

# The Blue Ridge Chemist

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



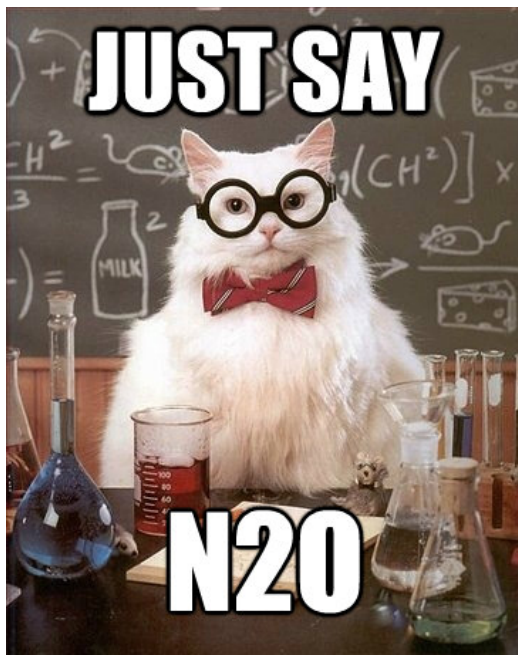
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March 18, 2015

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## Roanoke Valley Governor School Hosts March Meeting

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

## VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

**670<sup>th</sup> SECTION MEETING**  
**Roanoke Valley Governor School**  
**Wednesday, March 18, 2015**

### PROGRAM:

- 5:30-6:00 Social time, Lecture Hall, RVGS  
6:00-7:00 Dinner, Lecture Hall, RVGS  
7:00-8:00 Talk, Lecture Hall, RVGS

The social time, dinner, and presentation will all take place in the Lecture Hall at Roanoke Valley Governor's School.

Mr. Dana Harris and Dr. Benjamin Huddle will be speaking on "NO! Dr. Thomas Beddoes and the Discovery of Laughing Gas"

The dinner will consist of pork barbeque (in a tomato-based sauce), Brunswick stew, baked potato, tossed salad (choice of three dressings), and pie (choice of three). Beverages include iced tea & lemonade. The dinner is \$14, with students and retired members being half price.

Reservations for the dinner must be made by WEDNESDAY March 11, (7 DAYS BEFORE THE MEETING) by contacting Steve Smith at phone number (540) 853-2116, or by e-mail to [ssmith@rvgs.k12.va.us](mailto:ssmith@rvgs.k12.va.us), or by writing to Steve Smith, Roanoke Valley Governor's School, 2104 Grandin Road SW, Roanoke, VA 24015.

## Mr. Dana Harris and Dr. Benjamin Huddle Chemistry Department Roanoke College



Dana Harris received a B.S., 1982, from Radford University; M.Div., 1987, from Southern Baptist Theological Seminary; and M.S. chemistry, 1996, from Virginia Tech. He's worked for the Virginia Dept. of Forensic Science since 1999 and currently serves as adjunct chemistry instructor for Roanoke College. Dana's current chemistry research involves identification of novel drugs of abuse (designer drugs) by GC/MS, ATR-IR, and GC-IRD.

Dr. Ben Huddle was born in Ootacamund, India in 1941 and raised in Kyoto and Tokyo, Japan. He graduated from Lenoir-Rhyne College with a B.S. in Chemistry in 1963, and from the University of North Carolina with a Ph.D. in Physical Chemistry in 1968. He has taught at Roanoke College since 1968. He has also held



short-term positions at Hollins University and at Sang Ji University in Wonju, Korea. He had a sabbatical at the Western Regional Forensic Lab in Roanoke. His research has focused on x-ray crystallography, homology, and forensic chemistry laboratory experiments. He retired in 2012, and has taught one section of General Chemistry every term.

## NO! Dr. Thomas Beddoes and the Discovery of Laughing Gas

Dr. Thomas Beddoes was a British chemist and physician who lived from 1760 to 1808. While treating patients for tuberculosis he had a brilliant idea: since TB is a disease of the lungs, have the patient breathe the medicine into the lungs where it might be able to fight the disease. This talk will look at the life and times of this remarkable scientist and the people he recruited to help him with his project. An unanticipated outcome of Beddoes' work at the Pneumatic Institute was the discovery of laughing gas, nitrous oxide,  $N_2O$ .



Satirical cartoon by James Gillray showing a Royal Institution lecture on pneumatics with Davy holding the bellows and Count Rumford looking on at extreme right. Dr Garnett is the lecturer holding the victim's nose. Wikipedia on Benjamin Thompson.



Detail from a satirical print from 1830 depicting Humphry Davy administering a dose of Laughing Gas to a woman while Count Rumford looks on (cropped out of the picture above), above the caption “Prescription for Scolding Wives” – Source. - See more at: <http://publicdomainreview.org/>

**In case you were wondering...**

The Blue Ridge Section Committees and Chairs:

- Awards – Chris Hermann
- Budget and Finance – Chris Monceaux
- Chemistry Olympiad – Kim Lane
- Educational – Steve Smith
- Newsletter – Nancy Richardson
- Nominations – Ben Huddle
- National Chemistry Week Coordinator – Tim Fuhrer

As a part of the April 8, 2015 meeting at Radford University, the Virginia Blue Ridge Section of the American Chemical Society is sponsoring the twenty-first Annual Undergraduate/High School Poster Session. Note that poster boards will be provided.

If you have a student or students, who will be participating, submit the following information by email to Chris Hermann (chermann@radford.edu) by April 2, 2015. **This is a firm deadline. No poster submissions will be accepted after this time.** All students and faculty will get email confirmation. If you did not get an email reply, then your submission was not received and you cannot present.

Name of Project \_\_\_\_\_

Name(s) of Student(s): \_\_\_\_\_

Affiliation (name of high school, college, or university): \_\_\_\_\_

Class of Student(s) (freshman, sophomore, junior, senior): \_\_\_\_\_

Student(s) email address: \_\_\_\_\_

Advisor's Name, Address, Telephone Number, and email address: \_\_\_\_\_

48" by 48" poster board with tripod on table or just table will be provided. Please specify what you need.

\_\_\_\_\_ poster board with tripod on table

\_\_\_\_\_ table needed

## Directions to the Roanoke Valley Governor's School

The Governor's School is located a little south of the corner of Grandin Road and Brandon Avenue. (Brandon Avenue is the continuation of Apperson Drive and Lee Highway.)

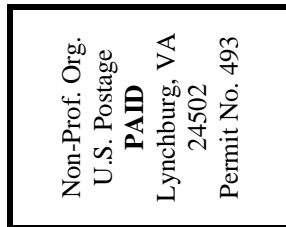
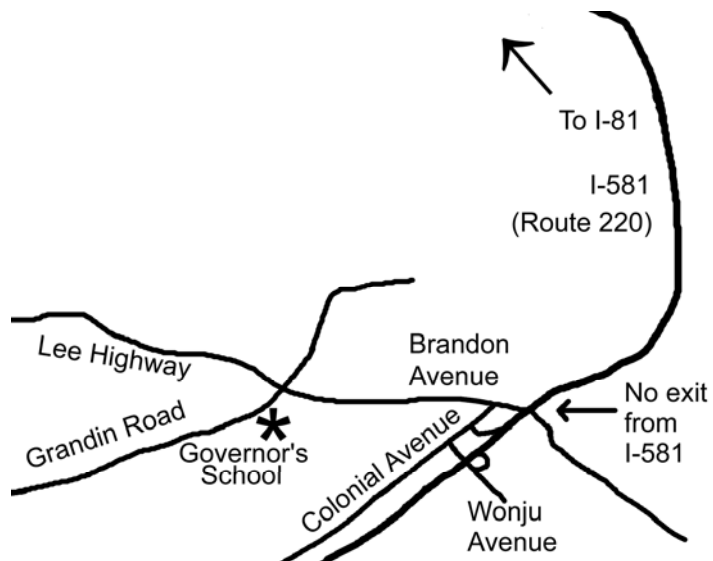
Driving south on I 581 (220), take the exit for Colonial Avenue. At the end of the exit ramp, turn right onto Colonial Avenue; continue below.

Driving north on I 581, take the second Wonju Street exit. Turn right at the end of the exit ramp onto Wonju Street. At the light, turn right onto Colonial Avenue and continue below.

Stay in the left lane on Colonial. Turn left at the light onto Brandon Rd. At the intersection of Brandon with Grandin Road, turn left, and shortly turn left again into the campuses of Patrick Henry High School and the Roanoke Valley Governor's School. After entering these campuses, the building ahead and a little to the right is the Governor's School.

Please call (540) 853-2116 for directions to the meeting, if they are not obvious.

## Map to the Roanoke Valley Governor's School



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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

Return Service Requested

The next meeting will be April 8, 2015 at Radford University. Details will appear in the next issue of the Blue Ridge Chemist.