

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 LVIII September and October 2005 No. 6

VMI Hosts September Meeting on Thursday, September 29

**Duane Blackburn, FBI's Agency Representative
to the National Science & Technology Council
(NSTC)**

**"Biometrics - Government Activities and
Growth Opportunities"**

**VBRS Executive Committee Hosts October
Meeting on Monday, October 3**

Bill Carroll, the 2005 President of ACS

"The Chemistry Enterprise: the Next 10 Years"

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

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

594th SECTION MEETING

**Hosted by Virginia Military Institute,
and is a Joint Meeting with IEEE**

Thursday, September 29, 2005

PROGRAM:

6:00-7:00 Social Time, Moody Hall
7:00-8:00 Dinner, Moody Hall
8:00-9:00 Talk, Moody Hall

The social time, dinner, and talk will take place in Moody Hall at VMI. Duane Blackburn will be speaking on "Biometrics - Government Activities and Growth Opportunities".

Dinner will be buffet style with salad, chicken, beef, rice, mixed vegetables, rolls, and dessert bar. There will be no special vegetarian option. Cost for the dinner is \$14.00, with students and retired ACS members being half price. Note that this is an increase from the past.

Reservations for the dinner must be made by WEDNESDAY, SEPTEMBER 21, EIGHT DAYS before the meeting, by contacting Elizabeth Cox at 540-458-8163 or by email to coxe@wlu.edu, or regular mailing to Department of Chemistry, Washington and Lee University, Lexington, Va 24450.

**Be sure your reservation clearly states that it is for the
September meeting at VMI.**

Duane Blackburn
Federal Bureau of Investigation's Agency Representative
to the National Science & Technology Council (NSTC).

In his title role, Duane Blackburn splits his time between the FBI's Operational Technology Division¹, Video Surveillance Unit, and the White House's Office of Science & Technology Policy² (OSTP), Homeland and National Security. Mr. Blackburn previously worked at the DoD Counterdrug Technology Development Program Office, and was detailed to the DOJ's National Institute of Justice, where he managed RDT&E programs in technology areas such as biometrics, data analysis, interdiction technologies, drug detection and screening, tagging and tracking, communications and GIS systems. He is most known for his work in biometrics technologies.

Biometrics, automated methods of recognizing an individual based on measurable biological (anatomical and physiological) and behavioral characteristics, has never been more important to our nation's security and prosperity as they are today. Through OSTP, Mr. Blackburn regularly advises White House personnel on biometric issues associated with major programs and policies, and coordinates U.S. Government biometric activities through his leadership of the NSTC's Subcommittee on Biometrics³. Mr. Blackburn performs similar advisory duties for other technology areas as needs arise. Mr. Blackburn's biometric activities continue at the FBI, where he co-sponsors and manages multiple RDT&E efforts in face and iris recognition. Mr. Blackburn also co-chairs the Justice Biometrics Cooperative, a collaboration-building working group on biometrics within the Department of Justice.

Mr. Blackburn holds B.S. and M.S. degrees in Electrical Engineering from Virginia Tech and was a finalist for a 2002 Service to America Medal, a national award program honoring the accomplishments of America's public servants.

¹ The mission of the FBI's Operational Technology Division is to ensure the operational availability of state-of-the-art technologies, support and expertise necessary to enable and enhance the FBI's investigative efforts. <http://www.fbi.gov>

² OSTP's primary mission is to provide scientific and technical expertise to the President and senior officials within the White House. OSTP also leads, through the NSTC, an interagency effort to develop and to implement sound science and technology policies and budgets and to work with the private sector, state and local governments, the science and higher education communities, and other nations toward this end. <http://www.ostp.gov>

³ <http://www.biometriccatalog.org/NSTCSubcommittee>

"Biometrics - Government Activities
and Growth Opportunities"

"Strategies for finding terrorists can be complicated by their efforts to disguise themselves among innocent civilians. As a counter to this, the implementation of biometric technologies (identifying an individual based on physical characteristics, such as fingerprinting, facial recognition, iris scans, etc.) shows great promise in improving the accuracy, consistency, and efficiency of identification devices"
--Science and Technology: A Foundation for Homeland Security (April 2005)

This talk will provide an overview of biometrics and related federal research activities, as well as discuss the need for new researchers in this important field.

Directions to Virginia Military Institute

Take Exit 188B off I-81 onto Route 60 west, continuing into Lexington. At the 6th light turn right on Main Street and immediately move to the left lane. Go three blocks and make a hard left turn onto Jefferson Street. Immediately move into the right lane and turn right onto Letcher Avenue. Proceed to the VMI Parade Ground. Moody Hall is on left corner. Parking is available in front of the building. The social time, dinner, and talk are in the Activities Room of Moody Hall.

Map of Lexington

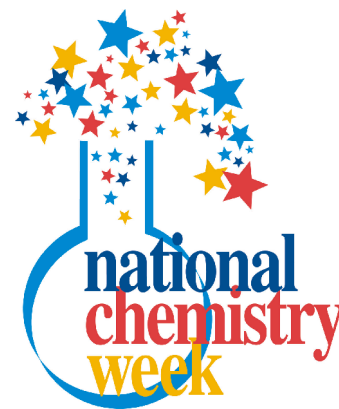


Fun-Filled Opportunities are Available Celebrating



National Chemistry Week: "The Joy of Toys"

The section needs your help during National Chemistry Week, October 16-22, 2005! Capitalizing on this year's theme, "The Joy of Toys," we will host a "Wizard Science Day" from 11 AM to 2 PM on Saturday, October 22 at the Science Museum of Western Virginia. Many hands-on activities are being planned, including casting spells that make objects glow, grow, shrink and sink. If you are interested in finding out more or in volunteering yourself, your students, or your student affiliate chapter, please contact Elizabeth Cox, National Chemistry Week Coordinator at coxe@wlu.edu or 540-462-6030 or Louise Jargowsky at 540-992-5495. You can also check out the announcement on the Museum's website at <http://www.smwv.org>.



ACS Sponsored High School Chemistry Clubs

This fall, the ACS Education Division will initiate a pilot program for affiliated high school chemistry clubs across the U.S. Plans for contacting interested teachers, producing a handbook, identifying interesting and appropriate club activities, and establishing contacts with membership programs are underway. Staff also plans to set up a Web page for posting resources and encouraging communication among clubs. As funds permit, logo-bearing banners and pins will add to the package.

Supporting and establishing ACS high school chemistry clubs is an attractive idea that has been under discussion for several years. A survey sent out to high school teacher members—several of whom already sponsor clubs—confirmed support for such a program. A self-selected group of these teachers is already on board for the 2005-06 pilot program and will receive assistance from the Office of High School Education.

In order to be an ACS high school chemistry club advisor, the teacher must be a member of the Society, and/or a national, divisional, or local section affiliate. Local ACS sections are encouraged to be pro-active in this pilot phase. Any section wishing to initiate a partnership with an area high school to establish an affiliated club is welcome to move forward. Please email staff at education@acs.org with questions, plans and/or suggestions.

Initial support for the clubs may include the following:

- * Detailed start-up materials for establishing a club
- * A sample constitution and bylaws
- * A charter application
- * A collection of safety-reviewed activities (Some of these will support various established ACS programs like National Chemistry Week, Chemagination, Kids & Chemistry, U.S. National Chemistry Olympiad, Chemists Celebrate Earth Day, and Green Chemistry.)
- * Career information
- * Information on ACS Accredited Colleges and Universities
- * A Website
- * Logo imprinted items (pins, banners, perhaps t-shirts and other items)
- * Contact information for Local Sections and Student Affiliate groups
- * Community Service Project ideas

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

595th SECTION MEETING

Hosted by the Executive Committee

Monday, October 3, 2005

PROGRAM:

- 5:00-6:00 Social Time, Roanoke Higher Education Center, 2nd floor lobby area
- 6:00-7:00 Talk, Roanoke Higher Education Center, Room 212
- 7:15-? Meal, Corned Beef & Co. restaurant

The social time and talk will take place in the Roanoke Higher Education Center. Dr. William F. Carroll, Jr. will be speaking on "The Chemistry Enterprise: the Next 10 Years".

Dinner will be at the Corned Beef & Co., which has an extensive menu. For groups larger than 25 persons, a selected menu will be available, which will include sandwich, salad, pasta and vegetarian options. Each individual will be responsible for the cost of his or her own meal.

Reservations for the social time and dinner must be made by **MONDAY, SEPTEMBER 26, SEVEN DAYS** before the meeting, by contacting Elizabeth Cox at 540-458-8163 or by email to coxe@wlu.edu, or regular mailing to Department of Chemistry, Washington and Lee University, Lexington, Va 24450.

Be sure your reservation clearly states that it is for the October meeting at Roanoke Higher Education Center.

Dr. William F. Carroll, Jr.

Bill Carroll holds a BA in Chemistry and Physics from DePauw University, Greencastle, IN, an MS from Tulane University in New Orleans, and a PhD. from Indiana University, Bloomington, IN, both in Organic Chemistry. Bill started his industry career in 1978 and after a year with Rohm and Haas Company, Bristol, PA, moved to what is now known as Occidental Chemical Corporation. He is currently Vice President, Chlorovinyl Issues for OxyChem and works on public policy issues and communications related to



chlorine and PVC. He is also Adjunct Professor of Chemistry at Indiana University, Bloomington, Indiana and teaches polymer chemistry there. Bill is President (2005) of the American Chemical Society. He is a Fellow of the Royal Society of Chemistry, a member of the US National Committee for the International Union of Pure and Applied Chemistry, and a member of the Science Advisory Board for DePauw University.

He has been an active member of and chaired various committees for a number of chemistry, plastics, fire protection and recycling organizations. He has served on expert groups commissioned by the United Nations Environmental Program, and the States of Florida and Oregon. He received the Vinyl Institute's Roy T. Gottesman Leadership Award for lifetime achievement in 2000.

He holds two patents, and has over forty publications in the fields of organic electrochemistry, polymer chemistry, combustion chemistry and physics, incineration, plastics recycling and chlorine issues.

"The Chemistry Enterprise: the next 10 years"

The Chemistry Enterprise - for industry, education and government - in the US is changing. For industry, energy and raw material supply is becoming a key factor for the commodity manufacturers. Chemical markets in developing countries are growing; specialties are becoming commoditized with expanding capacity. Global companies serve global markets; services are available globally even to small companies. In education, there are questions about the global mobility of students for both undergraduate and graduate education. The ability to hire and retain professors is changing, as is the approach to tenure and full-time positions. Governments are reconsidering taxation and other incentives to maintain and attract chemical businesses. Intellectual property protection is spotty.

Looking forward to the next ten years, the chemistry enterprise the world over is poised for rebalancing. This presentation provides a short summary issues impacting the US and its position in global chemistry, and our program wherein American Chemical Society members will envision the next ten years.

Directions to Corned Beef & Company from the Roanoke Higher Education Center.

To walk, take the covered walking bridge over the train tracks to Wachovia Tower. Turn right on Salem Avenue. Corned Beef & Co. is on the corner of Salem Ave. and Jefferson St. To drive, go SOUTH on N Jefferson St. toward Shenandoah Ave NW; turn LEFT onto Shenandoah Ave NE.; turn RIGHT onto Williamson Rd/US-11; turn RIGHT onto Salem Ave SE/US-11; end at 107 S Jefferson St. Look for parking along the street or use the Allright Parking lot directly across from the restaurant.

Directions to the Roanoke Higher Education Center

The Roanoke Higher Education Center is housed in the renovated Norfolk & Western Railroad building at 108 North Jefferson Street and is located across the street from the Hotel Roanoke.

From 581 South, take Exit 5. Turn right onto Wells Ave. Proceed past the Hotel Roanoke. Cross Jefferson St. Take next left into Jordan Alley to Parking Lot 1 (see numbered circle on map).

From 220/581 North, take Exit 4E, immediately turn right onto Williamson Road. Proceed to Wells Ave. and turn right onto Wells. Turn left onto Jordan Alley to Parking Lot 1. For additional information, go to <http://www.education.edu/directions-parking.html>.

The entrance for persons with handicaps/disabilities is located in front of the West Entrance (Main Entrance) on Jordan Alley. There are designated handicap/disability parking spaces in the parking lot adjacent to the entrance.

Map of Roanoke City near Roanoke Higher Ed Center



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THE BLUE RIDGE CHEMIST
Vern Miller, Editor
Roanoke College
Salem, VA 24153

The November Virginia Blue Ridge Section meeting will be Thursday, November 17, at Ferrum College. The speaker will be John J. Meister speaking on "Your Garbage = My Reactants: Trash Recycling". The contact person is Jason Powell.