TABLE OF CONTENTS
50 Years Ago....................................................2
Chem Gems & Joules..........................................2
Chatterji Oklahoma Chemist..............................5
April 16 Celebration for Marshalls......................6
Quantum Chemistry Symposium..........................7
Doherty/Schulz Nomination Deadline Delayed........7
Around-the-Area.............................................9
U of Arkansas..................................................9
Wichita Falls - Duncan.....................................9
South Plains/Lischka, Aquino Visitors..................9
D-FW............................................................10
April Metroplex Seminar Schedule.....................10
D-FW Section April Meeting Notice....................11

INDEX OF ADVERTISERS
American Polymer Standards Corp.......................3
ANA-LAB........................................................4
Huffman Laboratories.......................................3
Minuteman Press..............................................3
Sponsor Members............................................1
Texas A&M University-Commerce.......................3
Texas Christian University...............................8

!!Be among the first to know what’s happening in D-FW!!
Point your browser to the D-FW Section Website for

- Announcements
- Current Events
- Meetings

http://www.acsdfw.org

Sponsor Members
Alcon Laboratories
Halliburton
OxyChem
Texas Eastman
The February tour speaker is Dr. G. F. Huff of Callery Chemical Co. His topic is “The Chemistry of the Boron Hydrides.”

Local reporter Allen J. Bard reports that the new officers for the Central Texas ACS Section are: Chair, James E. Boggs; Chair-Elect, J. D. Malkemus; Secretary, Lester J. Reed; Treasurer, Eugene H. Wissler; Councilor, George W. Watt. Members of the UT Chemical Engineering faculty attending the AIChE meeting in San Francisco last December were Drs. John J. McKetta, W. A. Cunningham, E. H. Wissler, and David M. Himmelblau. McKetta co-chaired a symposium, and Himmelblau presented a paper. Chemistry and chemical engineering faculty who gave lectures recently outside the area were Drs. Norman Hackerman, Frederick A. Matsen, George W. Watt, Matthew Van Winkle, Roger J. Williams, and Murry A. Tamers. Dr. Royston M. Roberts is spending a year at the University of Zurich with a PRF fellowship.

At TCU Drs. J. E. Hodgkins and William H. Watson have received $20,000 Welch grants to study, respectively, divalent carbon intermediates and surface properties of semiconductors. TCU has received a $91,400 grant from NSF to conduct a summer institute in science and mathematics for high school science teachers. Dr. E. R. Alexander will conduct the institute with Dr. Sherrill D. Christian of the University of Oklahoma and Dr. William Shaw of the University of Texas as guest lecturers.

From the South Arkansas ACS section we learn that Dr. Al Gremillion, Ronald Galli, and Clifford Pugh of Lion Oil Research attended the regional ACS meeting in Baton Rouge.

**CHEM GEMS & JOULES**

**REGIONAL SCIENCE FAIRS.** Here are the place winners in the Fort Worth Regional Science and Engineering Fair held recently. Division 1, 1st Place, Favyen Bastani, Texas Academy of Mathematics and Science; 2nd Place, Anjana Ram, Texas Academy of Mathematics and Science; 3rd Place, Sailee Yadav, Martin High School; Honorable Mention, Shree Bose, Fort Worth Country Day School. The Division 2 winners were 1st Place, Megan B. McDivitt, Liberty Christian School; 2nd Place, Cameron A. Brasher, Liberty Christian School; 3rd Place, Christy D. Pounder, Christian Cottage Prep. The regional fair winners from Division 1 are invited to attend the International Science and Engineering Fair.
Southwest Retort

Published for the advancement of Chemists, Chemical Engineers and Chemistry in this area.

Published by
The Dallas-Fort Worth Section, with the cooperation of five other local sections of the American Chemical Society in the Southwest.

Vol. 63 February, 2011 No. 6

Editorial and Business Offices:
Editor: E. Thomas Strom, 1134 Medalist Dr., Dallas, TX 75232, 214-376-9602; FAX 817-272-3808; tomsstrom@juno.com
Managing Editor: Mary Teasdale, PO Box 461051, Garland, TX 75046; 972-276-9376; owlcritic75@yahoo.com
Business Manager: Kirby Drake, 9715 Dartridge, Dallas, Texas, 75238-1827; 214-553-9810; kbdrake2000@yahoo.com

Southwest Retort (USPS 507880) is published monthly, September through May by the Dallas-Ft. Worth Section of the American Chemical Society, Inc., for the ACS Sections of the Southwest Region. Subscription rates are $3.24 per year. Periodical postage paid at Dallas, Texas. POSTMASTER: Send address changes to American Chemical Society, Southwest Retort, Box 3337, Columbus, Ohio 43210.
Ana-Lab Corporation is an employee-owned organization which provides superior, innovative and cost effective solutions for clients through exceptional science, processes and people. With a staff of experienced, professional and talented chemists and technicians supported by sophisticated laboratory testing equipment, Ana-Lab is the preferred environmental testing laboratory serving clients nationwide.

Regional Service Centers

Amarillo, TX
806-679-8459 • Fax 806-679-8459
Email: panhandlesales@ana-lab.com

Dallas, TX
972-620-8900 • Fax 972-620-8900
Email: northtex@ana-lab.com

Austin, TX
512-821-0045 • Fax 512-821-0045
Email: centex@ana-lab.com

Brownsville, TX
956-238-0208 • Fax 956-238-0208
Email: rgvtex@ana-lab.com

Houston, TX
281-333-9414 • Fax 281-333-9414
Email: gulfoast@ana-lab.com

Norman, OK
405-590-2533 • Fax 405-590-2533
Email: oklahoma@ana-lab.com

Shreveport, LA
318-470-0066 • Fax 318-470-0066
Email: arkla@ana-lab.com
At the 2010 Oklahoma Pentasectional ACS meeting in Norman, OK, **Dr. Jiten Chatterji**, who recently retired from Halliburton, was named winner of the 2010 Oklahoma Chemist Award. Jiten was given a $1000 honorarium and an engraved plaque. Very often industrial chemists do not have the visibility of their academic counterparts, so it is gratifying to see this incredibly productive industrial chemist get his place in the sun. Jiten has played a seminal role in much of Halliburton’s important technology in the development of drilling fluids, cement additives, hydraulic fracturing and defoamers. He has been awarded the almost unbelievable number of 203 patents. His previous honors include 2001 Inventor of the Year chosen by the Houston Intellectual Property Law Association and 2003 Innovator of the Year selected by the Oklahoma Bar Association.

Jiten received his early college education at the University of Patma, India. He received a BS degree in 1954 and a master’s degree in organic chemistry in 1956. For several years he was an instructor at the University of Patma until he entered graduate school at the University of Wyoming. He received his Ph.D. degree in physical organic chemistry in 1967 under mentor Sarah Jane Rhodes. *Retort* readers with long memories of our profile of Richard Smalley will remember that Smalley credited his Aunt Mary Jane, whom he called “The Colossus of Rhodes,” with inspiring him to go into chemical research. Jiten recalls Smalley visiting his aunt during the summers. Jiten states that Dr. Rhodes was the finest teacher he had ever seen.

After Jiten received his Ph.D., he joined Halliburton in Duncan in
June, 1967, and he retired in Dec., 2009, at the top of the Halliburton technical ladder with a career spanning 42 and ½ years. He first worked in fracturing, and after five years he began efforts in cementing. He eventually became supervisor of production enhancement, which meant efforts also in acidizing research. After ten years in management, he made the unusual step back to the technical ladder for the rest of his career.

Jiten and his wife Iris, an educator, have two sons. Son Robbie Paul is a physician. Son Mark Andrew with a degree in foreign service spent six years in Australia and has since moved to Dallas with his family to work in finance. For Jiten, his work was pretty much his hobby, and he is not so sure that it was a good idea to retire.

Whether or not Jiten was right to retire, The Southwest Retort stands in awe of this internationally recognized chemist who developed a variety of technologies to enhance the economic production of oil and gas. Not every chemist has made a difference, but Jiten Chatterji has. We at The Southwest Retort salute him.

CELEBRATORY BANQUET APRIL 16

Jim and Jenny Marshall are sponsoring a Celebratory Banquet on Saturday, April 16, to commemorate the completion of their “Rediscovery of the Elements,” a twelve year old project where they visited all of the sites throughout the world associated with the discovery of the chemical elements. The program will include a presentation by Jim and Jenny on their twelve year effort, including interesting stories and anecdotes of their experiences traveling through 30 countries in Europe and the Americas on their quest. The banquet will be held at the well-known Fremaux’s Metropolitan Catering on University Ave. in Denton and will be held jointly with the annual Alpha Chi Sigma spring gathering.

Interested people of all ages are welcome including students, faculty, other scholars of science and history, laypersons, families, and friends. The cost is a reduced $25 per person. Included in this cost is a free DVD of “Rediscovery of the Elements,” just published by Jim and Jenny and registered with the U.S. Library of Congress, to be given to all attendees ($40 value). Prior registration is requested (deadline: April 8) and payment (either by PayPal or check) may be made using www.jennymarshall.com/axe.htm. Questions may be directed to J. L. Marshall at jimm@unt.edu. Personal directions will be sent to each interested party, and a map will be posted on the Departmental website as well.

The schedule is similar to that of a local ACS meeting, even though this is partly an Alpha Chi Sigma function. There is a social hour at 6 p.m., a 7 p.m. dinner, which is a full chicken dinner buffet, a brief business meeting at 7:45 p.m., and the 8 p.m. talk, “Twelve Years of Wandering in Europe and America While
Researching Rediscovery of the Elements—Background, Stories, and Anecdotes.”

Sharp-eyed readers will have noticed that this banquet is the same day as the section’s Meeting-in-Miniature. However, the Meeting-in-Miniature is a day function, while the banquet is an evening function. There is no reason why our members can’t attend both.

QUANTUM CHEMISTRY SYMPOSIUM AT ANAHEIM

Two local chemists have organized a symposium on “Pioneers of Quantum Chemistry” to be held on Monday, Mar. 28, at the ACS meeting in Anaheim, CA. The organizers are E. Thomas Strom of UT-Arlington and Angela Wilson of UNT. Also participating are local UNT chemists Weston Borden and Paul Bagus. The symposium was organized through the ACS Division of the History of Chemistry and is cosponsored by the Divisions of Computers in Chemistry and Physical Chemistry. The location of the symposium is in the Redondo Room in Disney’s Paradise Pier Hotel.


Doherty, Schulz Deadlines Delayed

The deadline for receiving Doherty and Schulz Award nominations has been delayed until Friday, April 15. Nominations should be sent to the Awards Committee Chair, Dr. Paul Sood, Access Pharmaceuticals, 2600 N. Stemmons Fwy, Ste 176, Dallas, TX 75207-2107, Tel. 214-905-5100 x214, Email, paul.sood@accesspharma.com.
@ a great small university in the heart of Fort Worth

TEXAS CHRISTIAN UNIVERSITY
GRADUATE PROGRAM IN CHEMISTRY (MA, MS & PhD)

RESEARCH AREAS

BIOLOGICAL
Biomacromolecules
Biomaterials
Drug delivery
Neurochemistry
Tissue engineering

INORGANIC
Bio-Inorganic
Inorganic polymers
Material science
Organometallics
Catalysis

ORGANIC
Natural products
Phosphorus chemistry
Synthetic methodology
Supramolecular chemistry
Total synthesis

PHYSICAL
Biophysics
Electronic structure
Nanoscience
Phase behavior
Statistical models

Every admitted student receives full financial support

For more information please visit: www.chm.tcu.edu or www.chm.tcu.edu/GradProg.htm
or contact:
Director of Graduate Studies • TCU Department of Chemistry • TCU Box 298860 • Fort Worth, TX 76129
Phone: (817) 257-7195 • FAX: (817) 257-5851
University of Arkansas

Xiaogang Peng is ranked number eight among the top 100 materials chemists of the past decade as compiled by Thomson Reuters. Derek Sears is serving on an NSF REU panel in astronomy. He recently received a grant from NASA to write a series of articles on the history of cosmochemistry. Alumna Bridgette (Blackman) Shannon was honored as a Modern Day Technology Leader (MDTL) during the 25th meeting of the Black Engineer of the Year Awards and STEM Global Competitiveness Conference held in Washington D.C. Feb. 17-19.

Wichita Falls-Duncan

The most recent local section meeting was held on Feb. 21 at Cameron University. The speaker was Dr. Al Hazari whose topic was “The Chemistry in Comics.”

South Plains

The group of Welch Professor Bill Hase is hosting the visiting European husband and wife team of Hans Lischka and Adélia Aquino. Dr. Lischka is a theoretical chemist who is recently retired from the University of Vienna. He received his Ph.D. at the University of Vienna. He spent some time at the University of Karlsruhe, Germany with a Humboldt fellowship. He has been a visiting scientist at Ohio State, Argonne National Laboratory, Chiba University in Japan, Pacific Northwest National Laboratory, and the Academy of Sciences of the Czech Republic. He received the Sandoz Prize for Chemistry and the Award Prize from the Theodor Körner Foundation. In 2008 he was honored with a special issue of the journal Chemical Physics on the occasion of his 65th birthday. Among his research interests are computer simulations on the properties of light-active DNA components and new quantum chemical approaches to photo-physical studies.

Theoretical chemist Adélia Aquino received her Ph.D. from the University of São Paulo, Brazil. She then worked as Coordinator of Human Resources for Strategic Areas and Technical Secretary of Subprogram Chemistry and Chemical Engineering in PADCT, a program sponsored by the Brazilian government and the World Bank. Following that, she did a post-doc in the physics department at UC-San Diego. Next she became Coordinator of the Division of Biological and Environmental Sciences at CNPq. There followed an international collaboration project between Brazil and Austria. She then became a Senior Scientist at the Institute of Theoretical Chemistry at the University of Vienna in the Advanced Light Sources research program. Among her research interests are molecular modeling of adsorption processes in soils and studies of hydrogen bonds and cation bridges.
The Eleventh Henry Shine Lecture took place on Feb. 22. The speaker was Peter Stang of the University of Utah. His topic was “Chemical Publishing in the 21st Century: Perspectives of a JACS Editor.”

Dallas-Fort Worth

Texas Wesleyan University. Dr. Newton Hilliard served as an NSF review panelist for the Feb., 2011 panel. Dr. Phil Pelphrey coauthored an article in Angew. Chem. Int. Ed. which was featured in the Feb. 21, 2011 issue of C&EN.

UT-Arlington. The speaker at a special seminar held on Mar. 3 was Dr. Claudia Longo of the University of Campinas, Brazil. Her topic was “Semiconductor Electrodes for Solar Energy Conversion: Application in Dye-Sensitized Solar Cells, Hydrogen Production and Water Disinfection.”

APRIL METROPLEX SEMINAR SCHEDULE

Seminars are occasionally postponed or cancelled. Check departmental websites or call the department before attending.


UT-Dallas. April 8, Jin Zhang, UC-Santa Cruz, “Shed Light on Nanomaterials for Solar Energy Conversion and Cancer Therapy.” April 22, Frank Bloom, Oklahoma State, TBA. Seminars are at 2 p.m. and are held in Room 2.303 Science Learning Center.


SMU. April 1, Uttam Krishnan Tambar, UT-Southwestern. TBA. April 29, Michael Kilbey, University of Tennessee, TBA. Seminars are at 3 p.m. in Room 152, Fondren Science Bldg.

TCU. April 19, Matthew Merritt, UT-Southwestern, “Measuring Metabolic Flux using Dynamic Nuclear Polarization and C13 Magnetic Resonance.” Seminars are at 11 a.m. in Lecture Hall 4, Sid Richardson Science Bldg.

****Continued on Page 12****
April D-FW American Chemical Society Meeting

44th Annual “Meeting-in-Miniature”

Saturday, April 16, 2011

TARLETON STATE UNIVERSITY SCIENCE BUILDING
STEPHENVILLE, TEXAS

Categories: Undergraduate Students and Graduate Students

Format: 10-15 min. talks

Abstract Deadline: Friday, April 1. Send abstracts (200 words or less) to Dr. Linda Schultz - schultz@tarleton.edu For further details, please check http://acsdfw.org/meetings/201104_meeting.php

Lunch: Free to speakers and sponsors; $5 to others. Menu is salad, spaghetti, bread, tea, and cookies

Special Events: We have arranged a tour of the new $11.1 million Southwest Regional Dairy Center and a Planetarium Show free for meeting participants.

How to Get There: From Fort Worth, follow US 377 south through Granbury to Stephenville or follow I-20 west to US 281, turn left, continue to intersection with US 377 in Stephenville. Follow 377 Business (W. Washington) south through town to TSU campus. Turn right on Lillian St. (next light past McDonalds). Proceed to the next intersection (Vanderbilt St.) and the Science Building (dome on corner) will be on the corner ahead to your left. Continue to the next street (Jones St.) and parking will be available to your right. From Dallas, either go through Ft. Worth or follow US 67 south to intersection with US 377 (South Loop). Turn left and proceed to light at Lillian St. Turn right on Lillian and follow previous instructions to Science Building.
****Continued from Page 10****


**UT-Southwestern Biological Chemistry.** April 19, Dionicio Siegel, UT-Austin, “Synthesis and Study of Regenerative Natural Products.” April 26, John A Porco, Jr., Boston University, TBA. Seminars are normally at 12 noon in Room L4.162 Biochemistry.