

# The Blue Ridge Chemist

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



## VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

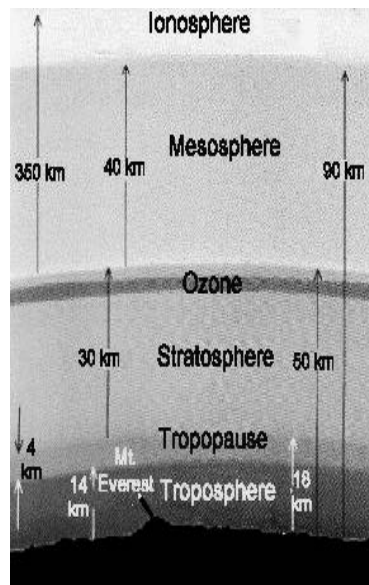
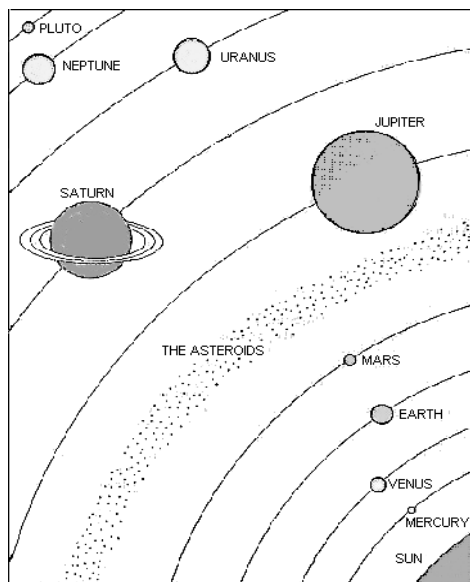
### 621<sup>st</sup> SECTION MEETING Hosted by Roanoke Valley Governor's School

Tuesday, January 20, 2009

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No. 1



<http://www.hq.nasa.gov/office/pao/History/conghand/fig1.gif>

[http://starryskies.com/solar\\_system/Earth/atmosphere.jpg](http://starryskies.com/solar_system/Earth/atmosphere.jpg)

### Roanoke Valley Governor's School Hosts January Meeting

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

#### PROGRAM:

5:30-6:00	Social Time
6:00-7:00	Dinner
7:00-8:00	Meeting

The social time, dinner, and talk will take place at the Roanoke Valley Governor's School. The speaker will be Yorke Rhodes, talking on "Planetary Chemistry: Differences in the Solar System Atmospheres".

The dinner will consist of beef tips, chicken oregantato, rice pilaf, Grecian beans, salad, a variety of desserts, and tea and coffee. A vegetarian eggplant option is available when requested with the reservation. Cost for the dinner is \$14.00, with students and retired ACS members being half price.

Reservations for the dinner must be made by TUESDAY, JANUARY 13, (7 DAYS BEFORE THE MEETING) by contacting Gwen Sibert at (540) 853-2116, or by e-mail to [gsibert@RVGS.k12.va.us](mailto:gsibert@RVGS.k12.va.us), or by writing to Gwen Sibert, Roanoke Valley Governor's School, 2104 Grandin Road SW, Roanoke, VA 24015.

**Dr. Yorke E. Rhodes**  
**New York University**

Yorke Rhodes received a B. S. in soil chemistry from the University of Delaware in 1957, as Senior of the Year in the College, and then earned an M.S. in organic chemistry in 1959 with William A. Mosher and Darrel Lynch. After completing his Ph.D. at the University of Illinois in 1964 with Prof. James C. Martin, he was a National Institutes of Health Postdoctoral Fellow with Kenneth B. Wiberg at Yale University. He joined the faculty of New York University at the University Heights campus in 1965 and developed research areas in SO<sub>2</sub> solvent chemistry, electrocyclic reactions, small ring chemistry, and carbocations, especially neighboring group cyclopropane-assisted cation rearrangements. He moved to the Washington Square campus in 1973 after a sabbatical leave with Horst Prinzbach at the Universitat Freiburg in West Germany. Work at the Square continued in carbocations, led to alkyl group migratory aptitude studies and to synthetic studies in silyl ketene acetal chemistry for synthesis of quaternary neopentyls. He was a State Department exchange visitor to Prague, Czechoslovakia, and Zagreb, Yugoslavia, in 1977 and was also Gastprofessor with Ivar Ugi at the Technische Universitat Munchen (TUM) in 1977, followed by a stay in 1978 as Alexander von Humboldt U.S. Senior Scientist Awardee at the TUM with Ugi. Nasa/IEEE Summer Fellowships were held at the Jet Propulsion Laboratories at Cal Tech in Pasadena with Wes Huntress in 1980 and 1981 (astrochemistry). In 1987, he was professor associe at the Centre d'Astrophysique, Universite de Grenoble, France, with Alain Omont (astro-polycyclic aromatic hydrocarbon chemistry). Rhodes was awarded the Golden Dozen Award for Teaching Excellence in the College of Arts and Science in 1991, and again in 1996. Professor Rhodes is director of the Dual Degree Program in Science and Engineering at New York University and Stevens Institute of Technology, resides as Professor in a Residence in a University residence hall, and is very active in the New York Academy of Sciences and American Chemical Society local section activities,

sponsoring a variety of symposia, poster sessions and other activities for students. He was recently elected chair-elect for 1997 and chair of the ACS New York Section for 1998. As an ACS Councilor he is also a member of the Local Section Activities Committee and welcomes discussions about local sections. He has served on Department of Education review panels and is an educational consultant/evaluator for several undergraduate and high school research mentoring programs.

**Planetary Chemistry:  
Differences in the Solar System Atmospheres**

The layers of gases that envelop the planets in our solar system contain a wide variety of chemical elements and compounds. Life on earth exists because of our abundant supply of oxygen (along with the protective layer of ozone and the heat-trapping effects of carbon dioxide and other greenhouse gases ). If we look at the atmospheres of other planets, we find hydrogen, helium, argon, nitrogen, krypton, sodium, methane, ammonia, carbon monoxide, nitric oxide, sulfur dioxide, formaldehyde, and many other substances. There are similarities in the atmospheres of the terrestrial planets (Mercury, Venus, Earth, and Mars) and between those of the four gas giants (Jupiter, Saturn, Uranus, and Neptune). This presentation will explore the characteristics of each of the planets in our solar system.

## **Congratulations to the New VBRS Officers**

Chair: Bill Lokar  
Lynchburg College

Chair-Elect: Dwight Williams  
Lynchburg College

Secretary: Wraegan Williams  
National Academy of Sciences

Treasurer: Vernon Miller  
Roanoke College

Recorder: Gary Hollis  
Roanoke College

Newsletter Editor: Vernon Miller  
Roanoke College

Councilor: Ben Huddle  
Roanoke College

Alternate Councilor: Gwen Sibert  
Roanoke Valley Governor's School

## **ACS Careers Industry Forum: Monthly Teleconferences featuring Luminaries in the Chemical Sciences**

Date and Time of Next Forum: Thursday, January 9, 2009, 2-3 p.m. ET

Speaker: Dr. Thomas H. Lane, President-Elect of ACS, Director, Global Science and Technology Outreach and Senior Research Scientist, Dow Corning Corporation.

Topic: "Mastering the Necessary Skills for the Present and the Future"

Take this personal opportunity to listen to the newly elected President of ACS discussing skills you will need now and in the future to launch your career to new heights. Sign up to participate. For downloads or transcripts of past forums please click on the ACS Careers Industry Forum tab located at the top of the ACS Careers Blog. This is a free service via conference call. We want to hear from you. Please post comments on our blog at <http://www.acs.org/careers>.

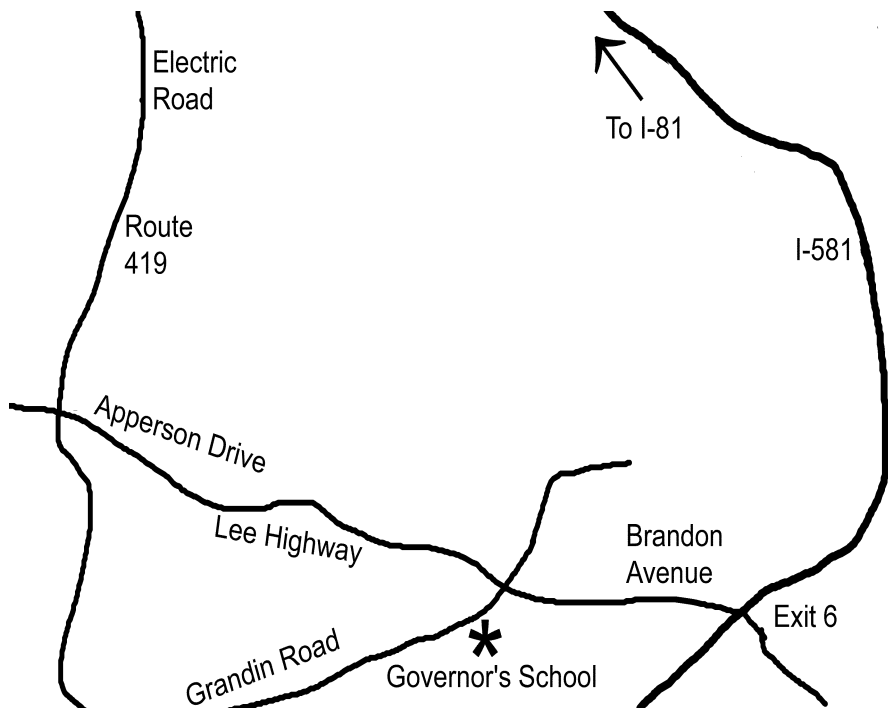
## **American Chemical Society Scholars Program**

The American Chemical Society Scholars Program is accepting applications for the 2009-2010 academic year. Now in its 14<sup>th</sup> year, the program has supported over 1990 students during their undergraduate studies in the chemical sciences. For more information and to access the on-line application form, go to [www.acs.org/scholars](http://www.acs.org/scholars), call toll-free 800-227-5558, ext. 6250; e-mail [scholars@acs.org](mailto:scholars@acs.org); or write to the American Chemical Society Scholars Program, 1155 16th Street, NW, Washington, DC 20036. The deadline is March 1, 2009.

## 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.) When coming by interstate get off of I-581 at exit 6, which is the exit for US 11 and for Colonial Avenue. Follow US 11, which shortly goes onto Brandon Avenue. 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.

### Map to the Roanoke Valley Governor's School



Non-Prof. Org.  
U.S. Postage  
**PAID**  
Salem, VA 24153  
Permit No. 31

Vernon Miller, Editor  
VA Blue Ridge Section, American Chemical Soc.  
Chemistry Dept., Roanoke College  
Salem, VA 24153-3789

The next Blue Ridge Section meeting will be Tuesday, February 17, at Roanoke College. The contact person is Ben Huddle. The speaker will be Howard Peters, talking on "Chocolate - Food of the Gods".