INTERVIEW WITH ACS PRESIDENT-ELECT NANCY JACKSON.....p. 5

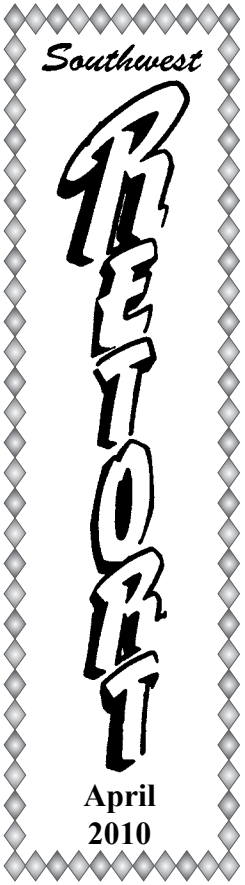


TABLE OF CONTENTS

INDEX OF ADVERTISERS

!!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
OxyChem

Fifty Years Ago in The Southwest Retort

Dr. G. Frederick Smith, ACS tour speaker for April, will speak on "The Role of Perchloric Acid in the Wet Oxidation of Organic Compounds." Dr. Smith is Professor of Chemistry at the University of Illinois and the President of G. Frederick Smith Chemical Co., which he founded in 1925. He has been Chair of the ACS Division of Physical and Inorganic Chemistry and is currently Chair-Elect of the ACS Division of Analytical Chemistry. He was the recipient of the ACS Fisher Award in Analytical Chemistry in 1954 and received the Anachem Award in Analytical Chemistry of the ACS Detroit Section in 1959. With **Dr. Harvey Diehl**, he is the author of the textbook, "Quantitative Analysis. Elementary Principles and Practice."

Construction of the University of Texas (*now UT-Austin*) Nuclear Science Laboratory is underway. About $3 million has been allocated for the construction of a tandem electrostatic accelerator and additional lower energy accelerators. The instrument, which is expected to be operational in two years, will produce energies of about 12 million volts. **Dr. Murry Tamers**, instructor of chemistry, will investigate the mechanisms and cross sections of nuclear reactions induced by high energy ions such a O^{16} and Cl^{35} from the accelerator. The accelerator program is only part of a new $15 million Science Research Institute at the University of Texas, which will carry out advanced research in the biological, physical, and engineering sciences.

A number of grants have been received by UT researchers this month. Assistant Professor **Rowland Pettit** has received a $14,000 grant from the Alfred P. Sloan Foundation. Pettit was the only Texan among the 30 scientists who received these grants. His research involves metal complexes of bicycloheptadiene and cyclooctatetrene and organo-boron compounds. The UT Research Foundation has given a $2240 grant to **Allen J. Bard** for a study of "High-Speed Controlled Potential Coulometry." **Robert L. Augustine** has received a $6900 grant from NIH for research on "The Hydrogenation of α, β-Unsaturated Ketones", while **Eugene H. Wissler** has received a $12,650 grant from NSF to study "Flow in Non-Newtonian Liquids."

Those from the D-FW ACS Section attending the January Analytical Symposium at LSU were **John Lynch, Phil Kane, and Tom Burkhalter** (TI), **E. R. Alexander** (TCU), **Don Tarver** (GSI), **Norris Brown** (Industrial Scientific), and **Bob Laux** (E. H. Sargent). As President of the Texas Academy of Science, **Dr. Gordon Teal** of TI Central Research Lab represented the organization at the inauguration of **Dr. Jack R. Woolf**, new president of Arlington State College. A new chemist in the TI Materials Research Department is **Graydon Larrabee**.

******Continued on Page 16******

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. 62 April, 2010 No. 8

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.

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

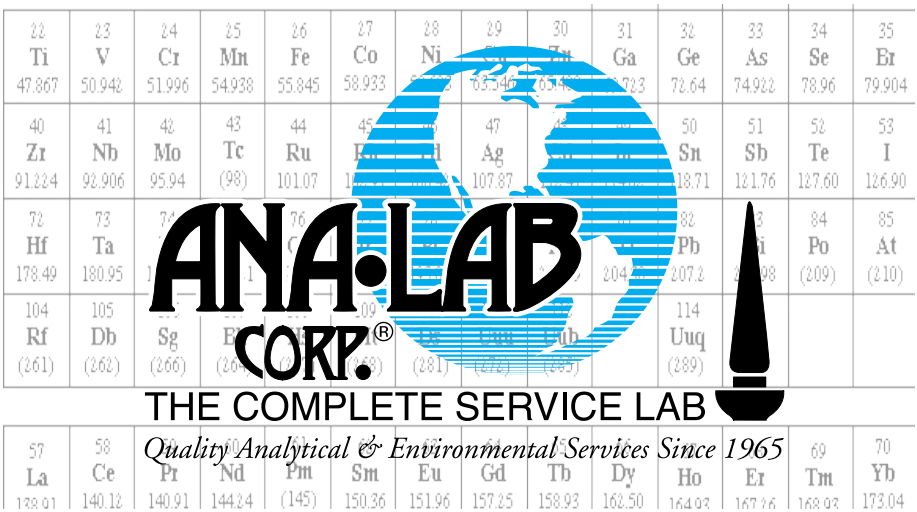
HUFFMAN LABORATORIES, INC.
Quality Analytical Services Since 1936
Phone: (303) 278-4455
FAX: (303) 278-7012
chemistry@huffmanlabs.com
www.huffmanlabs.com

Minuteman Press
The First & Last Step In Printing.
- Full Color & BW Printing
- Business Cards
- Letterhead
- Envelopes
- Flyers
- Carbonless Forms
- Booklets
- Postcards

972.313.3428
mmpirv@flash.net
www.irving.minutemanpress.com
Minuteman Press of Irving proudly supports and prints the Southwest Retort

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

* 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



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

Dallas, TX
972-620-8900 • Fax 972-620-8902
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

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

Madison, AL
256-461-0500 • Fax 256-461-0502
Email: alabama@ana-lab.com

BBB ACCREDITED BUSINESS

ACIL

ACCREDITED

nelap
02008

Southwest Retort

SIXTY-SECOND YEAR April 2010

INTERVIEW WITH ACS PRESIDENT ELECT NANCY JACKSON

Interviewer E. Thomas Strom

Starting in 2004, *The Southwest Retort* has published interviews with the incoming ACS Presidents-Elect with one exception. Bruce Bursten escaped our net in 2007, but we caught up with him in his presidential year of 2008. In any event, 2010 marks the seventh straight occasion *The Southwest Retort* has had a one-on-one interview with those individuals in the ACS presidential succession. This year, ACS President-Elect Dr. Nancy Jackson kindly gave *The Retort* nearly an hour of her time on March 20th at the San Francisco ACS Meeting. This is an edited transcript of the interview. Her remarks were slightly abridged, while my comments were drastically shortened.

Strom: You are now three months into your term as ACS President-Elect. What are the things you would like to accomplish in your three years in the presidential succession?

Jackson: Since I'm going to be president during the International Year of Chemistry (2011), my goals are centered around those themes and objectives. Those are not the only things I hope to do, but it makes sense to emphasize this. One of them would be communicating chemistry to the public. The other would be trying to increase the international reach of the ACS, particularly with developing countries, but really with any countries.

Strom: How precisely might that be accomplished?

Jackson: Not just by myself, that's for sure. I have a lot of ideas. Probably it would be easier to explain it if I tell you what I have been doing for the last three or four years in my day job. At Sandia National Labs I work with the US Department of State in what they call a Scientific Engagement Program. This means they use scientists in the US to engage scientists overseas to further US policy. My area has been to train chemists,

mostly in academia but also in industry, on safety and security. The US government does not want to see chemicals misused as weapons. They are also interested in teaching students state-of-the-art safe practices. I work with universities, but a lot of my work is with chemical societies. I work with IUPAC, national chemical societies, Federation of Asian Chemical Societies, Federation of African Societies of Chemistry, Arab Union of Chemists, etc. I have made over 20 trips in the last three years to Southeast Asia and the Middle East, organizing training in those parts of the world.

Strom: Have you ever noticed any reactions to US policy, say in the Arab world, or have relations always been pleasant?

Jackson: No, the Middle East has been a wonderful place. I know the leaders of these organizations and of the national societies and the needs of those parts of the world. I tell people not just Europe, China, and India, but also everybody else. Unfortunately, I don't have connections with Latin America, but that is because of how my job has gone I would like to leverage that knowledge and my connections to help ACS become more involved with the rest of the world. I see us as partnering with other societies. There are so many things ACS could do with developing countries that wouldn't cost us a dime. Things like, "Would you advertise my regional chemistry conference on your web? Could you recommend to me some speakers in this area?" I have invited the Federation of Asian Chemical Societies, and this is a huge group, to have an Executive Committee meeting in this country, and they are going to hold their Spring, 2011 ExeCom meeting in Anaheim at the time of the ACS Spring National Meeting. We are going to hold a joint symposium on US-Asia chemistry. The first half of the symposium will be in Anaheim and the second half will be at the FACS meeting that they have every two years. That will probably be in September 2011.

I would like us to consider a guest program. We could have young scientists come to national meetings, pairing them up with someone in their field. I would like to work with the divisions on this. Lots of young professors in developing countries would really appreciate such a program. I also want to talk to the Committee on Professional Training to ask them what it would take for us to do approvals overseas. Kuwait has actually gone to the Canadians to ask what is needed for accrediting their universities. Other countries are doing this, but ACS is not part of it. I'm not suggesting that we start something that isn't currently being done; I am suggesting that we be part of the game. My first real trip as ACS President-Elect was in March, when I went to a Kuwait Conference on Chemistry. Of course, Kuwait is a rich country, not a developing country. They talked to me about translating *The Journal of Chemical Education* into Arabic. That would have a huge impact on chemical education

in developing, Arabic-speaking countries. I see that as a mechanism for partnering with developed countries to work with developing countries. It would be great for us to be more networked into the world. I have gone to so many national meetings in other countries where I am the only ACS member there. I know they would like to see us there. Despite US fears that our scientific status is going downhill, the rest of the world sees us as an incredibly creative and innovative scientific community. This is not just because the US is rich; it is because we have a culture that favors innovation.

Strom: Besides communicating to the public and international outreach, are there other things you would like to push?

Jackson: Of course, I am a huge supporter of diversity. Also, every president of ACS should be involved in advocacy of research and education support. I would also include the national labs in that support.

Strom: Regarding the national labs, what do you mean by support?

Jackson: What I want is for the national labs to be effectively used. I would like a purpose for them and a vision, and I would like someone in the government to take ownership for them. Ultimately, for the American people to get the most out of them. People in the national labs spend a lot of time struggling and trying to figure out what they are going to do, and that's crazy. There is no one in DOE who owns the labs and the research, and the labs get the bread crumbs. There isn't a vision for how the labs work. My vision is that the national labs should not do anything that universities do. They should be doing a different kind of science---a multidisciplinary one. They can do the kind of projects that just can't be done at universities. There is not one cohesive organization that oversees the national labs. There is a lot of money being made available for energy research and that's exciting, but the national labs are not allowed to lead the process, just to participate. There's a lot of multidisciplinary things the labs could do in energy that universities would have trouble doing, but the universities would love to work with us. It's not that I want someone at the top to say what the national labs should do. I want someone at the top to say we have to think about what role we want the national labs to play in our scientific enterprise. Once we decide what that is, then we have to support it. It might be a smaller role or maybe a bigger role, but it should be defined.

Strom: Many people believe there is a need to increase the number of students involved in so-called STEM disciplines, *i.e.* science, technology, engineering, and math. In an earlier interview with former UT-President Norman Hackerman, I asked him if he thought that there was a need for more scientists. He said that his opinion, one that made his colleagues unhappy, was that there was no need to increase the number of scientists over that necessary to replace those retiring or dying. Hackerman said that the productivity of scientists

over the past 25 years had increased dramatically due to the advances in instrumentation. Consequently, there is no need to increase the absolute number of scientists. What is your response to this?

Jackson: When people talk about increasing the number of STEM students, my response is where are they going to get a job? My experience is that students are pretty darn smart. If there were good, strong jobs out there, they would be going into STEM. Until there are more jobs, I don't think students should be going into STEM disciplines. I know my opinion is not very popular. Pushing more people into STEM is not the way to go. The demand needs to be the pull. The market responds very slowly to a pull, because it takes a long time to train Ph.D.s. So, it would make sense to have a government program to encourage students to go into STEM **<u>if</u>** we thought the market was going to change. But I don't think it's going to.

Nancy Jackson – ACS Presiden-Elect – shares her thoughts on her upcoming term.

Photo Courtesy Peter Cutts Photography

Strom: Something that I have noticed has changed over my lifetime is that you can no longer expect to have a 25 to 30 year career with one company. Companies are not shy about downsizing longterm employees if economic conditions worsen or if the employee's expertise is no longer needed. Companies don't show loyalty to their workers, so I suppose that workers don't feel a great need to be loyal to their companies.

Jackson: I gave a lecture at West Virginia University a few years ago. My chemical engineering host and I talked about the changes in the workplace. He said that in the 20 years he has taught, his view of ethics has changed. Because of the lack of loyalty by the companies to the employees, this has changed the employee's expected loyalty to the company. He used to tell his students that, if they had accepted an offer from Company X and Company Y came in later with a better offer, you had to say no to Company Y. Now that's no longer the case, because the company will dump you, too, if something happens. I feel this is an element of a breakdown in our society. Remember, of course, both my parents are ministers. I see it as a crack in our culture. It seems much more acceptable to treat people as commodities, as interchangeable. All these things are really bad for a creative area like science, because it's all about relationships. It makes it harder to attract students into the field.

Strom: What got you interested in science in general and chemistry in particular?

Jackson: There was something I seemed to have liked in my high school chemistry, but to be honest with you I can't remember what it was; it was definitely not the teacher. I grew up in St. Louis, but I worked on Capital Hill some in high school. When I went to George Washington University in Washington, D.C to take political science, I decided to take chemistry as my science. However, I got a B in political science and an A in chemistry. I just loved the chemistry, but it never occurred to me to major in it. My freshman chemistry teacher, Theodoris Perros, noticed I was making good grades and made it his personal quest to turn me to chemistry. I didn't really think I could do it, but I just loved chemistry, loved being in the lab. So, the next fall I signed up for a full load, chemistry, math, etc, and I totally freaked out. I didn't believe I was smart enough, so I dropped out of school. I got some nerve back and went back to school as a political science major. When I went back, I had to take statistics. I did that class with one hand behind my back, while I saw everyone else in the class struggling. I decided that maybe I was smarter than I thought I was. Therefore, the next semester I returned to chemistry. I got a bachelor's degree, worked for a while, and then went to graduate school at UT-Austin. The first year I worked for *The Journal of Chemical Education* with plans to get a master's degree in education. When I realized just how much I loved chemistry, I went on to get a Ph.D. in chemical engineering at UT. After getting the Ph.D., I had accepted an offer to work for Chevron in Richmond, CA. However, by that time I had fallen in love with a fellow graduate student, Jim Miller, who hadn't finished his Ph.D. yet. Instead of going to Chevron, I stayed on to do a postdoc with Adam Heller.

Jim and I got jobs together at Sandia. When two engineers get together, they are very efficient, so we have twin sons, Christopher and Jackson Miller, who are 16 years old. I am an outdoors person, so I love to ski and hike in the mountains.

Strom: My personal opinion is that there are way too many presidential events, which diminish their impact. What are your plans for presidential events?

Jackson: I intend to have only one in Anaheim. We are going to have a two hour symposium on "Hollywood Chemistry." We are trying to get people who work on science shows like "Myth Busters" and "Breaking Bad." This fits with my theme of communicating science. Oh yes, I forgot. There's that US-Asia chemistry symposium that I mentioned earlier. That would be the second one, a technical symposium.

Strom: Is there anything else you would like to communicate to our readers?

Jackson: Just that the two topics I mentioned are my main focus, and that I need all the help that I can get! I want to hear from people.

University of Arkansas

Assistant Professor **Paul Adams** is the first recipient of the Nudie E. Williams Award for Diversity. A new assistant professor of physical chemistry is **Jingyi Chen**. She is currently a research assistant professor in the department of biomedical engineering at Washington University in St. Louis. She will arrive in August. **Ingrid Fritsch** and grad student **Melissa Weston** presented a poster in January at the Gordon Conference on Electrochemistry. Fritsch and undergrad **Caitlin Williams** will present a poster at the Electrochemical Society meeting in April in Vancouver. **Colin Heyes** gave an invited talk in April at a conference at Los Alamos. He also presented a seminar on quantum dots to the physics department in March. **Jack Lay** gave a seminar at the University of Missouri -St. Louis in February. **David Paul** gave a talk (coauthor **Greg Salamo**) in March at the Lilly Conference on College and University Teaching in West Pomona, CA. **Peter Pulay** presented a poster (coauthor **Jon Baker**) in March at the Symposium for Molecular Structure and Dynamics in Austin, TX. **Joshua Sakon** collected SAXS data at the Advanced Photon Source at Argonne National Lab.

Heart o' Texas

Baylor University. Data from **Dr. Kevin Chembliss'** recent paper in *Environmental Toxicology and Chemistry* was used to make a figure which appeared in the April, 2010, issue of *Natiional Geographic*. The colloquium speaker for April 9 was **Ed Childs** from the TAMU Health Science Center.

East Texas

Eastman Chemical Co, Texas Division. Stavinoha Honored. Dr. Jerome Stavinoha has been named a Fellow of the Industrial & Engineering Division of the ACS. This is in recognition of research which impacts both chemistry and chemical engineering. His award was presented at the Spring ACS meeting. It consisted of a plaque, meeting registration, complementary one-year division membership, and a $750 travel award. A half-day symposium in his honor was conducted at the spring meeting.

Dr. Stavinoha is a Research Fellow for Eastman at its site in Longview. He received his bachelor's degree in chemistry from the University of St. Thomas in 1971 and a Ph.D. in organic chemistry from Texas A&M in 1979, working with Patrick Mariano. He joined Eastman in 1979. and became Research Fellow in 2008. He has made major contributions in several important areas including hydroformylation, epoxidation, and hydrogenation. His latest work was instrumental in developing a key monomer process for the introduction of the recently commercialized Eastman Tritan^{TM} copolyester. Stavinoha is the author of 15 publications and holds 36 US patents. He and his wife Deya have

been married for 29 years and have three children. His favorite hobbies include photography and gardening.

Dallas-Fort Worth

UT-Dallas. Mihaela Stefan Receives NSF Career Award. Assistant Professor **Mihaela C. (Iovu) Stefan** has received a distinguished NSF Career Award, given to junior faculty members who exemplify the role of teacher-scholars through outstanding research and education. Dr. Stefan's research involves polymer chemistry and organic electronics, which she uses to study renewable energy.

The UTD Chemistry Student Association (advisor **John W. Sibert**) was given an Outstanding Chapter Award by the ACS. Grad student **Chicheng Chiu** has received the 2010 Simon Karecki Award given by the Education Alliance for his work in **Steven Nielsen's** group concerning the modeling of nanoparticle toxicity.

Dr. Jung-Mo Ahn was awarded an $880,000 Cancer Prevention and Research Institute of Texas grant to study a new class of molecules designed to wring the life out of prostate cancer drugs. **Drs. Gregg Dieckmann, Rocky Draper, Inga Musselman, Steven Nielsen, Paul Pantano, Dean Sherry , D. J. Yang** and **Jie Zheng** presented highlights of their research at a nanomedicine symposium hosted by the UTD School of Management. In association with PI Nielsen, Professors Dieckmann, Draper, Musselman, and Pantano were awarded Semiconductor Research Corporation funding for "Predicting, Testing, and Neutralizing Nanoparticle Toxicity."

UNT. New Center for Electronic Material Processing and Integration (CEMPI). Semiconductor Research Corporation (SRC), the world's leading university-research consortium for semiconductor and related technologies, and UNT announced the formation of a new research center focused on the fundamental understanding of advanced plasma processes and insulators used in manufacturing state-of-the-art semiconductor chips. Jointly funded by SRC and UNT with an annual budget for at least three years of approximately $850,000, the mission of CEMPI is to help ensure that semiconductor devices continue to increase in performance while growing smaller in size. Collaborating as part of the center will be a team of twelve researchers from UNT, the University of Maryland, UC-Berkeley, Rensselaer Polytechnic University, Penn State, Columbia University, UT-Arlington, the University of Michigan, and Arizona State University. The center is led by UNT Chemistry Professor **Jeff Kelber** and began operations on April 1.

UNT faculty members attending the San Francisco ACS meeting were **Drs. Angela Wilson, Diana Mason,** and **Robert Shelton**.

TCU. Jeff Coffer gave a talk in March at a Semiconductor Conference in Valencia, Spain. His title was "Mesoporous Silicon as an Effective Carrier for Extended Antibacterial and Antifungal Therapies." A poster from the Coffer group, "Electrochemical Fabrication of Porous

Germanium Nanowires," with grad student **Xuezhen Huang** as lead author won second prize in the poster competition for this conference.

SMU. Brent Summerlin gave a seminar at NC State, gave two invited presentations at the San Francisco ACS meeting, and participated in a focus group on organic chemistry instructional materials at McGraw-Hill Higher Education in Dubuque, IA. **David Son** gave a talk at the San Francisco ACS meeting on "Preorganized Ligands Based on 1,3,5-triacryloylhexahydro-1,3,5-Triazine: Possibilities for Ion Recognition." **Beatriz Rios** is one of only two graduate students appointed to a three-year term on the ACS Graduate Education Advisory Board.

MAY METROPLEX SEMINAR SCHEDULE

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

UT-Arlington. May 7, E. Thomas Strom, UT-Arlington, "Probing Aromatic Inductive, Resonance, and Steric Effects via Electron Spin Resonance Using the Semidione Spin Label." Seminars are normally at 2:30 p.m. in Room 114, Baker Chemical Research Bldg.

UNT. May 7, Barbara Garrison, Penn State, "Cluster Bombardment, of Solids: Atomistic, Mesoscale and Analytic Views." Seminars are normally at 3:30 p.m. in Room 106, Chemistry Bldg.

UT-Southwestern Biochemistry. May 6, Elfi Kraka, SMU, "How Chemistry Can Learn from a CADD Approach to Non-Toxic Enediyne Anti-Tumor Drugs." **May 20**, Wilfred van der Donk, University of Illinois, "Post-translational Modifications in Natural Product Biosynthesis." **May 27**, Eva Nogales, UC-Berkeley, "A Structural View at Microtubule Dynamics and Kinetochore Engagement." Seminars are normally at 12 noon in Biochemistry Lecture Hall L4.176.

UT-Southwestern Biological Chemistry. May 25, James L. Leighton, Columbia University, "Expanding Silicon's Repertoire for Tandemand Symmetric Reaction Design." Seminars are normally at 12 noon in Biochemistry L4.162.

BAYLOR'S STONE HONORED WITH MAY SYMPOSIUM

The long, distinguished career of Baylor Welch Professor F. Gordon A. Stone will be honored with a May 27-28 symposium featuring outstanding inorganic chemists from the US and abroad. The 14 speakers include Malcolm Chisholm and Sheldon Shore, Ohio State; Fred Hawthorne, University of Missouri; Malcolm Green, Oxford; Alan Cowley, UT-Austin; Tony Hill, Australian National University; R. Bruce King, Georgia; Judith A. K. Howard, University of Durham; John Fackler and Marcetta Darensbourg, Texas A&M; Peter Maitlis, University of Sheffield; Larry Dahl, University of Wisconsin; Ian Manners, University of Bristol; and Patrick Farmer, Baylor. The symposium is free, but you must register: www.baylor.edu/chemistry and link to the Stone Symposium.

MAY D-FW ACS MEETING

AMON CARTER MUSEUM

3501 Camp Bowie Blvd, FORT WORTH, 76107

THURSDAY, MAY 20, 2010

"ART AND PAPER CHEMISTRY AT THE CARTER: DOCENT-GUIDED TOUR OF THE CURRENT EXHIBITION,

American Moderns on Paper: Masterworks from the Wadsworth Atheneum Museum of Art, with COMMENTS from Museum Conservator of Works on Paper, JODIE UTTER"

About the Program: We will tour the "American Moderns on Paper" exhibit of the Amon Carter Museum under the guidance of an expert Amon Carter Museum Docent. The Museum's Conservator of Works on Paper, Jodie Utter, will accompany our tour and supplement, with paper chemistry and conservation related information, the docent's remarks. Following the tour we will proceed just across Lancaster Ave from the Carter Museum to a private gallery of the Fort Worth Community Arts Center, where we will enjoy a summery meal catered by Z's Café'. Links: www.cartermuseum.org/ & www.fwcac.com/

About the Conservator: Jodie Utter has worked in paper conservation as a technician, contract conservator, sole proprietor and staff conservator in private practice and in institutions for the past 19 years. She holds a graduate degree from the Art Conservation Program at Winterthur/University of Delaware. She has worked for the MFA in Boston, Harvard University, the Victoria and Albert Museum in London, and the Baltimore Museum of Art on a variety of projects, including the cleaning and reinstallation of block printed French wallpaper, the poetry of Emily Dickinson and 13th century Islamic parchment fragments. In addition, she had taught numerous classes, workshops and given lectures on conservation, preservation and historic artists' materials.

Museum Hours: Thursdays,10am – 8pm; free admission. Feel free to visit the museum before the ACS-DFW program. **ACS-DFW Local Section Tour:** At the museum. Assemble at 6.15pm. The hour-long tour begins promptly at 6.30pm.

About the Dinner & Social: Start time, ~8 p.m. Catered by Z's Café, @ the Fort Worth Community Arts Center, 1309 Montgomery Street Fort Worth, TX 76107; (817) 738-1938. Dinner cost is $5 for undergraduates (sponsored by ACS) and $17 for others. Menu: Salad Trio (Chicken Salad, Pasta Salad, Fruit Salad) with crackers; Assorted Desserts; water, peach tea, coffee, wine.

Reservations: Reservations are required. Please respond **by Tuesday, 5/19, to info@acsdfw.org**. If needed, more information is available from D.L. Merkle, Ph.D. (817) 921-0029. It is not required to participate in the Dinner & Social, but reservations stating 'Tour Only' must be made.

THE MAKING OF A RESEARCH CHEMIST

Review by E. Thomas Strom

I Chose the 1964 Ford Galaxie 500 My Graduation Present. A Memoir. My Life in Chemistry, Book 2 of Trips and Rides, Ed Janzen, Gentle Edge Publishing Co., Ltd, December, 2009.

The first part of the title of this memoir, "I Chose the 1964 Ford Galaxie 500 My Graduation Present," might mislead the casual browser. But the later section of the title, "My Life in Chemistry," truly describes the content. This is a book that would be of interest to chemistry graduate students and working chemists. Author Edward G. Janzen is the editor and publisher of the magazine *Canadian Stories* and is a car buff, who has published articles in car magazines. The title was probably designed to appeal to his Canadian readers.

Until Edward G. Janzen reached the mandatory retirement age of 65 after which he started the magazine *Canadian Stories*, he was a well-known organic chemist working in the area of free radicals in biology. However, Ed's background was an unlikely one for an academic chemist. He came from a Canadian Mennonite background. After graduation from high school, he attended a normal school for one year to qualify as a teacher. He taught eight grades in a one room school house for four years. Then he returned to college at the University of Manitoba, where after a rough start he received BS and MS degrees in chemistry. His next step was to enter graduate school at Iowa State University, choosing to work for renowned free radical chemist Glen Russell. By then a self-starter, he whipped through graduate school in three years. Those were the early days of electron spin resonance spectroscopy, and Ed made a number of important discoveries concerning free radical oxidations and electron transfer. He received the important Phi Lambda Upsilon Award for his outstanding graduate research. Staying on for a brief post-doc with Russell, he then joined the faculty of the University of Georgia, rising through the ranks to full professor. Later he returned to Canada as Chair of the Chemistry Department at the University of Guelph. He also headed an NIH Spin Trapping Center at the Oklahoma Medical Research Foundation for several years. He was a past winner of the International EPR Society's silver medal for his biology research.

The book consists of 50 vignettes starting with Ed's arrival in Ames and culminating with his receiving the Ph.D. and joining the faculty at Georgia. Probably to appeal to the

Canadian Stories, car magazine crowd, matters of science are described so that lay readers might comprehend what is going on. Nevertheless, there is plenty of genuine chemistry. I stated that graduate students would find this book of interest, as it documents the travails that graduate students have suffered and still suffer. You have to choose a research mentor, pass your courses with good enough grades, pass your prelims, complete interesting research, and ultimately get a job. There is also the interaction with your fellow graduate students and occasionally sticky matters of priorities and who gets his/her name on a publication plus the placement of said name. Working chemists would also like this book as a way of comparing their graduate experiences with Ed's.

It's sobering to look back at the early '60's, the time of this memoir, and realize that there was never any question of not being able to get a job. Everyone had lots of interviews and job offers, and it was just a choice of who offered the best salary and where you wanted to live. It's amusing to read of Ed's interviews for industry jobs, in which the industry people assured him there would be plenty of time for basic research. Maybe they really meant it back then, but I doubt it.

The book is dedicated to Ed's mentor Glen Russell. Russell was a strikingly handsome man, quite reserved to the point of being painfully shy. Nevertheless, he did a good job of teaching and presenting his work in seminars. He liked to walk down the corridors next to the right hand wall, dragging his hand across the wall. Graduate students seeking to play with his mind would try to get between him and the wall to watch the pained expression on his face. He could drink anybody under the table. He was an excellent bridge player, and some favored graduate students would occasionally be invited to his house to fill in a hand of bridge. He was undoubtedly a brilliant chemist. Very often there is a love/hate relationship between graduate student and mentor. In Ed's memoir Russell is a significant figure, clearly admired by Ed, but you don't get to know Russell on a deeper level. Perhaps this is Russell's fault rather than Ed's.

Let me add my personal insight here. I entered graduate school at Iowa State just three months after Ed did, and Russell was also my mentor. I think down deep he was a very kind man, and I can cite one special instance of his kindness. By November, 1963, my thesis was in good enough shape that I could think of leaving Dec. 1 for my job at Mobil in Dallas. I was due to join the Army in March, 1964, so I wanted to get as much of that industry money as I could before dropping down to a first lieutenant's salary. Russell knew of my intention, so he told me it would be a pity for my wife and me to leave our Iowa relatives over the Christmas holidays. He offered to put me on post-doctoral appointment for the month of December, so I took his offer. Russell didn't get much

PERIODICAL

****** Continued From Page 15 ******

research from me for his post-doc's salary, but my wife and I got to spend one last Christmas with our relatives.

Obviously I would be expected to like this book, but I sincerely believe that working chemists, and graduate students certainly fit that description, would find this book of great interest. You can buy the book for $25, either US or Canadian, the price including postage, from Dr. Janzen at 65 Conservation Trail, Belwood, Ontario, Canada N0B 1J0.

Scientific memoirs are a significant part of science history, and this memoir tells of that exciting time when electron spin resonance first allowed physical organic chemists to prove the presence of free radicals in reactions previously thought to be heterolytic. Buy the book and share the excitement.

UT-ARLINGTON'S LOVELY HONORED

Professor Carl Lovely of the Chemistry Department of UT-Arlington was honored on April 26 with induction into the UT-Arlington Academy of Distinguished Teachers. Dr. Lovely was one of five faculty so honored, and he was the only representative from science.

******Continued from Page 2******

Drs. Gerald Perkins, Jr. and **R. B. Escue, Jr.** of North Texas State College have received a $!5,000 grant from the Welch Foundation to continue their studies on fused salt systems. **Dr. William H. Watson** of TCU attended a symposium on "Semiconduction in Molecular Solids" held Feb. 16-18 at Princeton.