

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 LIX

September 2006

No. 6

History Quiz

Submit your answers to this month's questions by September 15, 2006 to Adele Addington (Addington@roanoke.edu).

1. Name all 5 Gene Wise Award winners.

2. Where is SERMACs being hosted this year?

**Executive Committee Hosts the September Meeting
Joint Meeting with IEEE and AIChE**

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

VIRGINIA BLUE RIDGE SECTION AMERICAN CHEMICAL SOCIETY

602nd SECTION MEETING Hosted by the Executive Committee Joint Meeting with IEEE and AIChE

Thursday, September 21, 2006

PROGRAM:

6:30-7:00 Social Time, Days Inn, cash bar
7:00-8:00 Dinner, Days Inn
8:00-9:00 Talk, Days Inn

The social time, dinner, and talk will take place at the Days Inn in Roanoke (formerly the Clarion near the airport). Dr. John McKenna of ETS in Roanoke will be speaking on "A New Tool for Improving Control of Fine Particle (PM 2.5) Emissions".

Dinner will be salad, vegetable lasagna, California blend vegetables, oven roasted potatoes, German chocolate cake, rolls, and drinks of coffee, decaf, and water. Cost for the dinner is \$14.00, with students and retired ACS members being half price.

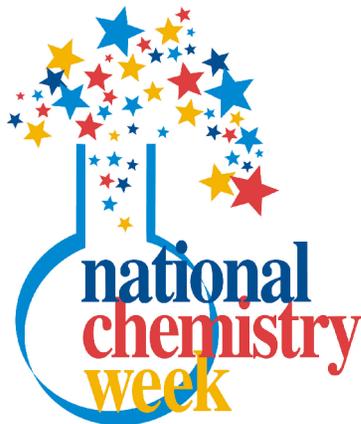
Reservations for the dinner must be made by FRIDAY, SEPTEMBER 15, SIX DAYS before the meeting, by phoning Adele Addington at 540-375-2364, or by e-mail to Addington@roanoke.edu, or by mail to Adele Addington, Department of Chemistry, Roanoke College, Salem, VA 24153.

Dr. John McKenna, ETS Inc.

John McKenna is the principal of ETS Inc. He is the author of numerous articles and a number of texts including the air pollution control section of *Perry's Chemical Engineering Handbook*. John is a chemical engineer (Manhattan College) with his entire career (40 plus years) spent in the field of pollution control with a special emphasis on baghouse technology. He designed, installed & operated the first baghouse on an industrial coal-fired boiler. He has provided environmental courses and training in various parts of the world including Kazakhstan, Armenia, Taiwan, Japan, Brazil and the Canary Islands.



Dr. McKenna authored the textbook *Fabric Filter - Baghouses I Theory, Design, and Selection* along with Dr. Jim Turner and currently is writing a text on fine particle measurement & control. He is a founder (1973) and principal of ETS Inc. ETS specializes in air pollution control equipment testing, trouble-shooting, training (online and in-person) & testimony (expert witness).



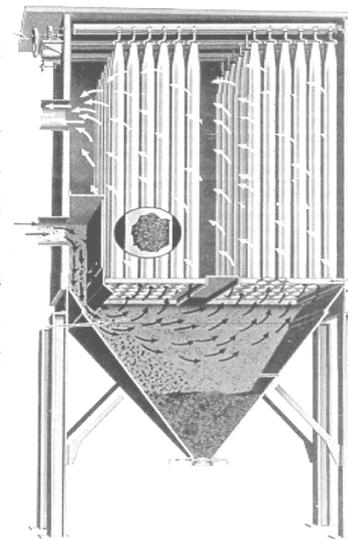
A New Tool for Improving Control of Fine Particle (PM 2.5) Emissions

For most of the Twentieth Century QA/QC programs for filter fabrics and baghouse bags have consisted primarily of specifying and testing fabric strength and permeability. The key parameter, filtration performance, lacked a standard method and therefore, was normally not part of most QA/QC programs.

In recent years, as part of EPA's Environmental Technology Verification (ETV) program, and in recognition of the impending PM 2.5 fine particle control legislation, a filtration test method and protocol was evolved from a European filtration testing device & procedure. Subsequently, an ASTM method was formalized based on this ETV Baghouse Filtration Products test. Currently an ISO method is being developed largely based on this same method.

The commercial implications of this test procedure being standardized are that current QA/QC programs are including the filtration performance test requirement. In the case of at least one DEQ code, baghouse operators are being allowed less frequent baghouse emissions testing if an ETV-verified product is employed.

In addition to describing the test method and providing test results, this presentation will also describe the employment of this new filtration test method in both QA/QC programs and the enforcement of baghouse emission requirements. It also will discuss the potential uses and benefits of the test method as a tool for improving baghouse performance.



Opportunity for Graduate Students:

The Graduate Education Advisory Board (GEAB) of the American Chemical Society has charged the ACS Younger Chemists Committee with the responsibility of selecting a Ph.D. graduate student for appointment to the GEAB. This three-year appointment will begin during the Spring 2007 ACS National Meeting in Chicago, Illinois. Currently, the YCC is soliciting nominations for this position from ACS committees, divisions, and local sections that may be aware of qualified and interested candidates.

The GEAB advises the ACS Office of Graduate Education (OGE) on all matters relevant to graduate education within the chemical sciences. Issues that the GEAB have identified as particularly important for the OGE to address include, but are not limited to, student-professor relationships, advisor-advisee responsibilities, the digital divide, degree requirements, and relations between businesses and graduate programs. For more information about ACS education-related activities and other issues relevant to younger chemists, please visit www.acs.org/education and www.acs.org/ycc.

Membership responsibilities on the GEAB will include attending two yearly meetings held on the Monday of each ACS National Meeting and working with other GEAB members between those meetings, typically via e-mail. Travel and hotel expenses will be covered by the ACS for attending the GEAB meetings.

If you wish to nominate a Ph.D. student(s) who may be interested in this unique opportunity to get involved with the ACS and to contribute to the advancement of graduate education in the chemical sciences, please send his/her name and contact information to Dustin Levy via e-mail at dlevy@nist.gov

Opportunity to Have Our Voices Heard

The ACS Office of Legislative and Government Affairs is seeking local section support and involvement in efforts to communicate to legislatures. This will result in helping the legislatures better understand the public policy concerns of chemists, chemical engineers, and allied professionals. The Virginia Blue Ridge section has hosted congressional representatives during previous local section meetings, and was identified by the ACS LGA office as a potential source of active participation in their programs.

If you are interested in chairing a local section committee in support of legislative communications and actions, please contact Adele Addington (Addington@roanoke.edu) for more information.

The Virginia Blue Ridge Section's 75th Anniversary: Our BIG BASH Our 75th Anniversary Big Bash

Mark your calendars now! Please join us on October 23, 2006 (yes-that is "Mole Day") for our celebration of 75 years of the Virginia Blue Ridge section of the American Chemical Society. The event will be held at the Hotel Roanoke, in the Shenandoah Room, with a social time beginning at 5:30, dinner at 6:30, followed by a presentation at 7:30. Our speaker and honored guest will be Dr. Ann Nalley, the current President of the American Chemical Society.

During our social hour, a cash bar will be available. Tables will have displays of materials important and relevant to the history of our section. Posters will be present highlighting the activities of our student affiliates at each school represented in the section.

Dinner will be a buffet, featuring sliced roast beef, chicken breast in champignon sauce, and pasta primavera. Costs are \$30 per person (\$15 for retired and student members).

The Virginia Blue Ridge Section's 75th Anniversary: Our BIG BASH History Snippet

In preparation for our historical celebration in October, we will be sharing a brief snippet of our section's history each month in the BRC. Additionally we will include two questions for you to answer. Submit your answers to each question to Adele Addington (Addington@roanoke.edu); a winner will be randomly selected from the correct entries received that month and awarded a free meal at an upcoming regular local section meeting!

The last 30 years have witnessed our section grow in terms of regional involvement and member recognition. We have twice hosted SERMACS, the Southeast Regional Meeting of the ACS. The first meeting was in October 1979, at the Hotel Roanoke. More than 800 ACS members and others attended this three-day event. Our second meeting was in October 1997, at the Marriott Hotel, Roanoke.

The Gene Wise award for meritorious service to both chemistry and society by a member of the section was instituted in 1988. This award was created in recognition of the service to which Gene Wise dedicated himself throughout his career. He served as a professor of chemistry at VMI for thirty-six years, five of those as the head of the department. He taught physical and industrial chemistry, as well as freshman chemistry. He was well known for his dedication to assist students throughout his career, both as a teacher and research mentor. Dr. Wise's service to his community was also exemplary. He served as chair of the Rockbridge Christmas Basket Program for more than 32 years, as chair of the Rockbridge chapter of the American Red Cross for 22 years, and the VMI efforts to support the United Way and American Cancer Society campaigns for 12 years. He worked with Boy Scouts, Rotary Club, and founded an affiliate organization, the Interact Club at the local high school. His efforts were recognized posthumously in 1986 with the Red Cross Clara Barton Award, the highest award given to volunteers, and in 1990 with the

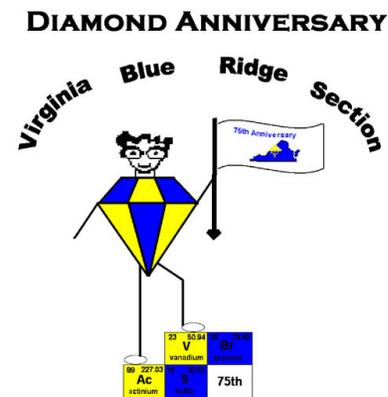
Paul Harris Fellow Award from the Rotary Foundation of Rotary International.

Dr. Wise served the Virginia Blue Ridge section of the American Chemical Society both as an officer in the early 1960's, and as a section Councilor for many years there after.

Since the inception of the award in 1988, five members of our section have been recognized for their contributions to the section, profession, and community. Each award winner delivered an address to the section at the April meeting of the year which he was selected.

75th Anniversary T-shirts

The executive committee was impressed with the logo design submitted by Lynchburg College. We decided to prepare a T-shirt to commemorate our 75th Anniversary. The T-shirt features Lynchburg College's submission on the back (see below), with a "75 in the mountains" in royal blue on the front left. Congratulations to the Lynchburg College SAACS group on their \$50 award. T-shirts are available (\$12 for S, M, L, or XL, and \$13 for XXL). Contact Adele Addington (Addington@roanoke.edu) if you would like to purchase one. I have a limited supply of each size. If demand warrants, I will place an additional order.

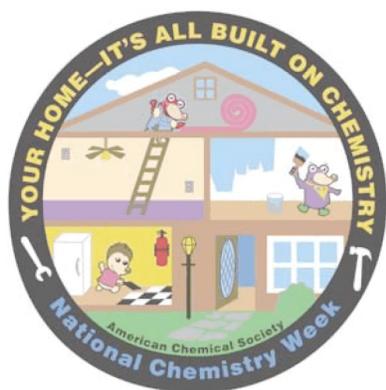


American Chemical Society

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Calling SAACS Chapters: 75th Anniversary Poster Display

Our student affiliates compose an integral part of the Virginia Blue Ridge section of the American Chemical Society. Your work helps us relay the message of the importance of chemistry to the broader community. In recognition of your efforts, we invite each SAACS chapter to prepare and present a poster highlighting your chapter's activities and achievements. This poster will be displayed in the lobby/social area during the Big Bash on October 23. For more information, contact your SAACS advisor or Adele Addington (Addington@roanoke.edu) .



Call for Volunteers

Come out and support chemistry in your local section! The Virginia Blue Ridge Section of the American Chemical Society is seeking groups and individuals to volunteer for National Chemistry Week activities throughout the section. National Chemistry Week runs October 22-28, 2006, and activities will run October 21-29, 2006. If you or your group is interested in volunteering, please contact Bill Lokar for more information. (lokar_w@lynchburg.edu or (434) 544-8631)

ConSOL, a Conference on the Teaching of Chemistry in Virginia Report and Recommendations

On June 23-24, 2006, more than thirty teachers joined with presenters from Virginia and other areas to consider ways to improve chemistry learning in Virginia, particularly in connection with the effect of the Standards of Learning (SOL) End of Course Chemistry Test and the Curriculum Framework. This report summarizes the results of that conference and, particularly, the recommendations of those in attendance for improvements in the way chemistry is taught and how students are evaluated.

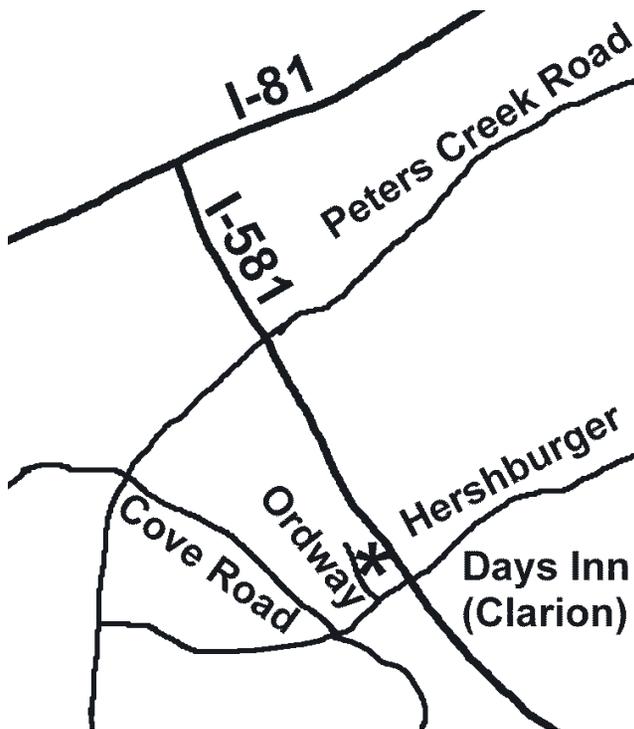
The summary states “the participants in the conference recognize and appreciate the enormous task facing the members of the Board of Education and the Staff in attempting to meet goals established not only under SOL but by the more recently announced NCLB legislation. We support the intent and approach of the SOL Framework and tests; our recommendations are toward improving both, not substituting an untested alternative. Toward that end we offer our continuing support and will welcome the opportunity to consider with the appropriate members of the Board and/or BOE Staff the recommendations presented here as well as other matters of mutual concern.”

The four Local Sections of the American Chemical Society that operate in Virginia and that endorse this report and offer their support in effecting the recommendations are the Hampton Roads Section, the Virginia Section, the Virginia Blue Ridge Section, and the Chemical Society of Washington. The full report can be seen at <http://membership.acs.org/V/VBR/>.

Directions to Days Inn (formerly the Clarion near the airport)

From I-581, take the Hershberger Road exit west toward Salem. Just beyond the interstate turn right onto Ordway Drive. The entrance to the motel will be on the right.

Map to Days Inn



THE BLUE RIDGE CHEMIST
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Non-Prof. Org.
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Salem, VA 24153
Permit No. 31

The next Virginia Blue Ridge Section meeting will be our Section's 75th Anniversary celebration and will be held Monday, October 23, at the Hotel Roanoke. The speaker will be Dr. Ann Nalley, the current President of the American Chemical Society. The contact person is Adele Addington.