JANUARY D-FW ACS MEETING UNIVERSITY OF TEXAS AT ARLINGTON TUESDAY, JANUARY 23, 2007

"SALUTES TO EXCELLENCE" AWARDS

Program Will Feature Introductions of, and Remarks by, Awardees:

William Watson of TCU, Sr. Cecilia Sehr of Bishop Lynch High School, and Donald Woessner of Mobil Corp. Topic: Reminiscences and Recollections

Also to be honored are 50 year ACS members Donald Day, B. George Hurd, Manfred Reinecke, Tommy Tolbert, and John Zimmerman

Social Hour, 6:00-6:45 p.m. Planetarium Lobby, Chem and Phys Bldg. Sponsored by Ricca Chemical Co.

Planetarium Show, 6:45 -7:15 p.m., Planetarium, Chemistry and Physics Bldg. Dinner, 7:15 -8:15 p.m., Carlisle Room, Hereford University Center

Presentations, 8:15 – 9:15 p.m., Carlisle Room, Hereford University Center. **Dinner reservations are not necessary to attend the presentations.**

Optional Tour of the New UTA Chemistry and Physics Bldg. after Presentations **Reservations.** Contact Ruth Handley at UT-Arlington by noon on Thursday, Jan. 18: Metro 817-272-3171 or handley@uta.edu. Dinner costs \$15 and is grilled chicken with Chardonnay cream sauce, herb roasted new potatoes, green beans, rolls and butter, double chocolate cake, coffee, and tea.

How to Get There. From either Interstate 20 or 30, take the Cooper exit and travel either north (Interstate 20) or south (Interstate 30) on Cooper to the University. From either direction, turn east at the light at Mitchell. Mitchell is at the far west end of the campus, just north of the huge student parking lot at Mitchell and Cooper. Go one block on Mitchell to the light at West St. and turn left. Go about half a block and turn left into the faculty-staff parking lot at Nedderman and West. After parking in the lot, cross Nedderman at the crosswalk about the center of the lot and continue walking north. The first building on your right is the Life Sciences Bldg. followed by the Library. Just past the library is Science Hall on your left connected by a bridge to the Baker Chemistry Research Building. Turn right just before the Chemistry Research Building and continue to the new Chemistry and Physics Bldg. on your left, connected by a bridge to the Chemistry Research Building. Enter the building in the center by the planetarium. The Hereford University Center is slightly to the east of the Chemistry and Physics Building and one layer of buildings further north. If parking is full in the faculty-staff lot, there is a parking garage on West St. one half block north of Nedderman. Parking is also available in the student lot at Mitchell and Cooper. From that lot, there is a bridge over Mitchell that can be crossed to the faculty-staff lot, after which you can follow the above directions.

February Meeting: Thursday, Feb.15 Bill Carroll "From Garbage to Stuff"

Interview with Dr. Catherine T. Hunt ACS President Elect.....p. 5



TABLE OF CONTENTS

50 Years Ago	2
Katy Hunt Talks with Tom Strom	5
Chem Gems & Joules	9
Around-the-Area	11
U of Arkansas/Brewer Honored	11
East Texas	11
South Plains/Liu Wins Award	11
Heart o' Texas	12
Wichita-Falls/Duncan	12
DFW	12
Salutes to Excellence	12
Fifty-year Members to be Honored	13
Doherty & Schulz Nominations Needed.	13
Metroplex Seminar Schedule	14
Retort Holiday Schedule	15
D-FW Section January Meeting	16
· ·	

INDEX OF ADVERTISERS

American Polymer Standards Corp	9
ANA-LAB	4
Chemir	9
Huffman Laboratories	3
Kelly Scientific Resources	14
Kforce	8
University of Texas at Dallas	10
Sponsor Members	3
Texas A&M University-Commerce	15

PERIODICAL

Fifty Years Ago in the Southwest Retort

The ACS tour speaker in the Southwest in January will be **Dr. Clair J. Collins** of Oak Ridge National Laboratory. His topics will be "Carbon-14 and the Pinacol Rearrangement" and "Carbon-14 and Organic Chemistry."

The Southeastern ACS Section (now Greater Houston) has explored the possibility of producing its own local section newsletter, but concluded that The Southwest Retort was doing an adequate job of serving the section. The section is now up to 1158 paid members. Sam Hastings of Humble Oil presented a paper at the Gulf Coast Spectroscopy Group meeting held in New Orleans. His coauthor was Frank H. Field. Prof. L. P. Hammett of Columbia University visited Shell Oil to conduct a general seminar and group discussions on physical organic chemistry.

In news from D-FW, two new faculty members have been added to the TCU staff. Mrs. Dorothy Hines Grinson, a recent MA graduate from TCU, is serving as instructor. Also new is Professor Joe E. Hodgkins. He received his Ph.D. from Rice and previously worked at DuPont in Wilmington.

Some 10,000 people attended the Open House held by Southwest Research Institute in San Antonio. The Institute has recently developed a thin chemical film that reduces water evaporation by as much as 45%.

Dr. Paul D. Bartlett spoke at the South Texas ACS Section meeting

held in the conference room of Columbia-Southern on Nov. 12.

The Texas A&M ACS Student Affiliate chapter hosted **Dr. Preston Brandt** of American Oil Company, speaking on "What Industry Expects of the Technical Graduate." The department is now applying to have a local chapter of Phi Lambda Upsilon.

The Baylor ACS Student Affiliate Chapter had two interesting talks recently. On Oct. 18 James Davenport spoke on "The Mercuration of Aromatic Compounds." New Baylor faculty member John S. Belew spoke on "The Chemistry of Ozone." The Phillips Petroleum Fellowship in the field of catalytic hydrogenation has been awarded to graduate student Don McClelland, who will work in this area under the direction of **Dr**. Thomas C. Franklin. A fellowship in sulfur chemistry from Texas Gulf Sulfur Co. has been awarded to June Kim, who will work in the area under the direction of Dr. A. G. Pinkus. Baylor was awarded \$5000 to be used for fellowships from Eastman Kodak Co. on behalf of three of its employees who received their education at Baylor.

At the University of Arkansas a revised edition has just appeared of the book "The Atom at Work" by **Dr. Jacob Sacks**. About half of the faculty will be attending the Southwide ACS Regional Meeting in Memphis. Papers will be presented authored by Professors **A. E.** ******Continued on Page 15******

Continued on Page 15"

Southwest Retort

You are receiving this magazine in January rather than December. Our printers, Minuteman Press, are taking a well-deserved break between Christmas and New Year's Day. D-FW readers will still receive the magazine in ample time to make reservations for our biennial "Salutes to Excellence" meeting on Tuesday, Jan. 23rd. Also, don't forget the February meeting on Thursday, Feb. 15, featuring our own Bill Carroll speaking on "From Garbage to Stuff: How We Recycle Plastics." Remember that you can always access the Section's meeting notices on the Section website separate from our magazine, and that the magazine in full will also be posted on the website. We wish all our readers a joyous holiday season!

*****Continued from Page 8***** candidates should be vetted in front of Council.

ETS: Is there something you would like to communicate to our readers that I haven't been able to cover in my questions?

Hunt: I do want to reemphasize the importance of the grass roots efforts. The members need to reflect on what do we want ACS to do for us. Also, how can we reach out to the general public, the teachers, the press, or the legislators to talk about chemistry?

ETS: One more thing, why did you go into chemistry?

Hunt: My dad was a chemist. I was the only one of his seven children who followed him into chemistry. Chemistry was the bond we shared. He died 19 years ago, and I so regret he never lived to see me as ACS President.

ETS: Thanks you so much for taking the time from your busy schedule to communicate with the readers of *The Southwest Retort*. I know our readers will appreciate being able to learn about your plans for our Society.

Continued from Page 2 Harvey, R. F. Kruh, E. S. Amis, A. J. Fry, and T. C. Hoering. Dr Kruh and Dr. P. C. Sharrah from Physics have been awarded an AEC contract to study liquid structure by x-ray diffraction.



There are three kinds of men: the ones that learn by reading, the few who learn by observation, and the

rest of them who have to touch the electric fence and find out for themselves. – Will Rogers

Texas A&M University-Commerce Quality Chemistry The advantages of a small college at a major regional university www.tamu-commerce.edu

UT-Arlington. Tellez New Undergraduate Lab Coordinator. The new Undergraduate Lab Coordinator is Mrs. Jennifer Tellez. succeeding Mrs. Shelley Hampe who resigned to spend more time with her family. Jennifer is a graduate of Southern Illinois University. She started as an electrical engineering major, but, inspired by a fine chemistry teacher, Dr. William Fairless, switched to a chemistry major with emphasis on forensic chemistry. After graduation, she worked as Lab Manager for SGS in Virginia, doing testing and analytical services. She then began graduate work at TCU, where she obtained an M.S. degree in organic chemistry. Her husband Stephen is an insurance adjuster. Her hobbies include remodeling and racquet ball.

<u>UT-Dallas</u>. <u>Gnade Named</u> <u>Research VP</u>. Dr. Bruce E. Gnade, a faculty member in both the chemistry and electrical engineering departments, has been named Vice President for Research and Economic Development.

NOVEMBER METROPLEX SEMINAR SCHEDULE

Seminar schedules for Spring semester are still being worked out. Here are the ones for which we have information. *Call the department or check departmental websites before attending.*

<u>UT-Arlington</u>. Jan. 19, David Dearden, Brigham Young University, "Supramolecular Chemistry in the Gas Phase: From Crown Ether Complexes to Cucurbituril-based Supramolecules." **Jan. 26**, Chris Ireland, University of Utah, "Chemistry and Mechanism of Action of Marine Natural Product Antitumor Agents." Seminars are normally at 2:30 p.m. in Room 114, Baker Chemical Research Building.

UT-Southwestern **Biochemistry.** Jan. 11, Margaret Phillips, UT-Southwestern, "Regulation and Function of Polyamine Biosynthesis in the Trypanosome." Jan. 18, Milan Mrksich, University of Chicago, "From Three Dimensions to Two: Chemistry and Biology at Surfaces." Jan. 25, Chris Garcia, Stanford Medical School. "New Structural Insights into the Recognition and Activation of Shared Receptors for Neurotrophins and Cytokines." Seminars are normally at noon in Room L4.176, Biochemistry.

UT-Southwestern Biological Chemistry. Jan. 9, Karl Hansen, Merck, TBA. Jan. 30, John Montgomery, University of Michian, "New Directions in Metal-Catalyzed Bond Constructions." Seminars are normally at 6:30 p.m. in Room L4.162, Biochemistry.





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. 59 December, 2006 No. 4

Editorial and Business Offices:

Editor: E. Thomas Strom, 1134 Medalist Dr., Dallas, TX 75232, 214-376-9602; FAX 817-272-3808; tomstrom@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; kdrake@fulbright.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.

Sponsor Members

Alcon Laboratories

Halliburton Energy Services

OxyChem

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

HUFFMAN LABORATORIES, INC. Cuality Analytical Services Since 1936 Phone: (303) 278-4455 FAX: (303) 278-7012 chemistry@huffmanlabs.com www.huffmanlabs.com

!!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

www.utdallas.edu/dept/chemistry/acs



Kilgore, Texas 75663-9000 (903) 984-0551 • Fax: (903) 984-5914 www.ana-lab.com • Email: corp@ana-lab.com

Ana-Lab Corporation 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

(806) 355-3556 • Fax (806) 355-3773 Email: panhandle@ana-lab.com

Arlington, TX (817) 261-6404 • Fax (817) 261-7115 Email: northtex@ana-lab.com

Austin, TX (512) 821-0045 • Fax (512) 821-0237 Email: centex@ana-lab.com

Brownsville, TX (956) 831-6437 • Fax (956) 831-6438 Email: rgvtex@ana-lab.com



ACII

Houston, TX

(281) 333-9414 • Fax (281) 333-9614 Email: gulfcoast@ana-lab.com

Norman, OK (405) 292-6630 • Fax (405) 292-3676 Email: oklahoma@ana-lab.com

Shreveport, LA (318) 219-9300 • Fax (318) 219-8300 Email: arkla@ana-lab.com

Huntsville, AL (256) 830-0788 • Fax (256) 830-0784 Email: alabama@ana-lab.com



Southwest Retort

awards in the Dallas Regional Science Fair for many years. In 2002 one of her students won grand prize at the Dallas Regional Science Fair, 2nd prize at the State Science Fair, and 2nd prize at the International Science Fair. While working fulltime at Bishop Lynch, she completed an Ed.D program at Texas A&M-Commerce. In 2003 she was the winner of the D-FW Schulz Award for outstanding high school chemistry teaching. She is an ex-officio member of the Section's Executive Committee. Don Woessner



joined Mobil in Dallas in 1958 after receiving his Ph.D. from the University of Illinois. He worked in the area of nmr, becoming a world authority in the area of nmr

relaxation. Two of his papers on that topic in *The Journal of Chemical Physics* were considered to be Science Citation Classics by The Institute for Scientific Information. He won the 3rd Doherty Award given by the Section, and he is one of only three chemists from the D-FW Section to have won the ACS Southwest Regional Award.

After he retired from Mobil, he became Adjunct Professor at the Rogers Magnetic Resonance Center at UT-Southwestern, where he still carries on nmr research. He is also a past treasurer and chair of the D-FW ACS Section.

D-FW ACS 50 Year Members to be Honored on Jan. 23. The Salutes to Excellence meeting will also honor our new ACS 50 year members. We hope that all of them will be able to attend. They are Mr. Donald Gaylord Day, Mr. Billy George Hurd, Dr. Manfred Gordon Reinecke, Dr. Tommy Lyle Tolbert, and Dr. John R. Zimmerman.

Nominations Still Needed for Doherty, Schulz Awards. Awards Chair Dr. David Son has informed us that he has not yet received any new nominations for the Doherty and Schulz Awards. The due date for both is Feb. 12, 2007. David would also welcome nomination submissions via e-mail. Forms may be obtained from the Section's website. Details about the awards were given in the October (Doherty) and November (Schulz) issues of The Retort. David's address is Department of Chemistry, Southern Methodist University, P. O. Box 750314. Dallas. TX 75275-0314. His e-mail address is dson@mail.smu .edu. It is necessary for ACS members and high school teachers to nominate outstanding individuals to maintain the stature of these awards!

UNT. Dr. Diana Mason is the Director of the Ft. Worth Regional Science Fair that will be held at UNT Mar. 4-6, 2007. Dr. Mason gave a seminar on "Current Issues in Teaching General Chemistry" at Southeastern Louisiana University. She also gave three talks at SWRM in Houston. The Mean Green Demo team gave demos in the Hall of State during the State Fair of Texas on Sept. 28 and Oct. 15. Another demo, "Everything is Built on Chemistry" was on Oct. 25 at The Science Place. The team will also be performing in Denver, CO on Jan. 11, 2007 for the Society of Hispanic Engineers.

Jing Wang, Hui Zhou and Yanfei Yang.

Heart o' Texas

Baylor University. Baylor has its very own ACS Student Affiliate Chapter of 35 enthusiasts who get interactive with chemistry. Nine of these undergraduates participated in SWRM 2006 in Houston, and a Magic Show was performed by the group for several audiences at the Mayborn Museum. The faculty advisor is Darrin Bellert. and the officers are: Tim Nguven. President: Jerry Choate, Vice President; An Nguyen, Secretary; Beth Hayes, Treasurer; and Marie Ally, Public Relations Chair. The ACS Student Affiliate Chapter is developing strongly and successfully with each new task that the members take on and accomplish.

Wichita Falls/Duncan

The new officers for the Section for 2007 as as follows: Chair. Dr. Randall Hallford, Midwestern State University; Chair-Elect, Dr. J. Shao, State Midwestern University; Secretary. Dr. P. K. Das. Cameron University: Treasurer. Dr. Chris Hansen. Midwestern State University: Councilor, Dr. Keith Vitense, Cameron University; and Alternate Councilor, Mr. Tom **Dealy**, Halliburton Energy Services.

Dallas-Fort Worth

Salutes to Excellence. Watson, Sehr. and Woessner to he Honored. The most recent of our biennial "Salutes to Excellence"

programs will be held on Tuesday, Jan. 23, at UTA. This program honors long-time members of the D-FW Section with significant accomplishments in academic research, chemical education, and industrial research. The honorees are **Professor** William Watson, retired from TCU in Fort Worth, Sr. Cecilia Sehr from Bishop Lynch High School in Dallas, and Dr. Donald Woessner, retired from Mobil in Farmers Branch.

Bill Watson came to TCU in 1957. The chemistry department had



only three faculty members at the time. However, the University later initiated what was the first Ph.D. program in chemistry in the D-FW Metroplex. Physical

chemist Watson became a renowned crystallographer and received many honors. He was an early winner of the Section's Doherty Award, the Chancellor's Award from TCU, an International Faculty Award from PRF, and a DAAD Fellowship from Germany. He published almost 500 papers and received 49 years continual support from the Welch Foundation. He has served the D-FW Section as Chair, and the Doherty Award was initiated while he was Chair. Although retired and living in Santa Fe, he still comes to TCU to do

x-ray crystallography. Cecilia Sr. Sehr has been at Bishop Lvnch High School for 24 years. Her students have won distinguish-ed

achievement



Southwest



FIFTY-NINTH YEAR

DECEMBER 2006

AN INTERVIEW WITH ACS INCOMING PRESIDENT DR. CATHERINE T. HUNT Interviewer E. Thomas Strom

Editor's Foreword. We have been fortunate in obtaining in-depth interviews with our ACS presidents over the last few years, and this year is no exception. Dr. Catherine (Katy) Hunt graciously took time from her busy schedule to give me an interview on Sept. 12, 2006, at the San Francisco ACS Meeting. We thought that the proper time to publish this interview was just prior to Katy's taking office on Jan. 1.

ETS: Why did you want to become ACS President?

Hunt: This came out of the blue when Valerie Kuch called me and asked me to run. I told her I'd think about it. The more I thought about it, the more compelling it was for me. Some of the things I truly believe in are education and the importance of educating legislators about science and technology. It was an opportunity too good to let go by. In addition, it was also the opportunity to work with the education department in speaking to the next generation. What I do at Rohm and Haas is to build collaborations based on technology

partnerships. With ACS we could work with other scientific and professional societies to make partnerships happen. I thought I had a skill to bring these matters forward.

ETS: Speaking of Rohm and Haas, what happens with your job when you have the time-consuming position of ACS President? Do Rohm and Haas just write it off as for the good of the profession, or do they cut your salary in half? How do they handle it?

Hunt: I talked to several past presidents to learn about the time commitments. So, I discussed

Southwest Retort

matters with Rohm and Haas up front stating that I couldn't agree to run unless we could arrange for paid leave. This year I am about 50% paid leave. Next year it will be close to 100%. I will still be working with my group at Rohm and Haas, but I have

put an infrastructure in place so that the group can carry on with more delegation.

ÈTS: What do you hope to accomplish during your presidential term?

Hunt: I would like to re-ignite a commitment to science and technology.

Of course, we already do a lot in that area, but I'm saving we could do so much more by being a very vocal voice for science and technology. Scientists are normally not very vocal about their work except for the technical nature of it. What I'd like to do is have scientists feel there is something to do in the line of advocacy. There are some of our teachers that do that very well. I spoke to an honors society group at a local high school for just 20 minutes about the role of chemistry. Afterwards a number of parents came up to me saying they had not realized before that so many things were based on chemistry. There is such an opportunity to talk about the products we make and the good that we do, but link that to the chemistry in a way that's understandable. I hope to work with the ACS OLGA staff, the Education Division, and the Green Chemistry Institute to get in to do briefings on Capitol Hill and give our technical community a voice to the public.



ETS: What do you believe are the main challenges for the ACS over the next five to ten years?

Hunt: I think one of them is to find that voice to the public, to be more visible, and I don't mean just as a member of the presidential

succession; I mean our full membership. We tend to be quiet. We don't tend to send letters to Congressmen. I think we need to realize that advocacy needs to be a part of our makeup. We need to be energizing people the way that Ann Nalley has started to do

around the Legislative Action Network (LAN).

Everyone is not going to go to briefings on Capitol Hill, but they can send letters. They can visit Congressmen in their home towns. For me, it's leading by example, and thus starting a grass roots effort. Also, it can't just be the ACS. So, I've starting talking to folks at AAAS and NAS. We have international members, and I think the questions of sustainable energy, food, and water are not just US/North American issues. One of the things I'm looking at is thematic programming to focus on sustainability at our spring meeting.

ETS: Let me insert a personal opinion here. I think there are getting to be far too many presidential events. I think they ought to be cut back rather than expanded. Too many events and symposia are canceling each other out.

Hunt: I agree. I think we do try to do too much. We don't focus on what it is we need to do. When I talk

University of Arkansas

UA Teaching Academy Inducts Brewer. Instructor Lorraine Brewer was one of six faculty inducted into the UA Teaching Academy. For the last 30 years Brewer has taught chemistry as well as math in courses ranging from beginning algebra to organic chemistry. She also serves as undergraduate advisor and advisor to the pre-pharmacy student organization. Her academic awards include Chi Omega "Outstanding Teacher of the Year." She was also named "Outstanding Faculty Member" by the Order of Omega. In 2000 she was named Honorary Member of the Golden Key International Honor Society.

Fifty Year ACS Members Childs and Myers Honored. The U of A ACS section honored Dr. Ves Childs and Col. William Myers for 50 years of service. Childs received both his M.S. and Ph.D. degrees from Arkansas, after which he worked 22 years with Phillips and 17 years for 3M Co. He is well known in the area of synthetic electrochemistry, and he developed the Phillips electrochemical fluorination process. After retiring from the Air Force in 1984, Myers has served as assistant department head and instructor in the U of A department of chemical engineering. He has published over 40 articles in the area of nuclear chemistry and nuclear cosmochronology.

Matt McIntosh gave a talk at the University of New Mexico on Oct. 27, and **Ryan Tian** gave a seminar at Milliken & Co. in South Carolina in October. Presentations were made at the Arkansas Biosciences Institute Conference in Little Rock on Oct. 26 by **Denise Greathouse**, **Karuppanan M. Kathir**, **Roger Koeppe**, and **Penny Lewis**. Dean **Donald R. Bobbitt** also attended the meeting.

East Texas Section

Following is a list of 2007 meeting dates, speakers, and general topics. Feb. 13, **Bill Carroll**, "Recycling Plastics;" Mar. TBD; April 17, **Malcolm D. Prouty**, "Nanoengineering;" Sept. 13, **J. Ernest Simpson**, "Chemistry of Wine;" Oct. 17, **James N. BeMiller**, TBD; Nov. 7, **Phillip D. Voegel**, "Role of Salinity Changes."

South Plains Section

TexasTechUniversity.LiuWinsResearchAward.Dr.Shaorong Liuis this year's recipientoftheTexasTechUniversityChancellor'sResearchAward.Chancellor'sResearchAward.Thisuniversity-wideaward is given eachyearto onefacultymemberwhoseresearchis recognized as outstandingintheirfield.Itcarriesa \$5,000unrestrictedcashprize.

Horn Professor Dr. Richard Bartsch and members of his group gave eight papers at SWRM 2006 in Houston. The co-authors/presenters were Gaurav Arora, Xiaodan Cao, Dongmei Zhang, Jennifer Crawford, Kazimierz Surowiec, Xiaodong Liu, Shengfu Li, Sergei V. Dzyuba, Malgorzata Surowiec,



about thematic programming, I am talking about picking programming that is not just for the national meetings and not just for presidential events. Let me illustrate how we hope to handle sustainability at a national meeting.

We'll do sustainability overall on Sunday afternoon. Then on Monday morning we'll talk about technical opportunities-how does chemistry feed into solving the broader problems of energy, food, and water. Then in the afternoon we'll talk about educating for sustainability. We are working with the divisions so that by partnering with us on those programs and not counter-programming they will get credit for that in terms of programming. Those will be my platinum events. Overall, we are trying to develop a process for thematic programming for presidential events. Communication is our biggest ally and our biggest challenge.

ETS: Do you feel that there is any need for expansion of the number of chemists over the next five to ten years?

Hunt: I have been talking to professors at this meeting about the number of students they have and where it's going. I think you have to come back to what are the symptoms and what is the problem. I look at funding for science and technology, and it's going down. When you look at plots of the funding for science and technology and the number of students in those areas, they absolutely lie on top of each other. Students are going away from the physical sciences, because the money is going away from the physical sciences. We need to have the money going toward the physical sciences.

It's the problem, but it's also the solution.

ETS: Does increasing the funding automatically increase the number of jobs available?

Hunt: What it does is it increases the training of the students coming out. Things are going offshore, because there are markets offshore: and we need to do R&D closer to the markets we are serving. What we need to focus on is R&D that we should be doing here, to focus on markets here, to focus on developing opportunities here. What industry looks for is where is the work force. If the work force is abroad, that will be a pull abroad. If energy costs are cheaper abroad, then manufacturing can be pulled abroad. We are still doing R&D here, but, if we find that R&D is funded better for emerging technologies and the students are more available in other countries, then, instead of research---develop---produce in the U.S., it will be research---develop---produce in other countries. We need to focus on R&D here. Right now we are better at it, but other countries are gaining on us. That sounds negative, but the positive side is that the challenges of sustainability in energy, food, and water provide more than enough problems for us to need excellent chemists to solve them. I would hate to see us turning our students off from doing that. I would hate to see my 15 year old son taking a job in China or India instead of the U.S.

ETS: Your answers have led into my next question and perhaps have answered part of it. What should the ACS do, if anything, about off-shoring?

Your expertise in research. Our expertise in your search. Endless opportunities.

Kforce® is more than a staffing firm-we're a leading provider of Scientific staffing solutions. We support the Food & Beverage industry by providing top talent with skills



from Animal Science and Biotech to Food & Beverage, Pharmaceutical and Chemical.

We can provide staffing contract, contract to hire or direct hire (permanent) staffing from Senior Directors to Lab Technicians. We show everyday how great people really do equal great results. For over 40 years, we have thrived on one core principle: finding our customers and candidates the right match through exceptional customer service, a disciplined process and personal respect.

For more information, please contact Kforce at **972.383.6154 or email raguilera@kforce.com**.

Please visit our website at **www.kforce.com**

Great People = Great Results* **KERORCE** SCIENTIFIC STAFFING ©2006 Kforce Inc. All Rights Reserved. **Hunt:** We don't have a lock and key on all the intelligent scientists in the world. What I think the ACS can do is help the scientists we have here be the best they can be. We need to focus on a leadership training program with emphasis on the socalled soft skills. In industry we used to get training in those areas inhouse. We are not getting that so much anymore. There needs to be somewhere else to go for that, and I think ACS is the logical choice. Leadership training not only benefits ACS volunteers, but they can take those skills back to their jobs and community.

ETS: There is a proposal to markedly, by a factor of five, increase the number of signatures needed for a petition candidate for ACS President. Do you have any opinion on this proposal, and, if you do, what is it?

Hunt: I do feel that the number of signatures should probably be more. This is a large society. I think the candidate should be connected more to the society and be capable of reaching out and engaging them. If you want somebody to be able to mobilize the Society, you want them to be able to reach out and engage people in the course of getting the signatures. The process we use in selecting the presidential candidates should reflect the skills needed by the ACS President. You need to be able to talk before a variety of audiences; you need to be able to think on your feet; you need to be able to answer tough questions. The matter of presenting yourself in front of Council is an important piece of the process. More than the number of signatures on a petition, I think all ****Continued on Page 15****

Southwest Retort

CHEM GEMS AND JOULES

by Mary Teasdale

A recently received advertisement for a metroplex auto maintenance chain provided a coupon to have my tires winterized. For only \$20. I could have all four tires of my car (trucks slightly higher priced) filled with nitrogen. The purpose for this, according to the nearby store's employee, was to keep the pressure in the tires constant for a longer period of time than could be accomplished with air-filled tires. This was important because today's cars are fitted with tire monitors that turn on when a tire is low. Being a car nonenthusiast, I let that pass and made a mental note to ask the engineering members of our family at Christmas dinner.

The store's representative hastened to explain to me that oxygen in the air-filled tires would leak out of the tire, but nitrogen would not because of its molecular makeup. Several times during his explanation of winterizing tires, he mentioned that nitrogen is more *consistent* than air. By this he seemed to mean that nitrogen is less affected by temperature than oxygen: "when the outside temperature decreases, the pressure inside the [nitrogen-filled] tire remains *consistent* where the tire with air goes down."

* GPC/SEC Analysis * GPC/SEC Polymer Standards *GPC/SEC Columns * Waters™ 150C Parts **Request your free catalog online** www.ampolymer.com American Polymer Standards Corporation 8680 Tyler Blvd., Mentor, OH 44060 Phone: 440-255-2211 Fax: 440-255-8391 As chemists, we are fond of saying that an understanding of chemistry helps us understand the world around us. Why not put your money where your mouth is, proverbially speaking, and have your students use what they know about the gas laws, the nature of rubber, air composition, oxygen, and nitrogen to write a justification of why they would, or would not, spend the \$20 to winterize their tires. Their written work could provide the basis for a lively class discussion?

This year's tour of the various malls around Dallas brought to my attention the availability of a fake snow formed by adding water to a white powder. After two or three weeks it becomes a powder again for easy cleanup. What role, if any, does humidity play in how long you can enjoy this snow? The label claims the snow is nontoxic. Would that be true for the toddler or small animal that goes for the taste test? Have students develop simple experiments to support their responses to these questions. — Send Material for this column to Dr. S. Starnes, Dept. of Chemistry, Texas A&M -Commerce, P. O. Box 3011. Commerce. TX 75429. Email stephen starnes @ tamu-commerce.edu. Tel.: 903-886-5389

