aims to address these challenges through the development of new materials for use as solar cells, as well as artificial photosynthetic systems for solar energy storage. These projects involve many areas of both chemistry and physics, and my lecture is intended to introduce our work to a general audience of scientists -- and science students -- with diverse backgrounds and experiences.

### **Upcoming Meetings 2015**

|          |                                  |
|----------|----------------------------------|
| January  | Hollins University               |
| February | Roanoke College                  |
| March    | Roanoke Valley Governor's School |
| April    | Radford University               |

**In Memoriam Karen Brewer  
Professor of Chemistry, Virginia Tech**



It is with great sadness that the Chemistry Department notes the passing of Professor Karen Jenks Brewer. Karen joined the Virginia Tech faculty in the Fall of 1992 as an assistant professor after starting her career at Washington State University; she was promoted to the rank of full professor in 2005. Karen's research in the areas of photochemical production of hydrogen gas and the use of supramolecular complexes of ruthenium, platinum, and rhodium, for the potential treatment of cancers by photodynamic therapy earned her an international reputation as a researcher. Her 100+ peer reviewed research publications have garnered over 3,000 citations and her research pace was as active as ever at the time of her premature death on Friday, October 24th. She will be missed more than we can say. Read more on the life and accomplishments of Karen:

<http://www.chemistry.vt.edu/people/faculty/brewer-karen/karen-brewer-obituary.pdf> .

**Ballot, 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.

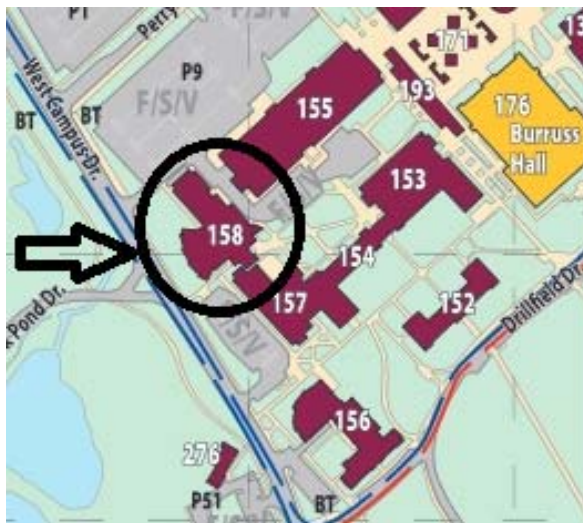
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|-------------------------|-------|--------------------------------------|
| Chair                   | _____ | Tim Fuhrer, Radford University       |
|                         | _____ | _____                                |
| Chair-elect             | _____ | James Ciszewski, DTI                 |
|                         | _____ | _____                                |
| Secretary               | _____ | OPEN                                 |
|                         | _____ | _____                                |
| Treasurer               | _____ | Chris Monceaux, Radford University   |
|                         | _____ | _____                                |
| Recorder                | _____ | Gary Hollis, Roanoke College         |
|                         | _____ | _____                                |
| Newsletter<br>Editor    | _____ | Nancy Richardson, Liberty University |
|                         | _____ | _____                                |
| Councilor               | _____ | Gary Hollis, Roanoke College         |
|                         | _____ | _____                                |
| Alternate-<br>Councilor | _____ | Maria Puccio, Ferrum College         |
|                         | _____ | _____                                |

Bring your ballot to the November meeting, or mail it to Maria Puccio, Ferrum College, GRB 309; 80 Wiley Dr. Ferrum, VA 24088.

## Directions to Virginia Tech

From I-81 follow US-460 West to Price's Fork Road and turn right, toward Downtown Blacksburg. Follow Price's Fork Road to West Campus Drive and turn right. The first three buildings on the left, about 1/4 mile down the hill, that are facing West Campus Drive are Hahn Hall North, Hahn Hall South, and Davidson Hall. Maps of campus and a parking map may be found at [www.maps.vt.edu](http://www.maps.vt.edu). Guests may park without a permit after 5 PM in C/G or F/S lots as long as they are not marked "24 hours." (Note that guests need a visitor permit to use angle parking along Drillfield Drive because those spaces are "24 hour" parking.) The closest useable parking lots (see the "Parking Map" at the above link) are the Hahn Lot F/S, Davidson Lot F/S, Wright House Lot F/S, and the large C/G lot between Price's Fork Road and Perry Street. Note that the familiar "Derring Lot" will be unavailable after November 07. The social hour and the dinner will be in Hahn Hall South and the presentation will be in Davidson Hall. The south-facing (Drillfield-side) entrances to Davidson Hall are closed.

## Map of Virginia Tech



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

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Return Service Requested

The January meeting will be held at Hollins University and the details will be announced in the next issue of the Blue Ridge Chemist.