



April 2009
Vol. 93, Issue 3

Central Texas ACS

Established 1917

Newsletter of the Central Texas Section of the American Chemical Society

Tuesday, April 14th, 6:30 PM-9:00 PM

Rediscovery of the Elements

Drs. James and Virginia Marshall

Shoreline Grill

98 San Jacinto Blvd., Austin TX

\$20 for members/adults, \$10 for students, FREE for volunteers

Please RSVP by email to malcolmdprouty@gmail.com or call (512) 968-4750

Talk Abstract

In developing a sequel to the above talk, Drs. Marshall have visited the European original sites of discovery for the elements. In this tour of Europe, they have visited mines, museums, laboratories, and other historical sites associated with the research and discovery of the elements over the past several hundred years. Examples: the original laboratory of Clemens Winkler, who was Director of the Freiberg School of Mines in Germany, where Winkler, in 1886, discovered germanium; in this laboratory resides the original equipment of Professor Winkler and other items of historical note such as letters from the Russian chemist Mendeleev congratulating the discovery of an element that he had predicted in his new Periodic Table. Other sites included the Fata Baii Mine in Romania where gypsies once panned for gold and where tellurium was discovered; Strontia, Scotland, the site of an ancient lead mine where strontium was found; Ytterby, Sweden, where feldspar was produced two hundred years ago for the ceramic trade in Great Britain and Poland and where yttrium and other rare earths were discovered; and Bologna, Italy, where in the 1600s the "fosforo di Bologna" ("glowing rock": barite) was uncovered by a shoemaker in the badland clay south of town. Modern sites were also visited, notably GSI in Darmstadt, Germany, where superheavy elements have been produced. Sometimes ancient sites actually were rediscovered, for example the Harz Mountain mines of Tilkrode (where thallium was discovered) which now appear as fields of poppies, peas, and rye interrupted by occasional mounds of earth (the old mine shafts). Careful documentation of these sites was made, including a GPS measurement of latitude and longitude for future identification. This presentation includes a story and description of these sites with reference to the history and personalities of the discoverers.

Drs. James and Virginia Marshall

James L. Marshall earned his B.S. in chemistry at Indiana University in 1962 and his Ph.D. in organic chemistry at Ohio State University in 1966. The following year, Dr. Marshall joined the Department of Chemistry at the University of North Texas (UNT). At UNT, he developed a progressive program involving primarily conformational analysis utilizing carbon-13 nuclear magnetic resonance (NMR) coupling constants. His research program at UNT has produced over 80 publications, including a contribution in *Accounts of Chemical Research* and a reference book on carbon-13 NMR coupling constants. During the period 1981-1987, Dr. Marshall developed the Analytical Program at the Celanese Technical Center, Corpus Christi, Texas, and then the Advanced Manufacturing Technology Program at Motorola, Inc., in Ft. Worth, Texas. In 1987, Dr. Marshall returned to the UNT Department of Chemistry to establish a research program in analytical chemistry and materials science. Dr. Marshall co-founded the North Texas Section of the Materials Research Society in 1983 and has served as officer (including president) for several terms. In 1989, Dr. Marshall received an Honors Professor Award and a "Top Prof" Award at UNT, and in 1995 an Outstanding Faculty Member Award. At UNT, Dr. Marshall has served as director of IUCRC (Industry-University Cooperative Research Center), director of CMC (Center for Materials Characterization), and interim chairman of the Department of Chemistry. Presently, Dr. Marshall is on the Executive Committee of the Dallas-Ft. Worth Section of the American Chemical Society, having served as chair of the section. He is also managing editor of the *Southwest Report*, an ACS publication serving five states. Present research interests include electronic materials development and characterization. Dr. Marshall is presently active in chemical educational activities, including several American Chemical Society Lecture Tours across the U.S.

Central Texas ACS: April 2009

Chair's Page

Congratulations to our ACS Awards Banquet Nominees!

Texas State
Kristen Gould
Marie Moser

The University of Texas, Chemical Engineering
Amanda D. Cuellar

Southwestern University
Whitney Johnson

The University of Texas, Chemistry
Nicholas Simmons

St. Edwards University
Jacqueline Pope

Sixty Year Members
Dr. Charles Clifton Hobbs, Jr.
Dr. Edwin Myers Lansford, Jr.

Fifty Year Members
Dr. Patrick E. Cassidy
Mr. David R. Hague
Dr. Kenneth T. Knapp

3M Hands-On Chemistry Workshop For High School Science Teachers

St. Edward's University, July 7-10
Priority registration deadline: May 1

High school chemistry teachers are invited to St. Edward's University (www.stedwards.edu) in Austin on July 7–10 for a hands-on workshop designed to teach key chemistry concepts covered in TEKS. You'll develop in-depth knowledge of experiments and concepts and learn how to apply them to your classroom experience. Plus, all attendees will receive:

- \$250 stipend upon completion of course
- \$50 stipend for classroom materials
- Continuing Education credit

Priority registration is May 1. Final registration is June 1. Preference will be given to schools in partnership with St. Edward's or 3M. Be sure to include your contact information, school and a list of courses taught.

To register for the workshop, contact either:

Don Wharry: donaldw@stedwards.edu, 512-695-8498
LeAnn Rowe: leanrr@stedwards.edu, 512-970-9567

ACS-Hach High School Chemistry Grant

The ACS-Hach High School Chemistry Grant is awarded to teachers and institutions aiming to enhance the teaching and learning of high school chemistry. Applicants can receive up to \$1,500 to support ideas that transform classroom learning and encourage student development. Applications are due on April 1, 2009. To find out more about this and other grant opportunities go to www.acs.org > Funding & Awards > Grants.

Considering a Career in High School Chemistry Teaching?

The ACS-Hach Second Career Teach Scholarship is awarded to chemists interested in pursuing a Masters degree in education or becoming certified as a chemistry/science teacher. Scholarship recipients receive \$6,000 for full-time study and \$3,000 for part-time. Applications are due on April 1, 2009. To learn more about this exciting scholarship program, go to www.acs.org > Funding & Awards > Scholarships.

Central Texas ACS: April 2009

Calendar of Events

Chemists Celebrate Earth Day 2009 April 18th, 12PM-4PM, Zilker Park



Austin's Chemists Celebrate Earth Day event will be held on **April 18th** from 12:00 PM to 4:00 PM at Zilker Park in the Austin Children's Museum Splash Exhibit. Many volunteers will be needed for this fun and exciting event!

For more information regarding Chemists Celebrate Earth Day, contact Dodie Wells:
dodiewells4@hotmail.com, (512) 369-3668
To volunteer, contact Jackie Padilla:
jackie.padilla@gmail.com, (512) 653-6311

2009 ACS *Chemistry in the Community* Summer Workshops

Texas State University, San Marcos, July 19-24

The ACS Education Division will offer three five-day residential workshops during the summer 2009 for teachers who use *Chemistry in the Community*, the ACS textbook for first-year high school chemistry. Visit the Education Division Workshops at www.acs.org/education > Courses and Workshops to learn more about these residential workshops and free-of-charge online training opportunities. For more information about the *Chemistry in the Community* project, please contact Michael Mury at m_mury@acs.org.

ACS Fellows Program April 15 Nomination Deadline

The ACS Fellows Program, which was created by the Board of Directors in December 2008, is designed "to recognize members of the American Chemical Society for outstanding achievements in and contributions to Science, the Profession, and the Society." Unlike ACS national awards, the honor of a Fellows designation will go to those who have distinguished themselves in multiple areas, including promoting the science, the profession, *and* service to the American Chemical Society.

Deadline for receipt of nomination form for the first class of Fellows is April 15, 2009. The first class of ACS Fellows will be honored at the Fall 2009 ACS National Meeting. Nomination Forms and instructions are available on the web at <http://www.acs.org/fellows>.

Free ACS Webinar for Small Businesses Thursday, April 23

ACS Small Business Webinar Series presents "Steps to Successful Technology Commercialization for Scientist Entrepreneurs and Small/Medium Businesses in Lean Times."

An interactive hour of idea-sharing with speaker Craig S. Galbraith, MBA, MSc, Ph.D; a chance for scientist entrepreneurs and small/medium businesses to learn strategies and tips on how to successfully promote your products or services during the economic downturn.

Webinar Details

Date: Thursday, April 23, 2009

Time: 2:00-3:00 pm EST

Fee: Complimentary

Don't miss out – Space is limited.

Details and advanced registration:
<http://boilthisdown.com/small-business/>