

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

596th SECTION MEETING Hosted by Hollins University

Monday, January 16, 2006

VOLUME LIX

January 2006

No. 1

History Quiz

Submit your answers to this month's question by January 27, 2006 to Adele Addington (Addington@roanoke.edu)

1. For the six additional chemists in attendance at the first meeting of the Southwest Virginia Chemists Club, name the work place of three of these chemists.

LeRoy H. Smith _____
J.H. Gibboney _____
George Downey _____
Lester Whitmore _____
Harriett Fillinger _____
George McDonald _____

2. Where was the first meeting of the Southwest Virginia Chemists Club held?

Hollins University Hosts the January Meeting

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

PROGRAM:

5:30-6:00 Social Time, Ballator Gallery
6:00-7:00 Dinner, Ballator Gallery
7:00-8:00 Talk, Ballator Gallery

The social time, dinner, and talk will take place in Ballator Gallery of the Moody Center. Dr. Henry R. Bungay will be speaking on "Bioenergy Without Hype".

Dinner will be lemon chicken breast, cheese lasagna, vegetable medley, wild rice, rolls, apple pie, pecan pie, tea, water, coffee. 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 MONDAY, JANUARY 9, SEVEN DAYS before the meeting, by contacting Dan Derringer at 540-362-7433, or by e-mail to dderringer@hollins.edu, or by mail to Dan Derringer, Department of Chemistry, Hollins University, Roanoke, VA 24020.

Henry Bungay

Emeritus Professor Henry Bungay has held positions at Eli Lilly (Indianapolis) and Worthington Biochemical Corporation (Freehold, NJ), the National Science Foundation and the Department of Energy, and was a professor at Virginia Polytechnic Institute and at Clemson University before coming to Rensselaer Polytechnic Institute. He coordinated a U.S./U.S.S.R. cooperative program for enzyme technology and has visited India, Brazil, and Indonesia as part of National Academy of Sciences teams on biomass. His honors include the James Van Lanen Distinguished Service Award and the Marvin Johnson Award from the Biotechnology Division of the American Chemical Society, and he is a Fellow of the AIChE. He has more than 200 publications and has authored five books including "ENERGY, THE BIOMASS OPTIONS" that received an award as best technical book from the American Association of Publishers.



Bioenergy Without Hype

Energy from biomass has an exciting future, but the wild claims of those who think that it can replace much of our dependence on foreign oil are appalling. It is naive to view biomass as the panacea for the coming energy crisis because there is not enough in practical locations and its costs will be relatively high. The world will not run out of energy, but cheap energy may disappear. The exact economics is clouded by a myriad of subsidies for all of the competing energy sources and by world politics. Biomass feedstocks of most interest are sugarcane, corn, trees, and algae. Algae grow rapidly but require

flat land for ponds, and such lands with plentiful water command top prices for agriculture. Sugarcane and corn exhaust the soil and require fertilizer and expensive cultivation. Trees are attractive because forests are sustainable and trees can do well on abandoned farms that could not compete with the fertile lands of the Midwestern states. This assessment of biomass supply and conversion technologies provides global perspectives and exposes some alternatives as so impractical as to be almost fraudulent. Burning of wood has shifted from a prominent source of energy a century ago to a small but important contributor today. There will always be simple combustion of biomass with attractive economics where natural gas, coal, or petroleum are not readily available. Making gas or oil from biomass can only have tiny margins of profit because of intense competition from conventional producers. Biomass refining to furnish liquid motor fuels and byproduct chemicals is already practical and can be scaled up many fold. The upshot is that hydrolysis of biomass to its component sugars (and a major byproduct, lignin) should lead to a profitable, environmentally benign new fermentation industry while having a small but significant impact on overall consumption of energy.

The Virginia Blue Ridge Section's 75th Anniversary Logo Design Competition

Attention SAACS Advisors: To help us celebrate 75 years of local section activities, we would like to invite our student affiliate groups to be involved and help in designing a logo for our celebration! Design a nifty icon that embodies our celebration. Ideas may include, but certainly are not limited to the fact that this is our 75th anniversary; as this is our "diamond" anniversary. Perhaps your design could include the chemistry of Carbon (organic, polymer, biological, and any other ties you can make). Be creative and colorful!

For individuals with an idea, but not part of a SAACS section, please contact a SAACS section nearby to contribute your ideas!

Submit your logo design entry electronically to Adele Addington (Addington@Roanoke.edu), along with a description of the symbolism embodied in your design, by April 1. The winning entry will be announced at the April meeting. A \$50 prize also will be awarded to the winning entry at that time.

The Virginia Blue Ridge Section's 75th Anniversary 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 selected randomly from all the correct entries received that month, with the prize being a free meal at an upcoming regular local section meeting!

The Blue Ridge Local Section of the American Chemical Society held its first official meeting in October of 1931. It evolved from the Southwest Virginia Chemist's club, which was initially organized by Dr. Harry I Johnson of Roanoke College in May 1928. Six additional chemists were in attendance at this organizational meeting (LeRoy H. Smith, J.H. Gibboney, George Downey, Lester Whitmore, Harriett Fillinger and George McDonald).

Similar to our meetings today, the club decided to hold five dinner meetings between September and June at area colleges, and also at high schools, hotels, and restaurants. While it is unfortunate that the location of the meeting minutes is not known, except for those of the last meeting of the club, some of the speakers are known. The list includes William McPherson (President of the American

Chemical Society), Harrison Howe, Marston Bogert, S.S. Negus, E.E. Slosson, James L. Howe, and E.R. Weidlein.

The final meeting of the Southwest Virginia Chemist's Club was on May 9, 1931, with the notation of "finis" at the end of the minutes. It was agreed that the group would petition the ACS to establish a new local section, the Virginia Blue Ridge Section.

(Information taken from "The Fifty Year History of the Virginia Blue Ridge Section of the American Chemical Society, 1932-1981"; E.F. Furtch, August 1981)

Be sure to mark your calendars for our upcoming meetings, especially our special celebrations!

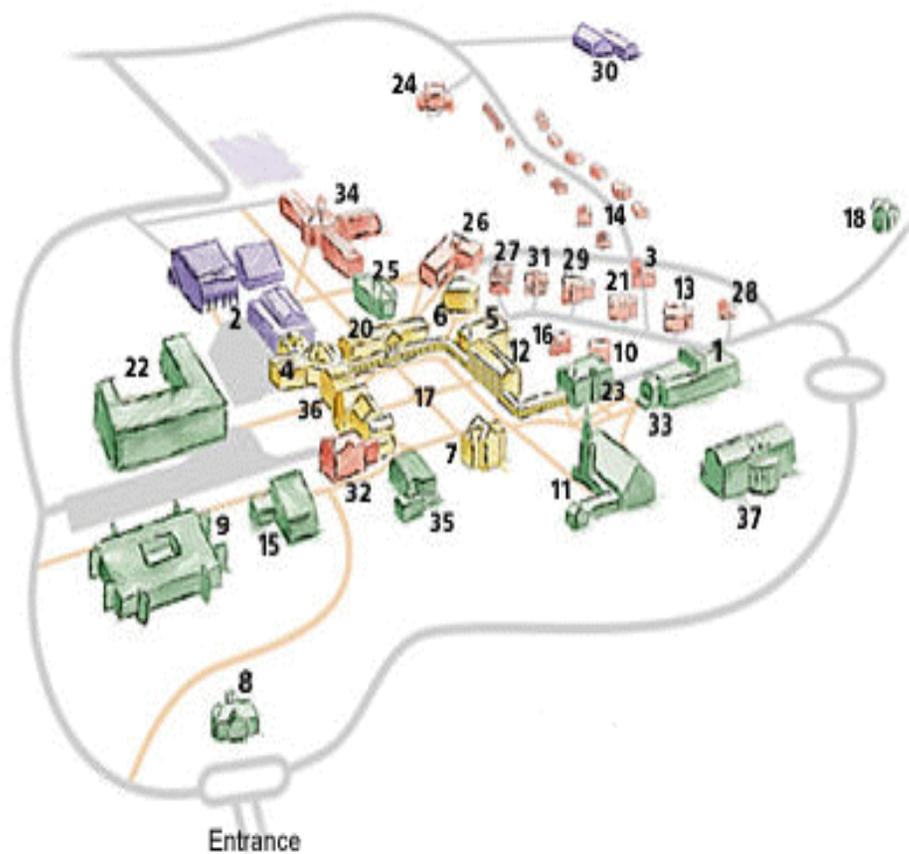
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|--------------|---|
| January 16 | Henry Bungay: "Bioenergy Without the Hype"; at Hollins University. |
| February 13 | Ronald DeLorenzo; "Interesting Mysteries in Science"; at Roanoke College. |
| March (TBA) | TBA- joint meeting with the Virginia Section; at Washington and Lee University. |
| April 19 | 600th Local Section Meeting! Atilla Pavlath; "Celebrating Local Section Activities"; at Radford University. |
| May (TBA) | David Bevan; "CAVE Technology"; at Virginia Tech |
| September 21 | John McKenna; TBA; Joint with IEEE and AIChE; Clarion Hotel, Roanoke. |
| October 23 | 75th Anniversary Celebration; Ann Nalley, ACS President; Location TBA. |
| November 7 | Yorke Rhodes; "What's' New in the Field of Astrochemistry"; at Ferrum College. |

Directions to Hollins University

From I-81, take the Hollins exit (146) south to Peters Creek Road and turn left. The entrance to Hollins University is a little more than half a mile and is on the left.

The meeting is in the Ballator Gallery of the Moody Center (Building #22). The room is handicap accessible. A ramp leads to the building, and an elevator leads to the room.

Map of Hollins University



THE BLUE RIDGE CHEMIST
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The February Virginia Blue Ridge Section meeting will be Monday, February 13, at Roanoke College. The speaker will be Ronald DeLorenzo, speaking about interesting mysteries in science. The contact person is Ben Huddle.