

# The Blue Ridge Chemist

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



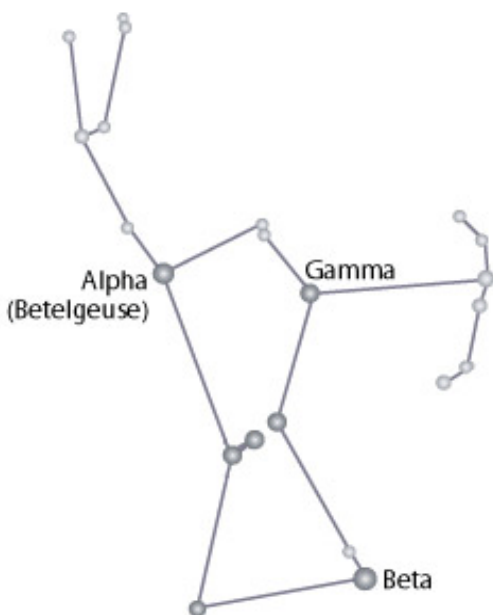
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**Orion**

(NASA/CXC/SAO)

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**Executive Committee hosts May Meeting**

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

## VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

### 633<sup>rd</sup> SECTION MEETING

Hosted by Executive Committee

Thursday, May 20, 2010

#### PROGRAM:

**5:30-7:00 Dinner, Corned Beef & Co.**

**7:00-8:00 Visit Science Museum**

**8:00-8:30 Attend Planetarium Show**

Dinner will be at Corned Beef & Co., 107 S Jefferson Street, in downtown Roanoke. Individuals will order from the menu and take care of the check themselves. The menu and more information on this restaurant can be found at <http://www.cornedbeefandco.com/>.

The program will be visiting the Science Museum for the first hour and then attend the planetarium show "Visions of a Spring Night". This is a closed event for VBRS members and their families, with the cost being picked up by the section.

Notification of attendance would be greatly appreciated so that Corned Beef & Co. can be alerted to the number coming. Please make such notifications by 12:00 NOON, WEDNESDAY, MAY 19 to Gary Hollis at [hollis@roanoke.edu](mailto:hollis@roanoke.edu) or to Gary Hollis, Roanoke College, Salem, VA 24153, or phone him at 540-375-2437.

Even if you do not send in a notification, please feel free to attend.

#### CeRMACS-2010

The 42th Central Regional Meeting of the ACS will be held June 16-19 in Dayton Ohio, about a six hour drive time from here. For more information go to [CeRMACS2010.org](http://CeRMACS2010.org). (added to newsletter 5/13/10)

## The Science Museum of Western Virginia

The Science Museum of Western Virginia is the oldest science museum in Virginia, being founded in 1970 by a group of teachers and community volunteers. The Museum moved into its current home on two floors of a multi-cultural building in the heart of downtown Roanoke called Center in the Square in 1983. That move led to the fabrication of all new galleries and transformed the Museum from a small "home-grown" collecting Museum to a larger institution with a planetarium and a wide selection of interactive exhibits. The Museum is now among the fewer than 5% of museums in the U.S. nationally accredited by the American Association of Museums. The mission of the museum is to make science and technology accessible to all people by being an outstanding regional institution that ignites and nurtures lifelong learning. One way it pursues this mission is to provide hands-on, interactive exhibits, a principle of inquiry-based learning.

The exhibits include biG Mouth, Living River, Body Tech, Geology Gallery, Earth Treasurers, Light & Sound Arcade, and Weather Gallery. In the planetarium show, "Visions of a Spring Night", the brighter stars and constellations found in the spring night sky will be explored. The Big Dipper, the Little Dipper, Leo the Lion, Virgo the goddess of Spring, Hercules and more will be pointed out, while the mythology behind each will be presented.

Parking is available in a parking garage which adjoins Center in the Square. Parking is \$1 per half hour with a \$6 maximum. Other, less expensive, parking lots include one attended and several unattended lots located within one to two blocks of the Museum. Free on-street parking may be limited to one hour.

For more information on the Science Museum and parking, go to their Web site at <http://smwv.org/>.

Adapted from their Web page

## Our "ET" - Ecosystem and Thermodynamics

The Laws of Thermodynamics are globally applicable. The First Law (Conservation of Energy) states that energy can neither be created nor destroyed, it only changes state.

Whether we look at global economics - where there are finite amounts of workers, products, funds, resources, and demands, or the global ecosystem - where there are finite organisms, compounds, elements, and energy, the interdependent interactions neither create nor destroy the total amount of mass or energy. When these interdependent interactions are disrupted by introducing creative means of re-distributing wealth and risk in economics, or by heavily taxing specific parts of our ecosystem, the elasticity is pushed to the extremes. Whereas political economists can "artificially" stimulate the economy, there is no such "fix" that will truly repair our Global Ecosystem. Just as we are experiencing the global economic pains, we are affecting our global ecosystem to the point where it is beginning to pull back. Climate Change is only one.

We have the ability to effect change that minimizes environmental impact. It cannot totally come from leadership, for what good is a sports coach without a loyal, willing and dedicated group of players? It must continuously come from you and me, every single day. What we all do, every day, affects the Global Ecosystem that we all share on this Planet Spaceship Earth.

With the global-slow-down in the economy, the leading industrial nations have the opportunity to lead in changing course in the large impact we have on our Planet Spaceship EARTH. It all begins at the local, or "ME," level. "What and How can I least impact my piece of the Global Ecosystem 'to the greatest of my ability.'"

Our "ET", or the direct relationship of our Global Ecosystem and the First Law of Thermodynamics is fundamental. Taking the First Law of Thermodynamics and applying it directly to our efforts to clean up our environment is universal in minimizing our eco-impact.

Chris Karageorge  
Public Relations Committee Chair

### Regional Science Fair Winners of the VBRS Award

Each year the Virginia Blue Ridge Sections awards a \$50 US Savings Bond to the project selected as the best overall chemistry project at the regional science fairs in its boundaries. This year's winners are listed below.

Kathryn Butler (Cave Spring High School) was the winner of the VBRS award at the Western Virginia Regional Science Fair. Her project was titled "Cooling Rate Not Affected by Surface Area of Ice". Her sponsor was Sandra Flora.

Rebekah Webster (Pulaski County High School/Southwest Virginia Governor's School) was the winner of the VBRS award at the Blue Ridge Highlands Regional Science Fair. Her project was titled "Changes in Intestinal Microflora in Mice due to Diet". Her sponsor was Eric Hogan. Miss Webster also won the award last year.

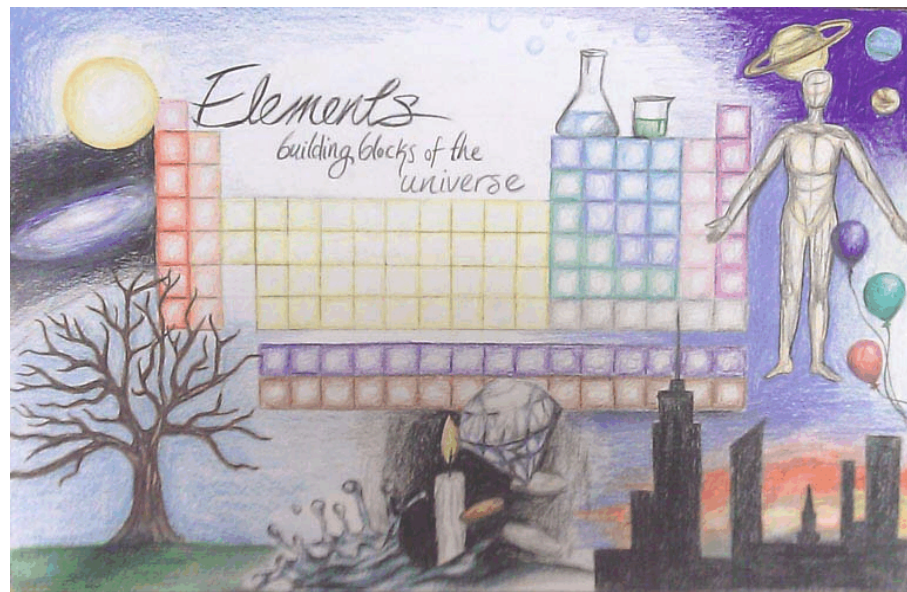
The Virginia Blue Ridge Section of the American Chemical Society would like to congratulate these winners, and all the other students who participated in the various local and regional Science Fairs. We need to encourage more students like these who are interested in science.

### National Chemistry Week Poster Winner

The Virginia Blue Ridge Section also sponsors a poster contest for students in grade K-12 during National Chemistry Week. This last November's theme was "Chemistry—It's Elemental!". The winner of this award (a \$50 US Savings Bond) was Brittany Fan from Blacksburg High School, who also won this contest last year. Her teacher is Katie Davis. Her poster is shown below.

The Virginia Blue Ridge Section of the American Chemical Society would like to congratulate Miss Fan and all the other students who submitted posters. We need to encourage more students like these who are interested in science and have a knack for art.

### National Chemistry Week Winning Poster Created by Brittany Fan



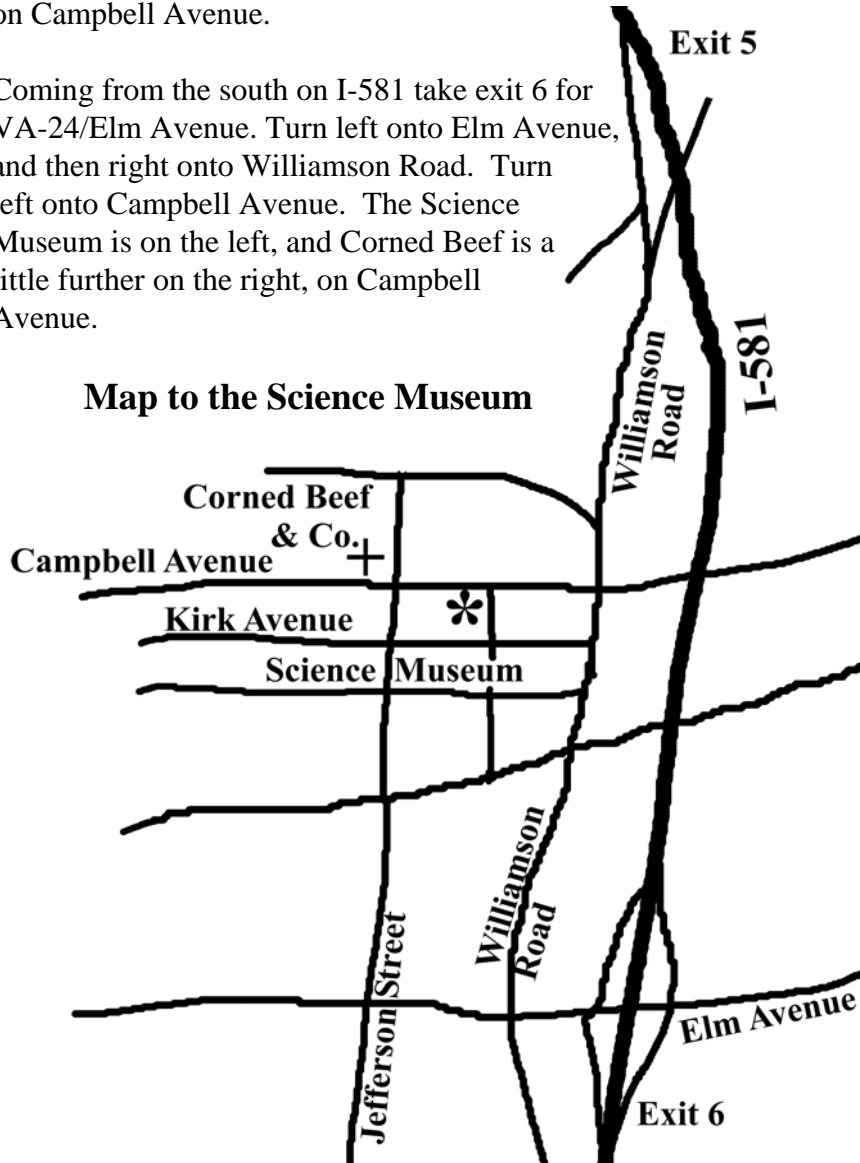
For color version visit the VBRS Web site at [www.acs-vbrs.org](http://www.acs-vbrs.org)

## Directions for the Science Museum

Coming from the north on I-581 take exit 5 for US-11 S toward U.S. 220 Business S/Downtown. Take a slight right onto Williamson Road, and then turn right onto Campbell Avenue. The Science Museum is on the left, and Corned Beef is a little further on the right, on Campbell Avenue.

Coming from the south on I-581 take exit 6 for VA-24/Elm Avenue. Turn left onto Elm Avenue, and then right onto Williamson Road. Turn left onto Campbell Avenue. The Science Museum is on the left, and Corned Beef is a little further on the right, on Campbell Avenue.

### Map to the Science Museum



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Salem, VA 24153  
Permit No. 31

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Return Service Requested

Look for the details of the September meeting in the next BRC.