



# Richland Section American Chemical Society

summer 2007

Photo # NH 999 Confederate submarine H.L. Hunley. Artwork by R.G. Skerrett

featured talk

## The H. L. Hunley Recovery and Preservation by Jack Breazeale

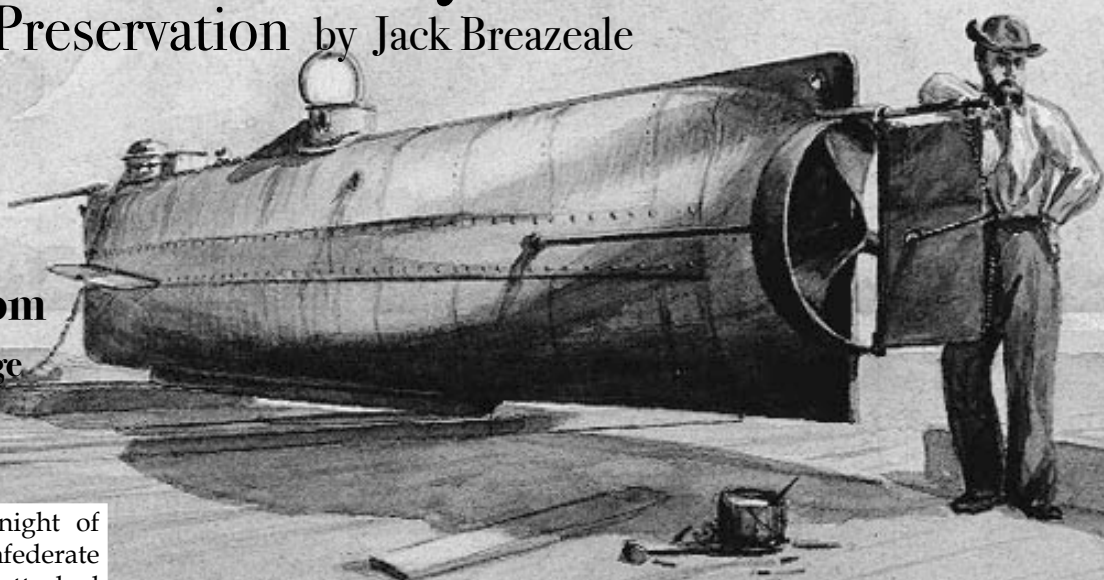


**April 3, 2007, 6pm**

**Columbia Basin College  
Library Building  
Room L-109**

About the talk: On the night of February 17, 1864 the Confederate submarine, the H.L. Hunley, attacked and sank the USS Housatonic. The attack occurred in Charleston Harbor on the South Carolina coast. The Hunley and its crew never returned from the mission. That is, until 8:37 am on August 8, 2000, when the submarine and its crew were recovered off the South Carolina coast. Work is complete on the recovery of the crew and continues on the preservation of the vessel. The talk will include a brief history of the Hunley, explain the search and recovery process, and a brief discussion of the continuing preservation process of the submarine.

About the speaker: Dr. W. H. (Jack) Breazeale received his Ph.D. from the University of South Carolina in 1966. He taught at Winthrop College in Rock Hill, SC from 1965-1970. In 1970 he was a founding faculty member of a new state college in



Florence, SC: now Francis Marion University. From 1970 until his retirement in 1997, he was chair of the Department of Chemistry and Physics and Professor of Chemistry. Dr. Breazeale has been active in the American Chemical Society for over 40 years. He has served nine years as a member of the ACS Committee on Chemical Safety including three years as chair. He also held offices in the ACS Division of Chemical Health and Safety including that of chair. Other activities at the national level have included appointments to the Committee on the Economics Status of Chemists, the Committee on Constitution and Bylaws, the National Chemistry Week Task Force with three years as chair, and the Board of Trustees for Group Insurance Plans for ACS Members.

He is currently a member of the Council Committee on Committees. At the local level Dr. Breazeale has held several offices in the South Carolina Section including chair and currently serves the Section as Councillor. His interest in laboratory safety became a major professional activity in the early 1980s in the South Carolina Section. Dr. Breazeale has presented in the Laboratory Safety Institute workshops for some twenty years. These presentations include one-, two-, and four-day workshops nationwide on various safety topics. He presently serves on the Board of Trustees of the Laboratory Safety Institute. He resides in Mount Pleasant, SC and is an Adjunct Professor of Chemistry at the College of Charleston.

inside: **SOUTHEAST** winemaking  
MAY 15 SPEAKER MEETING

**FEATURED TALK: MAY 15, 7PM**



Huber Auditorium, Badgley Hall  
Eastern Oregon U, laGrande, OR

**Robert P. Bates**

Pitfalls & Pleasures of  
*Southeast  
Winemaking*

**About the talk:** Winemaking is a rather recent development in the Southeast, despite the earliest record in the U.S. (1565 in Spanish colonial Florida). Pitfalls are the hot, humid, predator-friendly growing and harvest environment; limited cultivation and enology experience with available grape species (compared with centuries with *Vitis vinifera*, the traditional wine species); substantially different grape morphology and chemistry; limited cultivars; lack of a regional wine consuming tradition; and poor quality/image of some early commercial efforts. Fortunately, the situation is changing. There are some positive features that make efforts pleasurable and practical. They include the availability of improved wine cultivars; the accumulation of viticulture and enology experience in the region; the establishment of a few small wineries in the Southeast producing a wide variety of acceptable table and specialty wines; and increased grower and consumer interest in local grapes due to U-Pick operations, fresh market expansion, and home winemaking successes. The technology of home and small commercial winemaking will be described. With attention to detail and diligence, this small industry will certainly survive and possibly thrive.

**About the speaker:** Robert P. Bates received his B.S. degree in Food Technology from MIT. After several years in the food industry, he obtained an M.S. degree in Food Science from the University of Hawaii and a Ph.D. in Food Science from MIT. After a year at the Institute of Nutrition of Central America and Panama in Guatemala, he joined the University of Florida where he has been for 3+ decades. He is presently professor emeritus of Food Science in the Food Science and Human Nutrition Department. Bates' areas of interest are food processing and utilization, small-scale process and equipment development, fermentation technology and byproduct recovery, food product development, and international technical assistance. His major responsibilities involve teaching graduate and undergraduate food processing, fermentation, and product development courses; and conducting research/extension activities in home, community, and small-scale industrial food processing operations. He has completed short and long-term international assignments in many countries in the Caribbean, Central and South America, and Asia. He fields frequent inquiries on food science and technology and related subjects from national, international, and industrial sources. Bates has developed and presented many short courses in the U.S. and overseas and has been an ACS tour speaker on various food science and technology topics for over 25 years.



## NORM 2007

The technical program will be composed of general research papers and the special symposia listed below:

### Chemical Education:

Instrumental Experiments in the General Chemistry Laboratory,  
Active Learning in Chemical Education

### Environmental and Analytical Chemistry:

Bio-based Products, Green Chemistry, the Chemistry of Advanced Nuclear Systems, Environmental Chemistry/Geochemistry, Hanford Site Analytical Chemistry, Thermodynamic Models in Geochemistry, Non-Invasive Diagnostics

### Materials Science:

Sensors and Sensor Technology and Semiconductor Materials

### Special Topics:

Public Response to Chemical Emergencies, Management of the Chemical Enterprise, Radioisotopes and Radiopharmaceuticals, Actinide Chemistry, Environmental Molecular Science Laboratory User Research, Women in Chemistry

### For more information, please contact:

Dr. Timothy L. Hubler  
General Chair, NORM 2007  
Telephone: (509) 373-0249  
tim.hubler@pnl.gov

Dr. Samuel A. Bryan  
Program Chair, NORM 2007  
Telephone: (509) 376-6949  
sam.bryan@pnl.gov

The Richland Section of the American Chemical Society will host the 62<sup>nd</sup> Northwest Regional Meeting of the ACS (NORM 2007) in Boise, Idaho from June 17-20, 2007 at the Boise Centre on the Grove. The conference website is: [http://northwestchemistry.org/Norm\\_2007/index.htm](http://northwestchemistry.org/Norm_2007/index.htm). For the first time, NORM 2007 will be co-located with the annual meeting of the Pacific Division of the American Association for the Advancement of Science (additional information is available at <http://www.sou.edu/aaaspd/2007Boise/Index.html>). All registered NORM 2007 attendees will have full access to the AAASPD symposia and field trips and vice-versa. We are looking forward to the interaction with scientists of all disciplines at this meeting.

### TO SUBMIT ABSTRACTS:

[http://northwestchemistry.org/Norm\\_2007/Submission.htm](http://northwestchemistry.org/Norm_2007/Submission.htm).

### FOR CONFERENCE PRE-REGISTRATION:

[http://northwestchemistry.org/Norm\\_2007/Registration.htm](http://northwestchemistry.org/Norm_2007/Registration.htm).

NORM 2007 will begin on Sunday evening with a welcoming address by Dr. Catherine Hunt, President of ACS. Dr. Hunt will also officially recognize the formation of the Snake River Local Section of the ACS encompassing all of Southwest Idaho. This will be the first new ACS local section to be formed in a decade. AAASPD will host a keynote speaker, Dr. Shirley Malcolm, on Monday evening.

## SCIENCE DAY | April 14

### Science Day for Middle School Girls - April 14th at WSU Tri-Cities

The Expanding Your Horizons conference will be held April 14th at WSU Tri-Cities. This is a one day conference for middle school girls. The goal of EYH is to increase the interest of young women in math and science by providing exciting and fun hands-on learning experiences. Girls will attend a keynote presentation by Battelle chemist (Richland Section Chair-Elect) Dr. Novella Bridges, as well as four workshops of their choice on various careers for women. In most of the workshops, young women participate in hands-on learning experiences led by women scientists, mathematicians, and engineers. In other workshops, role models share career awareness information and discuss job satisfaction, necessary education, and descriptions of a typical day on the job. There is a registration fee of \$10 per girl and lunch will be provided. A "parents workshop" is also being planned as part of the conference. Contact Jorge Moreno at [jomoreno\\_mesa@tricity.wsu.edu](mailto:jomoreno_mesa@tricity.wsu.edu) or (509) 372-7244 for more information or to register. Hope to see you (and your daughter) there!

Additionally, NORM 2007 will feature special programs designed for high school teachers and undergraduate students as well as a workshop on Professional Analytical Chemists in Industry (sponsored by Proctor and Gamble Corp).

Special social events that are planned at NORM 2007 include a tour at the World Center for Birds of Prey Research, tours of the Micron Semiconductor plant, the annual Awards Banquet, and a Pub Crawl for microbreweries in the Boise area. We are pleased to feature ACS award winners of the 2007 Regional Industrial Innovation Award, the 2007 Regional High School Teacher Award, as well as other awards for diversity and volunteer efforts.

Lastly, this year's meeting will be held for the time in Boise, Idaho, home of the Boise State University Broncos, the 2007 Fiesta Bowl Champions. The recreational opportunities are in abundance and in close proximity to the city. We encourage you to come for the science and enjoy the friendly atmosphere and recreational opportunities in Idaho.

The NORM 2007 Organizing Committee would like to thank the Micron Foundation for major support of our program.

## CHEMISTRY OLYMPIAD

### International Chemistry Olympiad (IChO) Tests Planned

Royace Aikin, our Section's Chemistry Olympiad coordinator, reports that he has mailed out about 170 regional exams to eight high schools in the southeastern region of Washington. These schools will proctor the exams at their schools and then return the answer sheets to Royace for grading. The top eight scorers (no more than two from each school) will be invited to sit for the National IChO exam to be conducted at Columbia Basin College on Saturday, April 28. Vanda Glezakou will moderate components of the exam on that day. The National IChO exam is a day-long activity that involves a multiple choice exam, a discussion/problem solving-exam, and a laboratory practical. These exams will be mailed to ACS for grading. The top twenty students who sit for the National IChO exam nation-wide will be invited to attend the Chemistry Camp at the US Air Force Academy, June 3-17. The top four students from the study camp will represent the United States in the International IChO competition in Moscow, Russia on July 15-24.

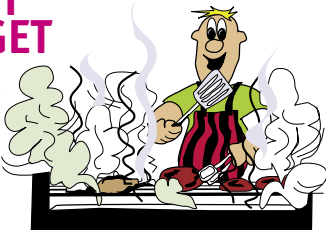
## HAIL AND FAREWELL

The Richland Section would like to greet the following new members: **Jesse Hale, Patrick Nichols, James Rivard, Arun Vendatnathan, Jian Hu, Ronald Walters, and Melanie Waltman.** We look forward to seeing you at a future section activity. We wish departing member **Brienne Bottenus** the best of luck in her future endeavors.

## COMING EVENTS

**DON'T FORGET**

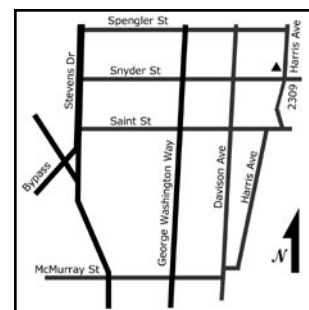
MEMBER  
PICNIC  
JUNE 1



## MEMBER EVENTS

### 50-Year Member Celebration

The Richland Section's celebration for this year's 50-Year Members will be on **Friday, April 27, from 6 to 8 p.m.** It will be held at the home of the Section's past-chair, Bill Samuels, 2309 Harris Ave., Richland (map shown at right). (This is the same place where the Section had its Winter Get-Together). Students from Eastern Oregon U. will be in attendance to present posters on their research. All members and their guests are invited. As usual, refreshments will be served.



- APRIL 3 **TOUR SPEAKER:** Jack Breazeale, Topic: The H. L. Hunley: Recovery and Preservation
- APRIL 14 **SCIENCE DAY FOR MIDDLE SCHOOL GIRLS**
- APRIL 21 & 28 **NUCLEAR SCIENCE MERIT BADGE:** Point of contact is Sandy Fiskum, 509-376-7015, or email [sandy.fiskum@pnl.gov](mailto:sandy.fiskum@pnl.gov)
- APRIL 27 **50-YEAR MEMBER CELEBRATION**
- APRIL 28 **CHEMISTRY OLYMPIAD TEST** for High School Students
- MAY 15 **TOUR SPEAKER:** Robert Bates, Topic: Pitfalls and Pleasures of Southeast Winemaking
- JUNE 1 **ANNUAL PICNIC** (with AIChE), Leslie Groves Park, details at Section website as available
- JUNE 17-20 **NORM '07**
- AUGUST 19-23 **ACS FALL NATIONAL MEETING**
- OCTOBER 22 **TOUR SPEAKER:** William Carroll, Topic: From Garbage to Stuff: How We Recycle Plastics
- NOVEMBER 3, 10 **YOUTH CHEMISTRY MERIT BADGE PROGRAM**
- DECEMBER 7 **MEMBER APPRECIATION**

Richland Section  
Home Page

[www.pnl.gov/acs/](http://www.pnl.gov/acs/)



Richland Section  
American Chemical Society  
c/o Editor: Steve Krogsrud  
4816 W. Irving  
Pasco, WA 99301

## Point to Ponder

Don't sweat the small stuff. It's all small stuff.

- Richard Carlson