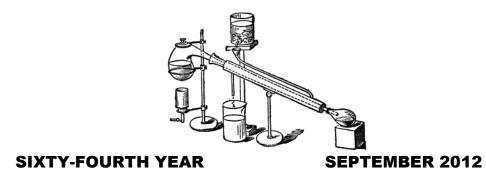


SOUTHWEST RETORT



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 Region.

Vol. 65(1) SEPTEMBER 2012

Editorial and Business Offices:

Editor: Connie Hendrickson, 802 South Jefferson, Irving, TX 75060;

972-786-4249; <u>retort@acsdfw.org</u>

Copy Editor: Mike Vance: <u>vance2276@gmail.com</u>

Business Manager: Kirby Drake, 9715 Dartridge, Dallas, Texas, 75238-1827;

214-553-9810; kbdrake2000@yahoo.com

The Southwest Retort 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. Contact the Editor for subscription and advertisement information.

TABLE OF CONTENTS



Contact the DFW Section

General: info@acsdfw.org

Education: ncw@acsdfw.org

Elections:

canddates@acsdfw.org

Twitter: acsdfw

| Fifty Years Ago4 |
|---------------------------------------|
| ARTICLES and COLUMNS |
| Interview with Sandy Dasgupta6 |
| And Another Thing9 |
| Microgreens11 |
| Five Questions20 |
| From the Editor21 |
| AROUND-THE-AREA13-15 |
| Employment Listings3 |
| SPECIAL SECTION: |
| CHEMDEMODFW |
| DFW SECTION17 |
| National Chemistry Week |
| September meeting news |
| October meeting TBA |
| OTHER MEETINGS |
| DFW-CHEM10 |
| iPad Workshop19 |
| CAST 201219 |
| INDEX OF ADVERTISERS |
| ANA-LAB5 |

SPONSOR MEMBERS

OXYCHEM

HALLIBURTON

TEXAS EASTMAN

Huffman Laboratories......3

Sponsor Members.....2

EMPLOYMENT CLEARING HOUSE

Job applicants should send name, email, and phone, along with type of position and geographical area desired; employers may contact job applicants directly. If you have an opening, send your listing, including contact info for your company, to retort@acsdfw.org. Deadlines are the 7th of each month.

Positions Available:



PhD Researcher at UNT Health Science Center on Alzheimer's disease. Details at the following link: www.unthscjobs.com/applicants/Central?guickFind=55507

Positions Wanted:



Need someone to proofread/copy-edit your next paper, grant, or presentation? Let an experienced proofreader and Ph.D. chemist do it for you! I have a strong grasp of English grammar and scientific writing and can condense text without losing the underlying meaning. Competitive rates! Contact Mike Vance at vance2276@gmail.com or 408-786-7451.



Dynamic research scientist with PhD in chemistry is seeking for academic or industrial career opportunity.: extensive experience in academia and industry specializing in organic, peptide and analytical chemistry, Visit linkedin account (www.linkedin.com/pub/eunice-murage/15/a5a/ba) and/or contact me for a copy of my resume.

Email mureun@gmail.com or by phone 214-923-9256.

Recent double masters (organic and analytical) graduate of Texas Woman's University actively seeking job in chemical industries. experienced in methods development, and analysis using chromatographic and spectroscopic techniques. Excellent management and organization skills, laboratory instruments

maintenance and troubleshooting. **Shylajadharanipathi@gmail.com** or call 512-925-8312.

Elemental Analysis

CHNOS Ash
ICP · AA · ICP/MS
TOC · TOX · BTU
Problem Solving

HUFFMAN

LABORATORIES, INC. Quality Analytical Services Since 1936

Phone: (303) 278-4455 FAX: (303) 278-7012 chemistry@huffmanlabs.com www.huffmanlabs.com

FIFTY YEARS AGO IN THE SOUTHWEST RETORT

September 1962

Dallas will host the 18th Southwest Regional ACS Meeting Dec. 6-8. General Chair for the meeting is Dr. Ray Sangster. Dr. Rowland **E. Johnson** of TI is the Vice Chair. Those serving as Division Chairs are as follows: Biomedical Chemistry, Dr. R. J. Speer, Wadley Research Institute: Chemical Education, Dr. J. J. Banewicz, SMU; Polymerization Chemistry, Mr. Eli Perry, Monsanto Chemical Co.; Process Instrumentation, Mr. J. O'Neal, Jr., Shell Oil; Surface Phenomena, Dr. J. W. Whalen, Socony Mobil Field Research Laboratories; Organic Chemistry, Dr. P. E. Blatz, Socony Mobil Field Research Laboratories: Physical Chemistry, Dr. W. H. Watson, TCU; Analytical Chemistry, **Dr. P. F. Kane**, TI; Industrial and Engineering Chemistry, Dr. C. M. Oualline, Jr., TI; and Inorganic Chemistry, Dr. J. J. Lagowski, UT-Austin.

At Texas Woman's University, **Dr. Lyman**Caswell has received a PRF grant for undergraduate research in organic chemistry. **Dr.**Everett C. Hurdis has joined the TWU staff to teach physical chemistry. **Dr. Pauline Berry Mack** has retired as Dean of the College of Household Arts and Sciences to direct the TWU Research Foundation in Household Arts and Sciences.

The Southeastern Texas ACS Section announces its 5th Biennial Symposium on Hydrocarbon Chemistry to be held Feb. 28-Mar. 1, 1963, at the Shamrock-Hilton Hotel in Houston. The invited speakers include: **Dr.** Charles Kemball, Dr. R. L. Burwell, Dr. J. R. McNesby, Dr. R. J. Cvetanivic, Dr. G. S. Hammond, Dr. H. E. Zimmerman, Dr. G. A. Olah, and Dr. K. B. Wiberg.

From the Central Texas ACS Section we learn that several UT-Austin faculty participated in Gordon Conferences over the summer. They were **Dr. F. A. Matsen, Dr. N. Hackerman, Dr. W. Shive, Dr. A. J. Bard,** and **Dr. P. S. Bailey. Dr. Rowland Pettit** gave a lecture at the University of Illinois this summer. **Drs. L. O. Morgan** and **J. J. Lagowski** participated in the 7th International Conference on Coordination Chemistry held in Stockholm.

Research grant renewals were obtained by the following Baylor faculty: NIH, John S. Belew, T. J. Bond, A. G. Pinkus; Air Force Cambridge Research Laboratories, Thomas C. Franklin; American Petroleum Institute, James L. McAtee, Jr. Graduate student Herman C. Custard announced the birth of a second son and third child, Christopher Martin. Professor William B. Smith of TCU lectured at the Summer Science Institute for high school teachers on the topic "The Growth of Theoretical Organic Chemistry and its Meaning for Us." At the same event Professor **Price Truitt** of North Texas State University (now UNT) lectured on "Chemotherapy of Cancer and Related Disorders."

The University of Arkansas added three new faculty: **Dr. R. M. Karras, Dr. B. C. Musgrave, Dr. Richard N. Porter**. **Dr. Arthur Fry** attended the NMR Conference at the University of Florida. **Dr. Samuel Siegel** attended a Gordon Conference on "Catalysis." **Dr. E. S. Amis** has been selected as an ACS tour speaker for this fall.

CONTRIBUTED BY E. THOMAS STROM



ANA-LAB CORPORATION

2600 Dudley Road • P. O. Box 9000 Kilgore, Texas 75663-9000

903-984-0551 • Fax: 903-984-5914

www.ana-lab.com • Email: corp@ana-lab.com

Ana-Lab Corporation is an employee-owned organization which provides superior, innovative and cost effective solutions for clients though 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 Phone / Fax 806-355-3556 Email: panhandlesales@ana-lab.com

Dallas, TX Phone / Fax 972-837-9412 Email: northtex@ana-lab.com

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

Brownsville, TX Phone / Fax 956-831-6437 Email: rgvtex@ana-lab.com Houston, TX Phone / Fax 281-333-9414 Email: gulfcoastsales@ana-lab.com

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

Shreveport, LA Phone / Fax 318-219-9300 Email: arkla@ana-lab.com





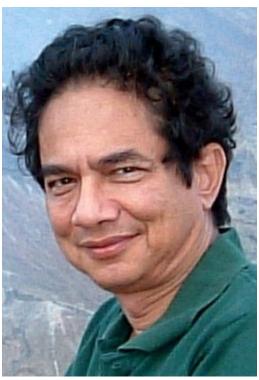




UTA'S DASGUPTA IS 2012 DOHERTY AWARD WINNER

By E. Thomas Strom

This year's Wilfred T. Doherty Award is being given to Purnendu K. (Sandy) Dasgupta, Jenkins Garrett Professor of Analytical Chemistry at the University of Texas at Arlington. Sandy is receiving the 40th such award since the award was started in 1972.



He is the 42nd winner, as on two occasions there were dual winners and one year the award was not given. Sandy will receive his plaque and \$1500 honorarium at the D-FW section's September meeting to be held on Wednesday, Sept. 12, at UT-Arlington. His photo will then be mounted in the Gallery of Doherty Award winners in Berkner Hall at UT-Dallas. The title of his award address is "Reflection on Reflections."

Even though his tenure at UT-Arlington only dates to Jan., 2007, Sandy has a long history in the Southwest. He received his Ph.D. in analytical chemistry from LSU in 1977, and he did post-doctoral work and served as instructor there for another year. After a brief interval in California following, he came to Texas Tech in 1981. He rose rapidly through the ranks, becoming a full professor in just seven years. He was the youngest person at Texas Tech ever to receive the title of Horn Professor. Listing his many honors would take this article to the bottom of the next page, so I will cite just a very few. He received the Institute Medal from the Institute of Industrial Sciences at the University of Tokyo in 1987, the P. A. Traylor Creativity Award in Analytical Sciences from Dow Chemical in 1989, the Outstanding Achievement Award in Ion Chromatography in both 1989 and 1995, the 1990 Faculty Distinguished Research Award from Texas Tech. the A. A. Benedetti-Pichler Memorial Award of the American Microchemical Society in 1998, the ACS Award in Chromatography in 2011, the Stephen Dal Nogare Award in Chromatography given by the Delaware Valley Chromatography Forum in 2012, and now the D-FW ACS Section's highest award. Furthermore, Texas Tech showed no hard feelings about UTA's snatching Sandy away to be its Chair, for in 2009 a lectureship was established in Sandy's

name there as well as a graduate award in analytical chemistry.

Sandy was born in India, and both of his parents were well educated. His maternal grandfather was noted historian S. N. Sen, the first Indian Vice Chancellor of the University of Delhi and only the fourth Indian to receive an honorary doctorate from Cambridge. His father was at heart an engineer, but he became a non-practicing physician and a professor of pharmacy. His father's Ph.D. thesis was chemistry based. Both parents supported his interest in chemistry. When his father built a new house, he had a chemistry lab for Sandy constructed on the second floor---a real lab with sinks, benches, and shelves for chemicals. Because of his father's engineering prowess, Sandy had access to many tools to construct instruments. Some of his early experiments were dangerous. Sandy once blew up part of a playground with his homemade nitroglycerin. When Sandy tried to make artificial silk, he first synthesized copper ammonium sulfate, a necessary reagent for the next step. Fearful of the ammonia evaporating, he put the solution in the refrigerator. However, his mother had previously put the dishes for a evening company meal in the refrigerator. As is true of much Indian food, the dishes contained turmeric, whose vellow color comes from the compound curcumin. It turns out that curcumin is also a great acid/base indicator. When his mother took the dishes out for the company, they were a bright red. His mother came looking for him with blood in her eye, and his father had to intervene to save him.

Sandy's parents had high expectations for him. One year in elementary school he told his mother that he was ranked 5th in his class. His mother gave him to understand that instead he needed to be proud of being ranked 1st in his class. He was promoted one grade twice, so he wound up entering the University of Burdwan, a college founded by Irish missionaries, at age 15. After graduating with a B.Sc. in 1968 and an M.Sc. in inorganic chemistry in 1970, he spent some time as a Senior Research Scholar at the Department of Physical Chemistry at the Indian Association for the Cultivation of Sciences in Calcutta. His mentor there encouraged him to go to the US for further graduate work.

Because of his interest in both electricity and chemistry, Sandy decided to go to graduate school at LSU and work for noted electrochemist Paul Delahay. Regrettably Delahay had to leave LSU for health problems. Sandy worked for his replacement for two years, but this work was unrewarding. He then chose renowned analytical chemist Philip West as his mentor. West was creative and supportive. He came into the lab one day and noticed that Sandy seemed depressed about how an experiment was going. Sandy quotes his efforts to buck him up as follows: "Sandy, many analytical chemists wish they were physical chemists. All physical chemists wish they were mathematicians. All mathematicians wish they were philosophers. And all philosophers wish they were garbage collectors, for then they would get a living wage." I think there is a message there for

all of us; I just wish I knew what it was.

While finishing the work for his Ph.D. in analytical chemistry, given in 1977 with minors in electrical engineering and inorganic chemistry, Sandy also completed a course in Advanced Electronics given by DeVry Institute of Technology, which added to Sandy's already impressive knowledge of instrumentation. After a year of teaching and further research at LSU, Sandy went to UC-Davis for a few years and then started his career at Texas Tech in 1981.

I can see, however, that I have failed to answer the question that all you readers are asking. Why is Sandy called Sandy, when his hair is not remotely sand-colored unless we are thinking of a black sand beach? When Sandy moved to Louisiana for graduate school, his roommate was from South America. He asked Sandy what he should call him. Sandy suggested Purnendu, but his roommate's pronunciation came out Fernandu. The pronunciation of Dasgupta fared equally poorly, so Sandy finally suggested Chandan, which one of his grandparents called him. This name refers to the sandlewood tree, which has a fragrant odor. The roommate somehow morphed Chandan into Sandy. Other acquaintances seized on the name, and so it has stuck.

Sandy served UTA as a dynamic and conscientious Chair on his arrival, but he gave up that position two years ago. He now has over 380 publications, and some of this

work has touched the public at large, *i.e.*, his work on perchlorate in human milk and his analysis of arsenic in the water in Bangladesh. Not being content to just point out the problem in Bangladesh, his group worked out affordable ways of doing arsenic measurements in that underdeveloped country. Recently NSF analyzed 1200 projects to pick out the most excellent ones they had funded. Sandy's work on arsenic in Bangladesh made the list of the top twenty-nine funded during the 2007-2009 time period. Recently the Mars explorer "Curiosity" has made the news headlines. Last year Sandy received a \$1.15 million NASA grant to develop "An ion chromatograph for extraterrestrial explorations." He is to design an ion chromatograph of three kilograms or less to be tested in the Atacama Desert in Chile, with refinement to follow for use on Mars and other extraterrestrial bodies.

In the course of preparing this article, I have pondered what factors have made Sandy so productive AND creative (productivity and creativity unfortunately are not always linked). My conclusion is that it is because Sandy is half engineer. He has the engineer's knack for devising practical solutions and the engineer's ability to construct the instrumentation to carry out those solutions plus the chemist's intuition as to what is truly significant. The top notch analytical chemists use instrumentation to do great things. Sandy constructs new, innovative instrumentation to do even greater things. He is a worthy successor to those 41 previous Doherty Award winners.

...AND ANOTHER THING...

By Denise L. Merkle

Everything's Chemical!

The recent West Nile virus outbreaks and resultant anti-mosquito activities by municipalities revealed so many interesting and divergent points of view, that it is fair to say the situation was a microcosm of societal tolerance for risk, and attitudes toward health, government intervention - and *chemistry*.

Two weeks ago, in an informational meeting about ground spraying and other means of mosquito abatement, an official from a city that will-not-be-named described the materials used in one method as: not chemicals. Not chemicals. It is likely he meant: not synthetic chemicals, however, that's not what he said. As amusing as it was to imagine not-chemical ways to remove mosquitos from storm drains, it was quite a concern that a public official would state that a chemical process did not involve chemicals. Even more upsetting was the idea that telling people something is 'not chemical' was perceived as reassuring. It's startling that we are still at this point. How is it that lay people do not yet know that Everything is Chemical? How do people intend to eat if they will not consume chemicals? Breathing might become challenging, also - and don't look at driving a car!

Why does the general public still believe that *Chemicals Are Bad*? More importantly, why are persons in authority - whose

statements are broadcast and accepted as fact - still free to make such inaccurate claims? One of the missions of the American Chemical Society (with its more than 164,000 members representing all aspects of chemistry and chemical engineering world-wide), is "Improving people's lives through the transforming power of chemistry."* How do we, as chemists, bring others to the idea that the transforming power of chemistry can be - and very often is- a force for good?

What can we, as professionals in the chemical sciences, do? Shrieking, 'That's a silly thing to say!' or 'You don't know what you're talking about!' is unlikely to encourage the recipient to think of chemicals more positively, just as rolling one's eyes and making the Duh face is apt to strongly bias the unenlightened against the chemist and his or her knowledge. Lectures are usually poorly received, as well.

Perhaps, in addition to participating <u>as</u> <u>much as possible</u> in outreach to the schools (which ought to be informing students about chemistry), the community, and government, we should all practice smiling, nodding, and asserting, politely, repeatedly: "Everything's Chemical".

*'About ACS' page of www.acs.org

And Another Thing...is meant to inspire thought and discourse. In no way is it intended to criticize the efforts of those who devote their time and energy to improve others' opportunities.

DFW--CHEM

<u>D</u>allas-<u>F</u>ort <u>W</u>orth <u>C</u>hemistry <u>H</u>igh School <u>E</u>ducators <u>M</u>eeting 2012-2013 Meetings



What? High school chemistry teachers getting together for a share-a-thon

Bring something to share....or not

Time to gather, get and give ideas for teaching various topics

Time to learn and network among peers

Time to talk and exchange teaching strategies

When? August 11th ** Where? Conrad High School, Dallas

September 15th Frisco Centennial High School

October 27th Plano Senior High School

January 26th Creekview High School

March 2nd Hebron High

Time? 9:00 AM Saturday morning for coffee and

donuts

9:30 Sharing starts

??? Sharing ends

** Aug 11th we will start at about 10 am, or whenever you can join us after taking advantage of the office supply stores' teacher appreciation day

No cost

No obligation

Come if you can

Pass the word along

Connect with other chemistry teachers

Sponsored by the Associated Chemistry Teachers of Texas

Contact Karen Compton for more information at karen.compton@pisd.edu

469-752-9000 x 39231

Many trendy "microgreens" are more nutritious than their mature counterparts

The first scientific analysis of nutrient levels in edible microgreens has found that many of those trendy seedlings of green vegetables and herbs have more vitamins and healthful nutrients than their fully grown counterparts. A report on the research appears in J. Ag. Food Chem., 2012, 60(31), pp 7644-7651: Assessment of Vitamin and Carotenoid Concentrations of Emerging Food Products: Edible Microgreens.

Oin Wang, Gene E. Lester and colleagues point out that microgreens have gained popularity as a new culinary trend over the past few years, especially in upscale markets and restaurants. Those seedlings of spinach, lettuce, red cabbage and other veggies are usually 1-3 inches in height and harvested within 14 days of germination. They enhance the color, texture and flavor of salads, soups, sandwiches and other foods. Despite their growing popularity, no scientific information existed on how nutrients in microgreens compare to those in mature plants. To fill that gap, they analyzed vitamins and other phytochemicals in 25 varieties of microgreens.

They found that microgreens generally have higher concentrations of healthful vitamins and carotenoids than their mature counterparts. But they also found wide variations in nutrient levels among the plants tested in the study. Red cabbage microgreens, for instance, had the highest

Vitamin D Vitamin E Vitamin K (µg) Calcium (mg)

concentration of vitamin Vitamin Β₁₂ (μ₂ C, for instance, while Vitamin C (mg) green daikon radish Vitamin A (µg F microgreens had the most vitamin E. Concentrations of vitamins and carotenoids in popcorn shoots and golden pea tendrils were low compared to other

microgreens, but were still as high as some common mature vegetables.

One other notable finding: Exposing microgreens to light tended to change the nutritional content, which is an ongoing research effort led by Dr. Lester and Dr. Wang, and results will be published soon.

ACS Press Room



Around the Area

DFW to host SWRM 2014

Volunteers Needed! As many of you know, the Dallas-Fort Worth Local Section will host the 2014 Southwest Regional Meeting (SWRM 2014). Local sections within the Region typically host SWRM every 10 years. SWRM 2004 was quite successful, and we look forward to maintaining the same high standard. in 2014.

Volunteers will form the backbone of success for SWRM 2014. We are in the planning stages for SWRM 2014, and we need volunteers to serve in a variety of capacities. We are looking for volunteers related to PR, funding, exhibits, as well as program chair. If you would like to organize a symposium or event, that would be great. No effort is too small to make a big contribution.

There will be a planning meeting during the first week of October to discuss the plans, next steps and ways to participate. If you would like to be involved in any way in SWRM 2014, please contact me as soon as possible at swrm@acsdfw.org. More details about the planning meeting will be circulated via email soon.

Participating in a SWRM is a unique and rewarding experience, and I encourage you all to consider how you can play a part! Kirby B. Drake, General Chair SWRM 2014

DFW Section and TCU

The DFW Section was awarded the ACS Chemluminary award for Outstanding Community Involvement in NCW for the 2011 NCW collaboration established with the Fort Worth Museum of Science and History. Sandi Dang (TCU Senior) represented TCU and the DFW section at the recent ACS meeting in Philadelphia to accept the award. Organizations interested



Sandi Dang (center)

in volunteering to participate in National Chemistry Week Activities
October 23-27 with the Fort
Worth Museum of Science and
History should

contact <u>chemistryclub@tcu.edu</u>. A meeting for SAACS members was held earlier this month.



SAACS Meeting

UTD



Ken Balkus

Professor Ken Balkus was chosen to receive the 2012 Presidential Scholars Program's Teacher Recognition Award.

Senior lecturer, Dr. Claudia Taenzler, received the School of Natural Sciences



ClaudianTaenzler (right)

and Mathematics (NS&M)
Outstanding Teacher
Award, and graduate student, **Hien**Nguyen (Professor
Stefan's Group)

received the NS&M Outstanding Teaching Assistant Award for 2011/2012. Graduate students **Babloo Sharma** and **Sriram Yagneswaran** (Professor Smith's Group) have been awarded the 2012 Poly-IUPAC Travel Awards to attend the annual IUPAC World Polymer Congress. **Taewoo Kim** (Professor Baughman's Group) was awarded First Prize, and **Doyun Lee, Emir Hubijar,** and **Grace Jones D. Kalaw** (Professor Ferraris' Group) were awarded Second Prize for their posters at the recently completed 2012 US-Korea Joint Symposium of Nanotechnology Workshop.

TEXAS TECH

Texas Tech closer to Tier One status: Texas Tech University and the University of Houston were confirmed by the state auditor this spring to have met the criteria

for access to the National Research University Fund (NRUF). This is a major milestone in our journey to reaching Tier One status as an Emerging Research University.

Robert Long, formerly Associate Professor at Eastern New Mexico University joined Texas Tech this summer as Associate Director of the department (a new position). Dr. Long's responsibilities include oversight of instructional lab safety, academic support services, HR coordination, and administrative support for the chair. He is also assuming the South Plains local section Chair-elect position vacated by Dr. Christopher Bradley who has moved on to Mount St. Mary's University in the DC area.

SMU

Dr. **Ed Biehl** of SMU has been elected to receive the Kametani Award for the year



2012. This is awarded for outstanding achievements in

Heterocyclic Chemistry and valuable contribution

Ed Biehl

to Heterocycles since

1986. The Kametani Award was founded by the Heterocycles Nomination Committee in 1999. The Kametani Award is presented to the elected Chemist on a yearly basis in the memory of the founder of Heterocycles, which is sponsored by The Japan Institute of Heterocyclic Chemistry and Elsevier.

UNT

Alesha Harris, a fifth-year graduate student working in Dr. Rob Petros' lab, won an Outstanding Young Scholar Award (sponsored by ACS Publications, ACS Nano, and Nano Letters) for an oral presentation of her work titled "Synthesis and Characterization of Copper Releasing Polymer Nanoparticles," presented in the Future Scientists Forum at the 6th International Conference on Nanotoxicology (Nanotoxicology 2012) held in Beijing, China, Sept. 5-7, 2012.

The Center for Advanced Scientific Computing and Modeling (CASCaM) at the University of North Texas is hosting a symposium celebration honoring Dr. Paul **Bagus** on October 22 and 23. Guest speakers will be Dr. Ria Broer, University of Groningen, The Netherlands; Dr. Bill Goddard, Cal Tech; Dr. Richard Martin, Los Alamos National Labs; and Dr. Jerry Whitten, North Carolina State Additional information will be forthcoming on our website (http://cascam.unt.edu/). If you are interested in attending, please contact Shawn Adams, shawn@unt.edu or 940-565-4372, for more information.

This fall 2012, Dr. **Wes Borden** will be on sabbatical at the Institute for Fundamental Chemistry in Kyoto, Japan. From mid-October to mid-December, he will be supported by a

fellowship from the Japan Society for Promotion of Science. In early October, he will travel to China to give lectures in Suzhou, Nanjing, and at the Eli Lilly Symposium in Organic Chemistry at Beijing University.

Dr. **Diana Mason** retires after teaching chemistry for over 30 years. Dr. Mason started her professional teaching career as an Education Coordinator in 1978 in the cytotechnology program at Southwestern Medical School. With her MS in zoology from Texas A&M University Commerce in hand, in 1980 she began teaching chemistry and algebra at Jesuit College Preparatory School in Dallas. After 10 years at Jesuit, she left to pursue her PhD at The University of Texas at Austin while continuing to teach chemistry at Austin



Community College. Her first tenure-track position came in 1995 at The University of Texas at San Antonio where she taught courses in interdisciplinary studies for the College of

<u>Diana Mason</u> Education and chemistry. In 2001 she accepted the first Chemical Education position in Texas at the University of North Texas, where she continued until she retired on August 31, 2012. Even though she has left the formal classroom, she intends to continue working with teachers doing professional development workshops, teaching online courses, and writing an e-book for high school chemistry that links basic chemistry with the storied facts, fiction, and folklore of Texas.

Dr. **Angela Wilson** presented a talk titled "From Career Inception to Career

Progression: Turning
Obstacles into
Opportunities" during the
244th ACS National
Meeting & Exposition in
Philadelphia, PA, August
19-23. Also during the



Angela Wilson

conference, Dr. Wilson, along with members of her research group, Dr. Wanyi Jiang, Andrew Mahler and Amanda Riojas, presented a research presentation titled "Multiscale Modeling on the Miniscale: Successful Strategies in Combining Methods."

UTA



Brad Pierce

Dr. **Brad Pierce** recently received a \$300K NSF award under the division of chemistry for a proposal titled, "Mechanistic and spectroscopic investigation of sulfur-oxidizing nonheme iron enzymes."

Enzymes involved in sulfur oxidation are increasingy being recognized as potential drug targets for development of antimicrobials and therapies for cancer and inflammatory diseases such as arthritis.

Dr. **Kevin Shug** will attend the 19th International Mass Spectrometry Conference (http://www.imsc2012.jp/) will be held in Kyoto, Japan, from September 15-21, 2012. During the conference, he will be presenting a poster on "Characterization of mosquito

cuticular lipids for age, species, and sex discrimination by MALDI-IT-TOF-MS." He will also be a feature speaker at a Shimadzu User Day, where he will give a talk entitled, "Biological Profiling: Complementary Qualitative and Quantitative Analysis using Ultra Fast Mass Spectrometry." Dr. Schug attended the Philadelphia ACS meeting in August, where he presented three papers. His graduate student **Kenneth Abayan** also presented a poster there. Ken attended the Biennial Conference on Chemical Education at Penn State, where he presented a poster.

Dr. E. Thomas Strom gave an oral presentation before the History Division at the Philadelphia ACS meeting. Dr. Peter Kroll was Visiting Professor at the University Pierre and Marie Curie, one of the Sorbonne Universities, and he also spent part of the summer at the Laboratoire de Chemie de las Matiere Condensee de Paris at the College de France, working with Prof. Christel Gervais and her group on NMR spectra of disordered hydroxyapatite bioceramics.

Diversity in Science in the United States (DISCUS), an NSF-funded educational outreach and pedagogical development program for K-12 science at UT-Arlington, will run a booth at the 2012 Texas State Fair Sept. 28-Oct.

8. The booth will feature a wide variety of stimulating science demonstrations, as well as take-home experiments for K-12 students. Please stop by the DISCUS booth at the State Fair to say hello.

If you send a news item or contribution to the RETORT and do not receive an acknowledgement, we didn't get it! This sometimes happens, with attachments and with simple messages. In such case, just send it again.

Remember, the Retort is on issuu.com. One good thing about issuu.com is that you can subscribe to your publication; if you put in your email (right next to the Retort on the site), you will automatically get the Retort when we post it. (In order to subscribe, download, or print, you need to register with issuu.com; it's free and you can opt out of extraneous emails.) The Retort is still and always will be available on the DFW section's website acsdfw.org. On that site, under SW Retort, you can access a pdf (just click on the name of the month), a flip-page PC version, and a flip-page MAC version, all of which are downloadable and printable.

Your Name Here!

Ads in the Southwest

RETORT

Advertise your company or organization

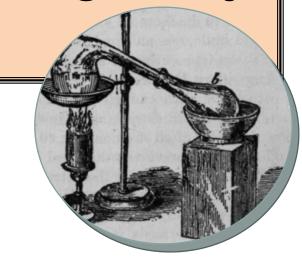
Promote a meeting, event or conference

Post your skills or list an available job

Congratulate a colleague

Full color: business card size to full page, one time insertion or repeating Reasonably priced

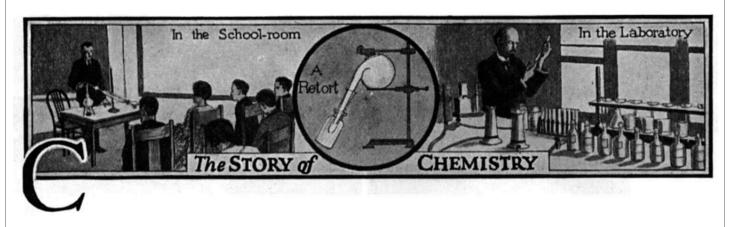
retort@acsdfw.org



DFW Section NEWS

National Chemistry Week Activities

National Chemistry Week Activities October 23-27 will be held with the Fort Worth Museum of Science and History in collaboration with the TCU students. Details will be emailed later this month. All parties and organizations interested in volunteering to participate should contact chemistryclub@tcu.edu.



September Meeting: The members present at the September 13 meeting voted on the proposed bylaws change [from paper ballot to electronic voting]. The results were 50 votes YES, 0 votes NO. The proposed bylaws will thus be changed in accordance with the procedures provided by National CCB. The Secretary of the section will notify the National CCB with the results of the election, and within a short time, the bylaws will be officially adopted. Thanks to all who attended and voted. Trish Smith, Secretary of the DFW Section.

October Meeting: to be announced by email



Attention Chemistry Clubs and Student Affiliates

CONTEST!

The DFW Section needs a logo and a slogan of its own, so the section is sponsoring ...with prizes!...a contest for each.

Submit entries to

retort@acsdfw.org

as pdf or jpeg for logo and word format for the slogan.

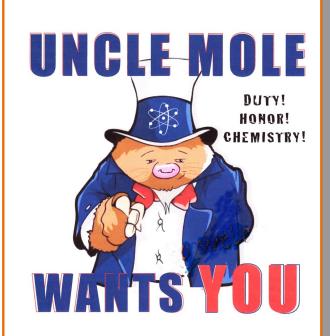
\$100 prize for each!

Deadline November 1
Winners will be announced in the November RETORT.

NOTE:

May not incorporate or resemble any part of the national logo or slogan.

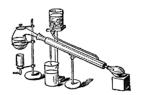




to send your articles, news items, and opinion pieces to the Southwest

RETORT!

retort@acsdfw.org



iPad Workshop

University of North Texas, CHEM 235

October 12 (8 AM – 5 PM, lunch included)

If education is the currency of the 21st Century, technology will provide the power needed to support the classroom. Dr. Bob Shelton, Austin Peay State University, will present a hands-on workshop designed to equip chemical educators with practical activities and logistical training needed to incorporate iPads into your curriculum. During this workshop, participants will gain experience using the iPads, gain familiarity with general chemistry classroom/lab activities, learn about logistics related to implementation, and develop new activities for the future. Deadline for registration (\$40) is October 1. Make checks payable to G.R. Shelton and mail your check to Dr. Diana Mason, 1155 Union Circle #305070, University of North Texas, Department of Chemistry, Denton, TX 76203-5017. For questions contact: Dr. Diana Mason, drdiana@alumni.utexas.net or Dr. Bob Shelton, grshelton@apsu.edu. Space is limited. Best parking location is in the Union Circle Garage on Welch Street for \$10 (http://www.unt.edu/transit/pdf/12-13 Campus Map.pdf).

Conference for the Advancement of Science Teaching (CAST 2012)

Get Your Geek On!

November 8-10, 2012

Corpus Christi, Texas

ACT2 Presents: Titles for CAST 2012 (several are offered more than once)

ACT2 Presents: Stoichiometry Stampede

ACT2 Presents: Energy, Enthalpy, and Entropy - So easy a tenth grader can do it

ACT2 Presents: Challenge and Success with RtI in Chemistry Using Stations

ACT2 Presents: IT'S A GAS!!!

ACT2 Presents: ACS Ultimate Chemistry Teacher Resources

ACT2 Presents: Chemistry in the Community: Changing with the Times

ACT2 presents: A Demo A Week Makes Science Class Peak

ACT2 presents: Using Manipulatives to Create Deep Connection and Improve Retention with

Chemistry and Biology

ACT2 Presents: Engaging Students Outside the Classroom with ChemClub

ACT2 Presents: The Name is Bond, Covalent Bond

ACT2 Presents: Write Your Way to Success: Grant Writing Strategies for You and Your

Chemistry Students

ACT2 Presents: Visualizing Chemistry

ACT2 Presents: Get Past the s, p, d, f phobia

ACT2 Presents: A Successful Stoichiometry Unit and How to Get There From Day One

FIVE QUESTIONS FOR...

Our September volunteer is Moji Bonakdar, Ph.D., who is Head of - Analytical Chemistry Group, Research and Development at Alcon Labs in Fort Worth

ACS Activity: Member and Chair-Elect 2012 (Chair 2013), DFW Local Section

1) How old were you when you realized you wanted to be a scientist?

16 years old

2) What event first triggered your interest in science?

I was a swimmer in a country club and I was fascinated with water purification system was built for the pool. It was built by a French company back in Teheran. This was an Olympic size pool. I was watching the supervisor checking the chlorine level, pH and cleaning the filters. He cleaned all the filters soaking them in a small pool by purging chlorine gas in the pool. All filters turned real white. He did not know why; he just knew it works. Then I read about role of chlorine and the chemistry of water.

3) What aspects of your education best prepared you for the role you have now?

Both my undergraduate and graduate research programs

4) Is there something you wish you'd studied, but didn't? And how did you learn what you needed to know?

I wanted to be a pilot. But, my parents did not agree with it. I was lucky I had 3 of my older brothers in college or graduated from college and they had got good jobs. There was always discussion about different topics in our home (i.e., economy, science and agriculture). One of my brothers was president of a corporation at age of 28, one was faculty at a university, and another one was getting an undergraduate degree. My dad's training was in agriculture and I learned how to grow roses and fruit trees and use chemicals to treat bugs.

5) Who is your science hero, and why?

Dr. Jack Robinson. He was my undergraduate research advisor. He was very kind, all inclusive and helped everyone, a great teacher and a great scientist. Overall, I consider him a great human being. Stephen William Hawking, is a



British theoretical physicist, cosmologist, and author. I have read few of his books. The *Grand Design* was my favorite. He is a fascinating

individual.

Thank you, Dr. Bonakdar, for your interesting remarks! To volunteer to be interviewed, e-mail to retort@acsdfw.org.

From the editor

My mother made the most wonderful cookies...pinwheels, ginger snaps, scones, chewy fruitcake cookies, iced, sugared, you name it. My favorites were the pinwheels with the colored stripes flavored as the color (green...mint, etc.). Teachers, my dad's coworkers, church friends...people always put in special requests for Mama's cookies. When I had children of my own, I was totally deficient in this regard; I always sent oreos or fig newtons. Subconsciously I think I always felt that I was letting them down. When my son was in kindergarten, I put together a chemical demonstration for that age group—a chem magic show, and performed it for his class. As we left the school that day, I looked over at him and said, a little hesitantly, "How was it, Dave?" He leaned back in the seat and gave out a big sigh, and said "Oh Mama, it was wunnerful." I realized then that everybody makes cookies in a different way, and the magic shows were mine. Over the next 10 years, I did many shows at different grade levels and at various schools. When the kids were in high school, I gradually stopped, but for years, at the school, students would come up to me and say, "I remember the magic shows." In 1989, I put together a booklet of chemical demonstrations especially geared for the elementary grades, and it was published by the DFW Section. I have reformatted it and included it as a publication on issuu.com:

CHEMDEMODFW

If you think the RETORT looks different, you're right, it does. Over the summer, we switched to using Microsoft Publisher, and I am not yet totally conversant with all the fancy ins and outs of the software...but I'm getting there.

(onvie

Best regards,

