

OCTOBER D-FW ACS MEETING THURSDAY, OCTOBER 25, 2007

UNIVERSITY OF DALLAS

The Doherty Award Presentation

2007 Awardee Dr. Connie Hendrickson

ARKON CONSULTANTS

“Adventures in Surfactants”

About the Speaker: Dr. Connie Hendrickson started Arkon Consultants 25 years ago. In 2006 her company teamed with NuPro Technologies to win the 2006 EPA Presidential Green Chemistry Challenge Award for developing environmentally safe solvents and reclamation for the flexographic printing industry. She is a past chair of the D-FW ACS Section and a past national president of the American Institute of Chemists. A full profile of Dr. Hendrickson is given on page 24.

About the Talk: Dr. Hendrickson's varied experiences in surfactant chemistry will be the basis for her talk on “Adventures in Surfactants.”

Meeting Schedule: 6 p.m., Social Hour, Haggar University Center (Upstairs),
7 p.m., Dinner, Haggar University Center (Upstairs)
8 p.m., Award Presentation and Lecture, Lynch Auditorium

Reservations: Dinner will be Bourbon Street Buffet: Blackened catfish or chicken, red beans and rice, sautéed vegetables, bread pudding. Cost including social hour, \$15. Reservations should be made by 9 a.m. on Monday, Oct. 22, to Janet Jodziewicz, Tel. 972-721-5374 or e-mail to jej@udallas.edu. Members are financially responsible for reservations made but not used. It is not necessary to make a dinner reservation to attend the lecture.

How To Get There: UD is about two miles west of Texas Stadium at the intersection of Hwy 114 and Loop 12 in Irving. From the East, exit to the service road parallel to Hwy 114 and turn left onto Tom Braniff Drive and then right onto East Northgate Drive. From the West, take I-820 East to Hwy 183 East. Go east on 183 into Irving, and exit at Carl Road and take a left under Hwy 183. At the end of Carl Road, turn right onto Northgate Drive. Park in Lot A by the Braniff Tower. Haggar University Center is the first building north of the tower on your right. Lynch Auditorium is the building nearest to the east side of the tower.

Remembering Norman Hackerman.....p. 9

Southwest

RETORT

September
2007

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PERIODICAL

Fifty Years Ago in the Southwest Retort

The chemistry department at the University of Arkansas now has the first commercially-built particle accelerator. It is a Cockcroft-Walton positive ion accelerator. In fact, with the exception of UC-Berkeley, there is probably no other major accelerator owned and operated by a chemistry department. The unit will be supervised by **Dr. Richard W. Fink** and operated by graduate students. The total cost of the accelerator and associated housing is about \$150,000, with the costs being shared by the university and the Atomic Energy Commission (AEC). **Raymond R. Edwards**, who has been on leave with the AEC, has returned to his duties as department chair. **Arthur Fry** has served as interim chair in his absence. **Paul Kuroda** has accepted a position as associate chemist in the Radiological Physics Division of Argonne National Laboratory (*Note: He later returned to an illustrious career at U of A.*).

Archie Broodo of Texas Instruments is the new editor of *The Southwest Retort*. Dr. Broodo has an undergraduate degree in chemical engineering from Texas A&M, while his master's and doctorate in chemistry are from UT-Austin. Before joining TI, he worked for Convair in Fort Worth. Previous editor **Norman Uranson** remains as a consultant on the magazine's editorial board.

The Southeastern Texas ACS Section will have **Professor C. K.**

Ingold as its speaker at the September section meeting. **Joe Franklin** is on leave from Humble Oil to work in the Mass Spectrometry Section of the National Bureau of Standards.

The Baylor University ACS Student Affiliate Chapter made a trip to the Phillips Petroleum Plant in McGregor, TX. **Dr. Virgil Tweedie's** industrial chemistry class made a trip to the Houston area to tour several chemical plants. In connection with the summer Science Institute for High School Teachers, **Dr. Hubert Alyea** of Princeton visited in July to give a well attended lecture and demonstrations on atomic energy. **Dr. Leallyn B. Clapp** of Brown University directed the instruction in chemistry at the institute. **Dr. Charles Reeder** has joined the Baylor chemistry department. Reeder received his Ph.D. from Iowa State College under the direction of **George Hammond** and has been teaching at Bates College in Maine.

At Texas A&M, **Dr. H. K. Zimmerman** is now the possessor of a new Beckman DK 1 recording spectrophotometer. This will help him carry out research sponsored through a Welch Foundation grant. **Dr. Henry Rakoff** has been promoted to associate professor and new Ph.D. **Robert Alexander** to assistant professor.

University of North Texas. Sept. 28, Haobin Wang, New Mexico State University, *Theoretical Study of Ultrafast Electron Transfer Reactions*. **Oct. 5**, Glen Jackson, Ohio University, *Part 1; The CSI Effect on Forensic Science Degree Programs: Part 2; Faster Tandem Mass Spectrometry in Quadrupole Ion Traps for Forensic and Biological Applications*. **Oct. 12**, Kyeongjae Cho, UT-Dallas, *Multiscale Modeling of Nano scale Wires*. **Oct. 19**, Brooks Pate, University of Virginia, *TBA*. **Oct. 26**, Bruce Gnade, UT-Dallas, *Flexible Electronics*. **Nov. 2**, Russ Schmehl, Tulane University, *Light Induced Electron Transfer Reactions of Pt(II) Terpyridyl Complexes: Assessing the Promise of Multielectron Photoredox Reactivity*. Seminars are normally at 3:30 p.m. in Room 106 Chemistry Bldg.

Texas Christian University. Sept. 25, George Gokel, University of Missouri, St. Louis, *Synthetic Organic Compounds that Transport Ions through Bilayers*. **Oct. 11**, Rasika Dias, UT-Arlington, *TBA*. **Oct. 25**, Bradley Smith, Notre Dame, *TBA*. Seminars are normally at 11 a.m. in Lecture Hall 3, Sid Richardson Science Bldg.

UT-Southwestern Biochemistry. Sept. 27, Sara Woodson, Johns Hopkins University, *RNA Folding from Ribozymes to Ribosomes*. **Oct. 4**, Joao Cabral, Yale, *Structural Studies of an Ion Channel*. **Oct. 11**, Wenqin Xu, University of Washington, *From Beta-Catenin to PP2A: Structural and Mechanistic Analyses of the Wnt Signaling Pathway*. **Oct. 18**, E. J. Corey, Harvard, *TBA*. **Oct. 25**, Sandra Martin, University of Col-

orado at Denver, *Mamalian Hibernation as a Model for Tissue Protection and Metabolic Engineering*. **Nov. 1**, Zheng Zhou, Baylor College of Medicine, *The Genetics of Hiding the Corpse: Removal of Apoptotic Cells in C. Elegans*. Seminars are normally at 12 noon, Biochemistry Lecture Hall L4.176.

UT-Southwestern Biological Chemistry. Sept. 25, Al Delmonte, Bristol-Myers Squibb, *TBA*. **Oct. 16**, Jiin-Quan Yu, Brandeis, *TBA*. Seminars are normally at 6 p.m., Biochemistry Library L4.162 *

****Continued From Page 22****

CHEMED 2007 AT UNT

Dr. Diana Mason successfully steered the ChemEd 2007 Conference at UNT July 29-Aug. 2. This was the first international chemical education conference to be held in Texas. Over 700 attendees participated in the conference. They came from the U.S. and foreign countries including Israel, Nepal, Germany, Canada, Mexico, and Sweden. There were 250 presentations, 39 exhibitors, 175 workshops, and a lot of fun! There were also field trips including one to the Glen Rose nuclear power plant. **James and Virginia Marshall** of UNT gave the keynote address on "Rediscovery of the Elements: Final Phase." Other speakers included past ACS presidents Bill Carroll and Ann Nalley, Mary Virginia Orna, presenting ACS Education, Galen Suppes, ACS Green Chemist Awardee, and Bill Dees, LA. Tech, winner of the Presidential Green Challenge Award.

Send material for this column to Mary Teasdale at owlcritic75@yahoo.com or to Tom Strom at tomstrom@juno.com

Student **Tom Grimes** won the Ed and Julia Hodges Memorial Scholarship. Student **Adriana Dinescu** was the winner of the James J. and Ruth I. Spurlock Award. She also won a Graduate Council Dissertation Award.

Dr. Mohammad Omary gave a talk at the 39th Central Regional ACS meeting in Covington, KY and also gave a talk at a teleconference broadcast to multiple Texas sites as part of the Nanotechnology Colloquium Series.

New UNT faculty member **Dr. Rob Stockland** received his B.S. in 1994 from St. Cloud University and his Ph.D. in 1999 from the University of Missouri-St. Louis. Following postdoctoral appointments at the University of Iowa and the University of Chicago, he joined the faculty at Bucknell University, where he was granted tenure in 2006. His research interests lie in synthetic organic and inorganic chemistry.

The UNT chemistry department had another successful Research Experiences for Undergraduates program. This is a ten-week internship supported by NSF. Drs. Cundari and Wilson are in charge of the program.

Professor Hajo Freund, Director of the Chemical Physics Department at the Fritz Haber Institute in Berlin gave a seminar July 27 on "Model Systems in Catalysis: An Atomic View of Deposited Atoms and Supported Clusters."

OCTOBER METROPLEX

SEMINAR SCHEDULE

Seminars are occasionally postponed or cancelled. Call the department or check departmental websites before attending.

UT-Arlington, Sept. 28, Francis D'Souza, Wichita State, *Bio-Inspired Electron Transfer in Supramolecular Donor-Acceptor Conjugates*. **Oct. 5**, James Imlay, University of Illinois, *Molecular Explanations for the Toxicity of Oxygen*. **Oct. 12**, John C. Poutsma, College of William and Mary, *Amino Acid Thermochemistry from the Extended Kinetic Method*. **Oct. 19**, Yuri Kazakevich, Seton Hall University, *Geometry and Surface Chemistry of Silica-based HPLC Adsorbents*. **Oct. 26**, Zoltan Schelly, UT-Arlington, *Electrooptics, Electroporation, Vesicles, Quantum Dots*. **Nov. 2**, Nenad M. Costić, Texas A&M-Commerce, *Metal Complexes as Artificial Peptidases: Reaction Mechanism and Applicability in Biotechnology and Proteomics*. Seminars are normally at 2:30 p.m. in Room 114, Baker Chemical Research Building.

UT-Dallas, Sept. 26, Christopher W. Bielawski, UT-Austin, *Polymer Chemistry*. **Oct. 10**, Paul W. Schrier, Intellectual Property Practice Group, Jones Day, *Overview of Patent Law*. **Oct. 17**, Adam R. Urbach, Trinity University, *Bioorganic Chemistry*. **Oct. 24**, Timothy E. Patten, UC-Davis, *Polymer Chemistry*. **Oct. 31**, Richard Timmons, UT-Arlington, *Heterogeneous Catalysis*. Seminars are normally at 12:30 p.m. in Room 2.106 Founders North.



Southwest Retort

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22 Ti 47.867	23 V 50.942	24 Cr 51.996	25 Mn 54.938	26 Fe 55.845	27 Co 58.933	28 Ni 58.693	29 Cu 63.546	30 Zn 65.38	31 Ga 69.723	32 Ge 72.64	33 As 74.922	34 Se 78.96	35 Br 79.904
40 Zr 91.224	41 Nb 92.906	42 Mo 95.94	43 Tc (98)	44 Ru 101.07	45 Rh 101.07	46 Pd 106.36	47 Ag 107.87	48 Cd 112.41	50 Sn 118.71	51 Sb 121.76	52 Te 127.60	53 I 126.90	
72 Hf 178.49	73 Ta 180.95	74 W 183.84	75 Re 186.21	76 Os 190.23	77 Ir 192.22	78 Pt 195.08	79 Au 196.97	80 Hg 200.59	82 Pb 207.2	83 Bi 208.98	84 Po (209)	85 At (210)	
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57 La 138.91	58 Ce 140.12	59 Pr 140.91	60 Nd 144.24	61 Pm (145)	62 Sm 150.36	63 Eu 151.96	64 Gd 157.25	65 Tb 158.93	66 Dy 162.50	67 Ho 164.93	68 Er 167.26	69 Tm 168.93	70 Yb 173.04

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(POSTECH) in Korea, 1991, and his M.S. at POSTECH in 1993. In 2004, he received his Ph.D. at Texas A&M University. He was a postdoctoral research fellow at the Scripps Research Institute from 2004 to 2007.

Tracy Hanna presented a poster titled "Intramolecular C-H Activation in Bismuth(III) Aryloxides" at the Inorganic Gordon Research Conference in Providence RI in July, and a talk of the same title at the National ACS Meeting in Boston, MA in August. Her student **Bernat Martinez Ortega** also presented a poster titled *Synthesis and Characterization of New Calix[5]arene Complexes* at the National ACS Meeting.

UNT. After 14 years of conscientious service as Chemistry Department Chair, **Dr. Ruthanne Thomas** has moved on to Interim Chair of the Department of Mechanical and Energy Engineering at the UNT North Campus. Her successor is **Dr. Michael Richmond**. Dr. Richmond came to UNT in 1986 from the University of Alabama and has established an international reputation in inorganic ruthenium chemistry.

Welch Professor **Dr. Wes Borden** was a lecturer at the French speaking universities in Switzerland, giving a total of five lectures at the Universities of Fribourg, Basel, and Geneva. He also gave a lecture at the University of Vienna, and chaired a session of a conference on Molecular Quantum Mechanics in Budapest. In July he lectured at an International Symposium on "Reactive Intermediates and Unusual Molecules" on Heron Island, part of Australia's Great Barrier Reef. Dr. Borden and fellow faculty member **Dr. Tom**

Cundari have received a subcontract from the Center for Enabling New Technologies through Catalysis (CENTC). CENTC, which involves nearly 20 principal investigators at ten different universities, has been funded by NSF for five years at a total of \$15,000,000. UNT's project proposes to use calculation to design a new catalytic system to transform benzene and ammonia directly to aniline.

Dr. Cundari has been named to the Editorial Board of *The Journal of Molecular Structure, THEOCHEM*. Over the past few months he gave seminars at Stephen F. Austin, Austin Peay, Southeastern Louisiana, and Georgetown Universities. He received a \$270,000 NSF grant for "Structure and Reactivity of Low Coordination Transition Metal Complexes" and is co-PI with **Dr. Angela Wilson** of a \$172,000 NSF grant for "Research Experiences for Undergraduates in Chemistry." Dr. Wilson gave a talk at the Boston ACS meeting about UNT's work with the Correlation Consistent Composite Approach developed here at UNT.

Student **Adriana Dinescu** was the winner of the James J. and Ruth I. Spurlock Award. She also won a Graduate Council Dissertation Award. Student **Tom Grimes** won the Ed and Julia Hodges Memorial Scholarship.

Dr. Mohammad Omary gave a talk at the 39th Central Regional ACS meeting in Covington, KY and also gave a talk at a teleconference broadcast to multiple Texas sites as part of the Nanotechnology Colloquium Series.

Wayland Baptist, and **Jiangli Song**, University of Chemical Technology, Beijing, China.

The department has been saddened by the death of loved ones. Administrative Assistant **Adonna Cook** lost her husband Kenneth in May. **Dr. Mary Lynn Trawick** lost her husband Charles Freeman.

East Texas

The East Texas Section scholarships, generously donated by Eastman Chemical, were presented to **Jacki Hein** at the University of Texas-Tyler, and **Trey Perry** at Texas A&M University. The section's Sept. meeting was held Sept. 13 at Stephen F. Austin State University. **J. Ernest Simpson** spoke on "The Chemistry of Wine." The next meeting will be Oct. 17 at Kilgore College; **Charles Deak** speaker.

South Plains

Texas Tech University. Welch Professor Dr. **Bill Hase** is co-principal investigator on an International Research and Education grant awarded to Texas Tech by NSF. The award is \$500,000 a year for five years to study "Simulation of Electronic Non-Adiabatic Dynamics for Reactions with Organic Macromolecules, Liquids, and Surfaces." Collaborators are at Iowa State University, Yale, University of Santiago de Compostela (Spain), University of Pisa (Italy), and University of Vienna (Austria). Dr. Hase gave invited lectures at a Gordon Conference in Ventura, CA, at the Chicago ACS Meeting, at a conference held in Arcachon, France,

and at the Universidad de Santiago de Compostela.

Dr. **Bill Poirier** has received a two-year, \$173,418 NSF Small Grant for Exploratory Research to study "Bipolar Quantum Trajectory Simulations." Dr. Satomi Niwayama has received an ACS PROGRESS/Dreyfus Foundation Special Grant Award. This lectureship award is given to a female tenured/tenure track assistant of associate professor to present her research at Carnegie Research Extensive Universities in the U.S.

Dr. **Ed Quitevis** gave an invited talk at the 2nd International Congress on Ionic Liquids held in Yokohama, Japan, in August. His NSF proposal on "Probing Nanostructural organization in Room Temperature Ionic Liquids Using Optical Kerr Effect Spectroscopy" has been recommended for funding by NSF for \$454,050 for three years.

Dr. **Dennis Shelly** has been invited to give a paper in September at a conference on "Leather and Fur in the 21st Century" being held close to Lake Baikal in Ulan Ude in the Republic of Buryatia. The coauthor is Dr. **Huiliang Huang**. Dr. Shelly directs the Leather Research Institute and the Engineered Protein Materials Lab at Texas Tech.

Dallas-Fort Worth

TCU. TCU welcomes a new faculty member this fall, Prof. **Youngha Ryu**. His main research interests include synthesis of small molecules and proteins with novel biological functions and properties. Ryu obtained his B.S. at Pohang University of Science and Technology

Southwest

Retort

SIXTYTH YEAR

SEPTEMBER 2007

REMEMBERING NORMAN HACKERMAN

Vignettes Compiled By E. Thomas Strom

We all knew that it had to happen sometime, but it still was a shock to learn of former UT-Austin and Rice President Norman Hackerman's death on June 16 at age 95. In a profile I wrote about Norman in this magazine in 2001, I said I hoped to be writing another profile when Norman hit the century mark. Would that it could have been so!

My previous profile was published in our magazine in three installments, Vol. 53, No. 8, April, 2001, pp. 5-7,8; No. 9, May/June, pp. 16-18; and Vol. 54, No. 1, Sept., 2001, pp. 15-16. If any of our readers have misplaced those copies (surely you wouldn't have thrown our magazine away), you can contact me to get a reprint of the articles. In that profile I covered Norman's career reasonably well through age 89 and a half. Consequently, I don't propose to duplicate that here. Instead I am publishing short vignettes about Norman from people who knew him in a variety of ways---former students, fellow faculty members, fellow administrators, former employees, just plain friends, etc. As a gem's qualities can best be assessed by viewing it from a number of angles, Norman's career and qualities can best be appreciated in the varied responses from these people who knew him well. Also, please don't overlook a separate tribute to Norman from his friend Joe Lagowski, published elsewhere in this issue.

Linda Domelsmith, Texas Higher Education Coordinating Board. Back in the late '60's and early part of 1970 when I was an undergraduate chemistry major at UT-Austin, Dr. Hackerman was president of the university and also taught a

freshman chemistry course that I was attending to take notes for a commercial note-taking service located near campus. He allowed me to speak at the class's beginning about the availability of the notes. It was amazing that the university president was

teaching freshman chemistry—a requirement he established prior to accepting the position. His lectures mirrored his approach to life: straightforward, organized, clear.

My next encounter with Dr. Hackerman was in January, 1997, when the Texas Higher Education Coordinating Board hired me to run the Advanced Research and Advanced Technology Program (ARP/ATP) grant competitions. Norman was the first and only chairman of the Board's Advisory Committee on Research Programs (ACORP) which established program guidelines and oversaw the grand competitions. His meetings started on time (except for one where he was phoning the Houston police department about a speeding ticket) and ended on time. He had a firm but fair view of what the programs should produce and how they should operate. He spoke to our reviewers about minimizing their biases in selecting proposals, noting that everyone had biases except for Martians, and he saw no Martians there. At a meeting of the Texas Research Executives about the task ahead of them, he told them that the pool of knowledge is great, but the pool of ignorance is infinite.

At the first meeting of the Board's Research Committee, Jan. 28, 2004, he was asked to identify and address the three most important things needed for the Texas research enterprise. His response: 1) produce a steady stream of scientists, mathematicians, and engineers; 2) produce a steady stream of scientists, mathematicians, and engineers; and 3) produce a steady stream of scientists, mathematicians, and engineers.

He called me sometimes several times a week to check on the progress of the competitions, projects, and research. He could be quite gruff, but he was always sincere and focused on the greater good of the state. When I wanted to speak to him with a short call, I learned to call a little after 2 p.m. He would not let anything keep him from his afternoon squash match at 2:30 p.m. He was one of the few people on the UT campus who had a key to Gregory Gym.

He once told me that in his early days as UT-Austin department chair, he secured the very first research funding for the department by selling on the black market mercury that had been stored in the tunnels under the campus. I told him that qualified him as their first safety officer, and he laughed. Dr. Hackerman kept moving. The rest of us seemed to be aging, but he seemed ageless. I fully expected to follow after him as fast as my walker would allow at some point in the future.

At our ACORP meeting on June 8, 2007, he was coughing and breathless, but he led the meeting in his usual direct way. Bettie Sue Masters sat next to him at the meeting and afterwards expressed extreme concern for him. Dr. Hackerman was admitted to Scott and White Hospital in Temple the following week, where a son-in-law was a physician. I visited him on Friday, June 15, and was surprised at how great he looked. He said it was deceptive and acknowledged that a major battle (acute leukemia) was raging in his body. When I left, he asked me to let him know as soon as I heard that Governor Perry had

Ortho-Quinone Methide Analog as a Potential DNA Alkylator and Antitumor Compound." Her mentor was **Neil Allison**.

Undergraduates **Vanessa Bradley** and **James Steele** awarded Sturgis Study Abroad grants. Bradley will study in South Africa and Steele in Sweden. **Sean Stevens** will spend the fall term at Dublin City University and the summer term at the University of Regensburg. He is participating in the Transatlantic Dual Degree Program funded by an Atlantis Grant.

Doctoral degrees in May were awarded to **Julie Chittenden** for "Investigation of the Effect of Dissolved Salts, Soil Layers, and Wind on the Evaporation Rate of Water on Mars," Mentor **Derek Sears**; **Jody Buckholtz** for "In-Vitro/In-Vivo Calibration Method for Electrochemical Oxygen Sensors," Mentor **David Paul**; **Jeffrey Froude** for "The Oxidation of Thrombomodulin in Smokers," Mentor **Wesley Stites**; and **Gavin Jones** for "Exploring the Chemistry of Intermediates in the Nickel Catalyzed Cross-Coupling of Alkyl Electrophiles," Mentor **David Vicic**. Summer doctoral degrees were awarded to **Thomas J. Anderson** for "Synthesis of Ruthenium and Iridium Complexes for use as Photoinitiators in Electron Transfer Reactions of Metalloproteins," Mentor **Bill Durham**; **Anna Daily** for "Effect of Charged Amino Acid Side Chains on the Orientation of WALP-like Transmembrane Peptides and the Channel Activity of Gramicidin A," Mentor **Roger Koeppe**; and **John**

Hutchison for "An Ireland-Claisen Approach toward the Synthesis of Eupomatilone-6 and Sclerophytin A," Mentor **Matt McIntosh**.

Heart o' Texas

Baylor University. **Dr. David Pennington** will continue as Interim Chair of the department until July 31, 2008. **Dr. Charles Garner** has been appointed as Graduate Director, replacing **Dr. Carlos Manzanares** who has opted to step down after 13 years in the post.

The department has two new faculty members. **Dr. Sung-Kun Kim** has been appointed Assistant Professor of Biochemistry. He holds B.S. and M.S. degrees from Hanyang University in Seoul, Korea plus a Ph.D. from Texas Tech awarded in 2002. After that he had Postdoctoral Fellow/Research Associate appointments at Texas Tech till 2007. **Dr. Bruce Hodson** has been appointed Lecturer. He received a Ph.D. from Heriot-Watt University in Edinburgh, Scotland in 2001 and has been a post doctoral assistant in the Welch Group here at Baylor. The department is also pleased to welcome twelve new graduate students. They are **Jenny Barroso** and **David Camejo**, Universidad Central de Venezuela, **Cody Carlson** and **Patricia Diamond**, Baylor, **Humaira Fareed**, University of Kansas, **James Fowler**, Stephen F. Austin, **Clinton George**, UT-Austin, **Lindsay Jones**, Southwestern University, **Emily Kasa**, University of Mary Hardin-Baylor, **Catherine McManus**, New Mexico State, **Sheena Shipley**,

Around-the-Area

University of Arkansas

In May the U of A Board of Trustees appointed **Robert Gawley** to the rank of Distinguished Professor. Gawley joined the department's organic faculty in 2002. He is widely recognized for his work with chiral compounds. The rank of Distinguished Professor is given to faculty members who have gained national or international recognition of their disciplines for extraordinary accomplishments in teaching and research. Other Distinguished Professors in the department are **Frank Millet**, **Peter Pulay**, **Lothar Schäfer**, and **Charles Wilkins**.

Xiaogang Peng received one of two Recognition of Excellence in Innovation Certificates given by the Under Secretary of Commerce for Technology, **Robert Cresanti**, Aug. 7. He was recognized for pioneering the manufacture and application of high-quality, nanocrystals in solution that can be used in solid-state lighting, light-emitting diodes, solar cells, and biomedical detection.

Ingrid Fritsch was recently awarded a three-year NSF grant. She gave an invited talk at the International Society of Electrochemistry in Banff Sept. 9-14. **Matt McIntosh** taught a short course at the University of Pittsburgh Aug. 2-7. **Paul Adams** presented a poster at the 21st Annual Meeting of the Protein Society in Boston, July 21-24.

A number of students graduated in May with a senior thesis. These were **Shelly Buffington**, **Juan Chipollini**, **Sarah Covey**, **John Faver**, **Lacy Fincannon**, **Jay Kasbohm**, **Andy Whiteley**, **Joseph Allison**, **Jana Gertsch**, **Ann Marie Kieber-Emmons**, **Michael McLaughlin**, **Megan Carter**, **Evan Hawkins**, **Becky Kerr**, and **Khoi Vo**. Other graduates were B.S.: **Rebecca Aleck**, **Johnathon Hudman**, **Tiffany Hays**, **Jordan Hess**, **Jay Hinkle**, **Benjamin Jones**, **John Kaufman**, **Melinda Larson**, **Joseph Smith**, **Timothy Timmons**, and **Jennifer Woods**; B.A.: **Allyson Neal**, **Laura Wilson Pratt**, and **Dawn Hawkins**.

Aireal Haley received the Harold D. Hantz Four-Year Scholars Award for the most outstanding honors graduate in the Fulbright College. She graduated Summa Cum Laude. Her undergraduate research was on "Adventures in Gold Chemistry" with **David Vicic** as mentor. She will attend graduate school at the University of Michigan.

Megan Evans and Haley received recognition as First Ranked Senior Scholar. First Ranked Senior Scholars are students who earned a 4.0 GPA with all course work being done at the U of A. Only 25 graduates achieved this honor. Megan graduated Summa Cum Laude and will attend UAMS Medical School. Her undergraduate research was on "Study of the Synthesis and Chemistry of an

signed off on the \$16M in funding for the Advanced Research Program. The deadline to sign the appropriations bill was midnight that Sunday. Lora Weber of our staff heard the next day that the Governor had signed off on funding for ARP. When I called to tell Dr. Hackerman, his daughter Katy said he was not doing well; and she didn't think he would understand. (About six weeks later, Katy told me that he did seem to understand.) Norman Hackerman died that night – Saturday, June 16, 2007 – a strong supporter of Texas research programs to the very end.

Carla J. Armar, Administrative Assistant, The Welch Foundation. I worked with, and for, Dr. Hackerman for over 20 years at The Welch Foundation as an assistant to him in his capacity as Chairman of the Scientific Advisory Board. It certainly was a very interesting, inspirational, and sometimes demanding experience. No matter who you were, though, you always knew he was willing to walk and talk with royalty or paupers just the same.

He was indeed a "what you see is what you get" individual with very definite ideas on what should be done in various situations. He was never shy about telling you his opinion on how to handle things, whether you wanted to hear it or not. However, once you realized that he was right, and he always was, you learned to listen. Nevertheless, he would tell you that he could make mistakes, after all he wasn't an "alien", and had no problems owning up to mistakes.

Dr. Hackerman was very dedicated to every endeavor he took on. If it meant he needed to be some-

where every week at a certain time, you could count on him to be there. He made many a road trip from Austin to Houston, usually once a week, just to make sure he took care of whatever he felt needed his attention. He never sought the "convenient" way of doing things if he felt it wasn't right. No matter how many documents or letters he needed to sign, and sometimes it was hundreds, he signed every one of them personally because he felt the person receiving it deserved his personal attention.

Every person who worked with, or for, Dr. Hackerman recognized his leadership and wisdom, his unquestionable integrity, his insatiable curiosity, and his inexhaustible energy. That inexhaustible energy is what gave him the nickname "the energizer bunny." He will be remembered for his accomplishments in shaping the future of research and education in the State of Texas and throughout the nation.

Eric Strom, Director of U.S. Geological Survey Water Resources Division, South Carolina. I began working on my undergraduate degree at Rice in the Fall of 1981. Norman Hackerman was the president of the university at the time and, as such, had a certain celebrity status with the student body. Celebrities tend to have something that sets them apart, something

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that makes the person in the street point and say, "You know who that is?" with a knowing grin. Andy Warhol had his stark white mop, Jackie her sunglasses and scarves. Dr. Hackerman had his old fashioned bicycle, complete with the basket in the front, and students loved it. You know you've made celebrity status when you are the subject of song. I remember during orientation week the headmaster of our dorm breaking out his guitar and singing with his best Sting impression the tune "Every breath you take, I'll be watching you" by The Police – except it was "Every F you make, Hack is watching you."

My first year at Rice Dr. Hackerman would occasionally pass me on his bike on the path I took to an afternoon class. Unknown to me, he had told my father Tom Strom he would check in on me during my first year, so one day he stopped to say hello. As luck would have it, I was walking with one of my roommates that day, (I'll just call him "Buttinski") so my brush with celebrity was brief. It did make me feel special later in the day when Buttinski stopped talking about himself long enough to ponder aloud, "Why on earth would "The Hack" stop to talk to you?" "I guess he was just that kind of guy, Buttinski."

John McKetta, UT-Austin Chemical Engineering Faculty. I have had the great privilege and pleasure of knowing Norman for 61 years. We were in the same poker club for years, worked very closely, and had a great mutual respect, and yet I never knew his inner feelings. Basically he was very shy, but he had the finest basic qualities of ethics,

morals, and farsightedness. To him, teaching was an extremely serious business, and his family ties were vital. You could bet your last dollar on any statement or word he said to you. He never hid his feelings during his conversations and never let the listener leave without knowing where Norman stood on a subject or request.

During the three years I reported to him when I was Dean of the Engineering College, I was never at a loss as to how Norman felt about any topic or request that I brought up. He would give me an answer of "yes" or "no" after he heard my side. He never sent a decision to a committee for further study, but he might say, "Johnny, I like your idea and would support it, but I just do not have the money in my budget to do it this year." There were several times he would call me later and say, "Johnny, the new budget was approved, and I put in the project you requested. Let me know how it comes along." He supported me with enthusiasm and asked occasionally for details. He had one of the sharpest minds of any person I have known, and he craved perfection. That is why he was honored with so many awards throughout the world.

Peggy Mayfield Dunlap Wilson, Retired Mobil Chemist. Dr. Norman Hackerman was my teacher, mentor, and friend. When he arrived at UT in 1945, he took over instruction in my freshman chemistry class. His lectures in this and other courses were the clearest, most understandable in my experience. They confirmed my major in chemistry.

plunge into starting her own consulting business with Rockwood as her first client. Her focus is on the various problems involving surfaces, and she now considers herself a surfactant chemist. At present she has about a dozen clients

Nevertheless, while starting up her business, Arkon Consultants, she also worked in other areas. She obtained an M.Ed degree from UNT in 1984 and taught at a number of area schools, including the University of Dallas, Texas Wesleyan, Tarrant County Community College North-east Campus, and Brookhaven Community College. Connie has also been active in local ACS section governance – Section Chair 1988, General Chair for the 1998 National ACS Meeting held in Dallas, and Program Chair for the 2004 ACS Southwest Regional Meeting held in Fort Worth. She is a member of the American Institute of Chemists (AIC), serving as President in 1999. That group thought so much of her that their Board of Directors elected her as an AIC Honorary Fellow, joining such illustrious chemists as Glenn Seaborg, Linus Pauling, and Harold Urey.


Connie's hobbies include collecting rocks and minerals, and she also is fascinated by plants, focusing on orchids and bromeli. She enjoys folk music and has built an autoharp. She and husband Bill have two children, David, a graduate student in molecular pharmacology at Stanford, and Emily, an English and journalism teacher at the Town View Magnet High School in Dallas.

Connie will receive her \$1500 award and engraved plaque at the D-

FW Section's October meeting scheduled for Thursday, Oct. 25, at the University of Dallas (details on page 28). Her picture will also be hung in the Gallery of Doherty Award winners in Berkner Hall at the University of Texas at Dallas. Connie's Doherty Award Lecture is entitled "Adventures in Surfactants." I wouldn't want to miss it, and you D-FW ACS members shouldn't miss it either.

Don't Forget Those Local Section Dues!

It won't be long until you'll be receiving your 2008 dues statement from ACS. Among the various charges on your statement will be listing for optional local section dues. Since it's optional, you will be tempted to forget about it. *Please* pay that small sum; don't cross it out. Those optional dues make a world of difference to the programs that your local section can offer. They are **vital** to your local section. You won't miss the money, but your local section surely would!!



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DEPTH BENEATH THE SURFACE

CONNIE HENDRICKSON

2007 DOHERTY AWARD WINNER

by E. Thomas Strom

The D-FW Section's Wilfred T. Doherty Award was established in 1972. Until 2005, all the winners of the award had been men. The situation changed in 2005 when Trish Smith, then at TI, now at Fresnel Technologies, became the first woman to win the award. Patty Wisian-Neilson of SMU was the 2006 award winner. Now in 2007, Dr. Connie Hendrickson of Arkon Consultants, a surface and surfactant chemist, is the third woman to win this prestigious award.

Dr. Hendrickson is one of a small number of chemists from our section to receive national recognition. Her company, Arkon Consultants, teamed together with NuPro Technologies to win the 2006 EPA Presidential Green Chemistry Challenge Award in the Small Business Division for "Environmentally Safe Solvents and Reclamation in the Flexographic Printing Industry." Flexographic printing is used in a wide array of printing and uses millions of gallons of solvent. Arkon and NuPro developed a safer chemical processing system that eliminates hazardous solvents, reduces explosion potential and emissions, and increases worker



safety in the flexographic printing industry. The partners received their award in the summer of '06 at the National Academic of Sciences in Washington, D.C.

Connie Hendrickson was interested in science at a very early age, when she had a rock and mineral collection. She took her undergraduate training at Louisiana Tech, starting out as a geology major. However, she enjoyed chemistry more than geology, and by the time she took organic chemistry, she decided to switch majors. She met her husband Bill, now a faculty member at the University of Dallas, as an undergraduate. They started dating when they both entered graduate school at LSU. She received her Ph.D. in biochemistry in 1975, but even there her interest was in surface phenomena such as binding sites. Prior to her move to the D-FW area, she had postdoctoral appointments at Johns Hopkins University and the University of Alabama School of Medicine. She began work in this area in 1981 as Chief Chemist at Rockwood Systems. She grew tired of being locked away in a laboratory, and she had pretty well worked her way out of a job. She decided to take the

He shared his office with me when I was a graduate teaching assistant at UT. The campus was crowded with veterans of World War II, enrolled under the GI Bill of Rights. Faculty space was so crowded that the freshman chemistry office held three desks – the secretary's by the door and Dr. H's and mine jammed together at the back of the room. He and I could not both sit at our desks at the same time. When he was there, I sat cross-legged on my desk, facing the wall.

Frequently, small yellow squares of paper would fly from his desk and land on mine. They had Dr. H's name printed on top and his handwriting below. He regularly spent time in the library, noting articles of relevance to his professional contacts, students, faculty, and scientists at laboratories where he consulted. Then he came to the office to sort the notes. That's when he ran into a problem. He often could not read his writing. When he was a small child in the Baltimore schools, he was double promoted, skipping the second grade where penmanship was taught. Usually I could read his writing, but once in a while the task became hilarious. And we became friends.

James Boggs, UT-Austin Chemistry Faculty. When I arrived at UT for my employment interview early in 1953, I was shown around by various friendly faculty members, but they told me that they couldn't show me the most important thing that the

department had going for it, namely its chairman Norman Hackerman, who was currently out of town. I don't believe that I've ever heard university faculty speak in that way of their chairman before or since. When I arrived in the fall, I learned that it was all true. Norm was young, energetic, and had a goal of excellence for the department and the drive to set it on its way. The department was far from any national standard of excellence in those days – 12 contact hours of teaching per week for one thing – but Norm saw



Norman Hackerman 1912-2007

potential, realized the critical importance of selective hiring, and had the dynamism to press his case with the somewhat lethargic administration.

As chairman, Norm Hackerman looked after his flock. He introduced me to the Electrical Engineering Research Lab where I worked part time for a few years and by a very circuitous route developed the research path that has continued with many alterations to this day. He got me appointed as an Assistant to the Dean of the Graduate School to find out whether I liked administration (As an aside, the Dean, a secretary, and I were the complete staff except for a number of clerks in the student division. Now the Graduate Dean has three associate deans and four assistant deans, each of whom has his own substantial staff.) As it turned out, I didn't particularly like administration except for the part of my job that involved handing out to faculty the large sums of money that came with

the federal fellowships available in those post-World War II days. I made many friends! These are two personal examples, but Norm was always alert to open any opportunities that presented themselves to all of the younger members of his faculty.

It was a blow to the chemistry department but a very fortunate thing for the university when Norman moved on into the central administration and eventually the presidency. Actually, he never really left us, since all the time he was President he continued teaching one freshman chemistry class and maintained a productive research laboratory. Over the time period after my arrival in 1954 until Norman left to become President of Rice, vast changes occurred at Texas, and it became well on its way to becoming a national university. Nor everything was attributable to Hackerman of course, but he exerted a constant pressure in the direction of academic excellence. His activities at this time and later with State Higher Education Coordinating Board, the Welch Foundation and the National Science Board all contributed to increased funding for research, which led to a profound change in the character of the university. As much as any single person could be, Norman Hackerman was responsible for the conversion of a sleepy, self-contented, southern institution into a true university with international aspirations.

Earl Snavelly, Retired Mobil Chemist. My association with Norman Hackerman lasted nearly 60 years. He supervised my MA and Ph.D. work and was a valued consultant for every employment that I had thereafter. When I was one of

Hackerman's 25 teaching fellows for freshman chemistry, I was startled to note that he was always available for consultation. Even as he added immense responsibilities, he either saw us immediately or returned our calls at his first opportunity.

Hackerman is noted for his many contributions to the science of corrosion and electrochemistry. He was a conservationist, and his stated reason for studying corrosion was his desire to conserve materials. He practiced this desire in the way he cared for his auto. He had a car that was well past its prime, but he cared for it to extend its life. He rotated the muffler periodically to minimize corrosion, and he suspended an anode in the radiator to protect the radiator from corrosion. One day he appeared in a new car. He said the brakes on his old car had failed, and when he applied the brakes, the car swerved into a car lot on Lamar Blvd. Having to make a meeting and needing transportation, he made a deal on the spot and drove on his way.

Hackerman's students derived life-long benefits from his scientific, personal, and social examples. He was totally objective, unprejudiced, and impersonal. I think these traits were responsible for his ability to immediately understand a problem and suggest a remedy. He supervised students of many races and a spectrum of abilities, but we were all equal in his eyes.

On graduation, Hackerman's students were finished products, ready for any challenge that their specialty required. Integrity and stewardship were lessons borne forever. He once told a colleague in my presence that I

CHEM GEMS & JOULES

National Chemistry Week Oct 21-27 Approaches!

by Jane Smith, Frisco Centennial High School

This year's National Chemistry Week (NCW) marks the 20th anniversary celebration of the program. You can join the celebration in a variety of ways. This year's theme promotes the diversity of the discipline rather than focusing on one specific field of or use for chemistry. Chemists aren't just guys in white coats with pocket protectors – they're also nutritionists, inventors, teachers, artists, detectives, and so many, many more. They solve crimes, clean our water, make us healthier and more beautiful, improve the materials we use and touch every aspect of our lives.

Many more ideas for celebrating NCW are located on the ACS website <http://www.chemistry.org/NCW>, but here are a few to get you started:

- Have your company add the NCW logo and following tagline to correspondence during the month of October: *Our company is proud to join the American Chemical Society in celebrating National Chemistry Week, Oct. 21-27, 2007. Visit <http://www.chemistry.org/NCW> to find out more.*
- Conduct a company-wide or district-wide contest to see which office, work group, or school can most creatively assemble a periodic table – like a periodic table of cupcakes!
- Buy a gift subscription to *ChemMatters* magazine for a high

school chemistry class in your community.

- Buy a gift subscription to the *Journal of Chemical Education* for a high school chemistry teacher in your community.
- Find a fun activity from this, or a previous year's issue of *Celebrating Chemistry* and share it with your family or grandkids or youth group or neighborhood.
- Sponsor an open house or volunteer to be a guest speaker highlighting your own unique face of chemistry.

You can also find some great ideas for chemistry's impact on our lives at the American Chemistry Council's website <http://www.americanchemistry.com>. Ideas include information on: safety, health, environment, economy, innovation and everyday examples. The **Essential₂Public Information Campaign** section has some interesting resources including their public information advertisements, which you've probably seen in print or on TV. Their home page says "Chemistry is bicycle helmets, medical supplies, fire extinguisher and clean water. We make the products that help keep you safe and healthy and create a brighter future for you and your family." Do your part in October and put a real human face on the great field of Chemistry!!

****Continued on Page 31****

Also present was Robert Alonzo Welch, whose bequest established the Welch Foundation in 1954, because he had been “long impressed with the great possibilities for the betterment of mankind that lay in the field of research in the domain of chemistry.” Mr. Welch was curious to learn how The Foundation was able to give expression to his instincts about chemistry Norman clearly and in his concise way described The Foundation’s contribution to the advancement of chemistry in the State through research grants, departmental programs, endowed chairs, visiting lectureships, and special projects like the Welch Summer Scholar Program, each of which had some expression at educational institutions during the 24 years Norman was the Chairman of the Scientific Advisory Board of The Foundation. Norman had worked diligently to bring it all about. And Norman was pleased about that.

Yes, Norman Hackerman has left us, but he is now a member of the Pantheon that gathered to greet and receive him. Norman thought that perhaps he could reconstitute a different morning coffee group to solve apparently insoluble problems. Norman would like that.

Finally, in the background, moving gracefully through the assembled Pantheon, greeting all who had gathered individually and in small groups, and chatting with them as they pressed forward to speak with Norman was Gene – Norman’s beloved wife Gene. And Norman very much liked that.

****Continued from Page 22****
the study of chemistry or a chemically-related area. Donations can be

made to the Priscilla Carney Jones Scholarship Fund and sent to 1409 E. Windsor Dr., Denton, TX 76209.

“Numerical precision is the soul of science ...” William Stanley Jevons in *the Principles of Science* Book III Ch. XIII (p.273) taken from *Chemically Speaking*, Cavazos-Gaither, ed. (2002) p. 3.

Marynick Symposium Cancelled

Due to the illness of the honoree, the August 31st symposium at UT-Arlington honoring retiring chemistry professor Dennis Marynick had to be cancelled. It is possible that the symposium may be scheduled later if Dennis’ health permits.

Letter to the Editor

Dear Editor:

I want to express my appreciation to the Dallas-Fort Worth ACS Section for its contribution to the Priscilla Carney Jones Scholarship fund in memory of my wife, Dr. Priscilla Jones.

Paul Jones
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Denton, TX 76209

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could solve any problem, but I never knew how I did it. I know how I did it; I used the principles he taught me.

Michael Starbird, UT-Austin Mathematics Faculty. I was a squash partner, discussion partner, and friend of Norman Hackerman for about 20 years. For eight years I served as an Associate Dean in the College of Natural Sciences at UT. Hackerman was better than most everyone in most things, naturally including administrative ability, so as we headed to the squash court, I would often ask for advice. Among my weaknesses as an administrator was an inability to keep from getting snowed by the amount of work involved. One day I told Hackerman that I had a to-do list with 90 items on it and really did not know how to handle it. He said, “Bring me the list.” So the next week I brought him my list. He said, “I’ll bring it back next week.” The next week he returned the list with a number 1 through 5 written by each item. He said, “1 means just do it; 5 means mull it over.”

He explained the concept a bit, and then I looked at some of the items that he had written a ‘1’ by. One item on my list was a significant problem associated with the chemistry department – there were insufficient teaching laboratories for the chemistry majors to take required courses on time, with predictable results. I said, “What do you mean, ‘just do it?’ This is a major problem.” He replied, “Are you going to personally build those labs? No. So, write to the department that either they need to change some research labs into teaching labs (fat chance!) or they need to change the require-

ments so that students can graduate on time with the facilities they have. Tell them to report back in a month.” Cutting to the heart of the matter was his mode.

Joseph Lagowski, UT-Austin Chemistry Faculty. Among all the facets of Norman Hackerman’s academic life – administrator, researcher, leader, nationally recognized science advocate – teacher in the traditional sense is not one that is widely recognized. He was a good and devoted teacher, especially for students in the first-year general chemistry course for science majors, as I learned in my early years at UT. Being the “new boy on the block” in the very early ‘60’s, my first assignment from Billy Shive, Chemistry Chair, was to “back up” Norman’s general chemistry class. He had recently been named President of the University of Texas (the UT-system had not yet been invented), and, as such, his schedule was subject to the idiosyncratic vagaries of the person in that position. Harry Ransom was Chancellor and devoted most of his time to The University’s growing library holdings. Accordingly, Norman’s responsibility involved looking after everything else. Norman regularly, that is, *every* semester, taught one of the large sections of general chemistry. In those days “large” at UT meant

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A TRIBUTE TO NORMAN HACKERMAN

by J. J. Lagowski, UT-Austin

NORMAN HACKERMAN HAS LEFT US! And the Pantheon of scientists, academicians, and other luminaries of the modern technologically-oriented culture of the Western world have lined up to greet Norman, accepting him into their number. Among the first to seek him out was Sir Humphrey Davy who wanted to know about the details of the current and shifting view on corrosion, for Davy was an early investigator in the involvement of electricity with matter, *i.e.* electrochemistry. Norman liked talking with Davy.

Vannevar Bush also was there; he was interested in the details of the evolution of the National Science Foundation. In his report entitled "Science the Endless Frontier", published in July, 1945, Bush concluded that research is "the pacemaker of technological progress" and that new products and "new processes do not appear full-grown. They are founded on new principles and new conceptions, which, in turn, are painstakingly developed by research in the present realm of science." With that document, Bush recommended the creation of what would eventually become the National Science Foundation in 1950. Norman Hackerman made, essentially, the same argument for the creation of Texas-based ARP and ATP 33 years later, and the State prospered from its creation. A 2006 assessment of the ARP indicated a return on investment of 5.1 to 1; the

corresponding figures for the ATP are 4.6 to 1. Bush was very much interested in Norman's views of the relationship between science and technology, and he was also interested in the possibility of using such "local" programs to augment the Federal program that he (Bush) had helped create and nurture. And Norman liked that.

The politicians of Texas were all there – Sam Houston, the signers of the Texas constitution, John Connally, who was recognized as the most ardent political supporter of higher education in the State – and all in between who were interested, in and responsible for, the system of higher education in the State. The constitution dictated that "the legislature shall, as soon as is practicable, establish, organize, and provide for the maintenance, support, and direction of a university of the first class, to be located by a vote of the people of this state and styled, 'The University of Texas'..." These Texans who had an interest in a higher education system in the State all gathered around to discuss just how that interest was being expressed---how the education of Texans at the highest level was benefiting the State. Norman liked the idea of describing in detail the intricacies of how higher education was good for all the people of Texas. Yes, Norman really liked that.

IN MEMORIAM: PRISCILLA JONES and DMITRY RUDKEVICH

Last month our section suffered the grievous loss of two of our noted chemists, Dr. Priscilla Jones, long associated with UNT, and Associate Professor Dmitry Rudkevich of UT-Arlington. An obituary for Dr. Rudkevich will appear in our October issue. Dmitry left a wife and two small sons, and a Rudkevich Memorial Fund has been set up. Checks should be made out to the Rudkevich Memorial Fund and mailed to Educational Employees Credit Union, 2212 Southgate Street, Arlington, TX 76013.



Dr. Priscilla Anne Carney Jones passed away on Aug. 5. She had been suffering with terminal intestinal cancer and was under hospice care.

Born in Malden, MA April 30, 1937, Priscilla earned a B.A. degree in chemistry, cum laude, from Wheaton College in Norton, MA. She subsequently earned a master's degree in chemistry from Bryn Mawr College, where her thesis dealt with the kinetics of electrophilic aromatic halogenation. She then worked several years in basic research in the Boston area for a major chemical company. When in the early '60's she told the company she was going to the University of Wisconsin to earn a Ph.D., the company told her she would not have a job there when she finished, because company policy did not permit the hiring of fe-

male Ph.D. scientists. At Wisconsin she was one of two women in an entering class of over 100 graduate students. She received her Ph.D. under the direction of Robert West and was the first person to prepare and characterize the tetralithium derivative of propyne. With the awarding of her Ph.D. in 1968, she became the first woman to earn the doctorate in chemistry at Wisconsin.

While in Madison, she met and married her husband of nearly 40 years, Paul. They have two children, a son Kevin and a daughter Anne Carmel Martinez, and three grandchildren: Trent Fleming, Kevin Paul Jones, and Jessica Lea Jones.

Priscilla accompanied Paul to Denton when he accepted a teaching position at UNT, then North Texas State University. She was unable to get hired at other colleges in the area because of nepotism considerations. She was also told she was overqualified for industry positions. After her children were grown, she served as a research associate and temporary adjunct professor at UNT. Because of the difficulties she faced as a female chemist early in her career, she wished to establish a scholarship for women studying chemistry, the Priscilla Carney Jones Scholarship. The Scholarship, to be awarded on the basis of both need and demonstrated scholarship, is intended to support an undergraduate woman entering her junior or senior year in

****Continued on Page 22****

sections in the range of 450-500 students, taught in large classrooms around campus, because the Department had only one 250 seat lecture hall. Norman always chose to teach the MWF section at 8 a.m.! My job was to step in and deal with his class in the event that Norman became involved with "University business." In the 3-4 years I backed Norman up, he *never* missed a class. The closest he came to missing one occurred on a Fall Monday morning. That weekend Norman had a UT obligation that included taking a number of the UT regents to West Texas. I think that trip had to do with the UT telescope facility at Fort Davis. The party had flown out to Midland using a chartered Braniff plane. They then drove to Fort Davis to complete their business.

Late on the Sunday before the class in question, Billy Shive called to warn me to take Norman's class; he might not make it back to Austin in time to give his lecture. Fortunately, I had kept up with Norman's progress by attending his lectures, and I had all of the handouts he had given the class.

That Monday morning I was prepared to give the next lecture in the sequence as I imagined he would do it. I arrived at 7:40 a.m., prepared to give the lecture, sitting in my usual seat at the side of the class, and going over the overhead projector slides I had prepared. I went to the podium to arrange my slides and turned on the overhead projector. At that point, the class realized that something different was going to happen. As I was thinking about what I should tell the class about Norman's absence, he came striding

down the center aisle as the Tower chimes struck 8.

I learned later that Norman had spent all night getting to San Antonio using a mixture of private car and public transportation – a train and a bus. He rented a car in San Antonio and drove to Austin. This event well illustrated how seriously Norman took teaching, even if it was at the entry level. His interest in teaching, especially at the entry level, was also expressed in a number of committees he chaired for the National Academy of Sciences on various aspects of the curriculum, especially for nonscience majors, and to define acceptable ways of evaluating learning. His interest in evaluating learning was *not* to measure the effectiveness of the humans doing the teaching but to attempt to measure the effectiveness of the plethora of curricula being developed and used in many of the sciences. Norman's work with the Evaluation of Learning Committee was particularly frustrating, because, as a scientist, he was trained to look for more explicitly defined criteria than are available for the evaluation of learning. Finally, one of the last teaching areas that drew his attention was the content of the science course that he thought should be available for all first-year undergraduate students. Indeed, Norman and I had produced an outline of a course for "grade 13" students, for he had begun to believe in the continuum of science education for young people from grades K through grade 13, the first year of postsecondary schools.

Rest well, Norman. That fight is not over, even though one of our champions – you – is no longer available to help. The logical correctness

of the grade 13 science course for all students will ultimately carry the day. Some brave soul of an administrator at some influential institution will rediscover that “wheel”, and all will be well.

ACORP Committee. Introduction by Robert Curl. Norman Hackerman played a vital role in the creation and operation of the State of Texas programs that are supporting research at Texas universities. He served on the Select Committee that developed the conceptual framework and operating procedures for the Advanced Research Program and the Advanced Technology program that were ultimately created by statute. By insisting that the funding decisions for grant support of these programs be made by peer review, Hackerman put them on a sound technical basis. From the creation of the programs until his death, he chaired the Advisory Committee on Research Programs (ACORP) of the Texas Higher Education Coordinating Board (THECB) charged with oversight of the programs. When state budgets were tight or the political wind shifted, Hackerman worked tirelessly, but unfortunately not always successfully, to save the funding of the programs from the budget cutters’ knives. The fact that the Advanced Research Program still exists and its previously severely cut funding has been increased for the new biennium is in large part the result of Hackerman’s efforts.

The members of ACORP and the THECB staff supporting the program all feel great affection for Norman Hackerman and miss him and his wise leadership. We all feel a deep sense of loss. Having worked with

the man at close range over, in some cases, many years, we developed a deep appreciation of his commitment, wisdom, and leadership. Below are some personal reminiscences by members of ACORP.

Bettie Sue Masters, Welch Professor, UT-San Antonio Health Science Center, ACORP.

My personal knowledge of Norm actually began with the awarding of grant funds and, in 1990, an endowed chair by the Welch Foundation, for which he served as Chair of the Scientific Advisory Board for 24 years. As grantees, we were expected to attend the annual Welch Conferences held in Houston, where we were exposed to excellent presentations by the most outstanding research scientists in a specific area. It was Hackerman’s leadership of the Advisory Board that brought these programs to a new level of excellence and promoted the concepts of endowed chairs and the Welch Award in Chemistry, which is now recognized throughout the world as a highly coveted and prestigious award. Norm’s energy in this position was very visible at all of the annual Welch Conferences, where he was seen at every presentation and played a prominent role at the banquet at which the Welch awardees were honored. He was able to attract the highest caliber of scientists to the Advisory Board,



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STATEMENT FROM HOWARD M. PETERS

The ACS President represents the members, the Council, and the Board as the public face of chemistry. To do this well, one must understand the history, workings and thinking of these groups. My background as a chemist, service as a long-term Councilor, member of the Board of Directors, active committee member and as a leader in a large local section and in founding an active division have prepared me well for this opportunity.

I will be an active advocate to advance the vision and goals of our Society and those professionals who perform every day to improve people’s lives through chemistry—e.g.:

- INNOVATION/INVENTION
- INCLUSION/ENGAGEMENT
- INTERNATIONALIZATION/GLOBALIZATION

My planned initiatives include:

IMPROVING OUR COMMUNICATIONS

- ✓ Increase interactions among the ACS Board, Council, and members with the public.
- ✓ Support our publications to become the premier supplier of chemical information.
- ✓ Enhancing ACS regional meetings with funding, support, etc.

HONORING OUR COMMITMENTS

- ✓ Increase ACS programs to assist all members in career development and transitions.
- ✓ Build strategic alliances with related national and international scientific and engineering entities.
- ✓ Expand ACS engagement with community colleges and four-year, non-Ph.D. granting colleges and universities.

NOURISHING OUR DIVERSITY

- ✓ Create active committees for women/younger/minority/diversity and senior chemists.
- ✓ Support ACS engagement of high school teachers and community college professors.
- ✓ Increase involvement of ACS with science and engineering fairs.
- ✓ A great strength of the ACS is the diversity of its more than 160,000 members. Each of us brings out particular talents to service this profession.

If elected, I will work cooperatively with the Board, Council, staff and members to be the public voice for chemistry, innovation, sustainability and competitiveness.

I close with two thoughts:

(For me) ACS = **OPPORTUNITY!**

(And I know) **CHEMISTS—MAKE A DIFFERENCE!**

I ask for your vote.

STATEMENTS FROM PRESIDENTIAL CANDIDATES

Editor's Foreword. As is our usual practice in September, we are publishing 300 word statements provided to us by this year's candidates for ACS president. The order of statements is alphabetical by last name. The percentage of ACS members voting for president has been shrinking year after year. Voting for president is one of the easiest things members can do and one of the most important. We urge you readers to read these statements carefully and then vote!

STATEMENT FROM THOMAS H. LANE

Strengthening the Bonds:

Chemistry, Members, the World---Together

I am deeply honored for the opportunity to serve the American Chemical Society as candidate for president-elect. I believe in the ACS, our vision, and the power of our membership. The complexities of the issues before us require proactive listening, clear, concise communication and decisive actions. The very fiber of the chemical enterprise is changing. We must leverage our strength and the power of our membership to influence the future of our discipline.

Educating a new workforce, enhancing the public face of chemistry, shaping public policy, ensuring funding for discovery and managing the globalization of the chemical enterprise will require new levels of collaboration within the ACS and new relationships beyond our borders to bring about measurable change. As your president, this is where I will focus our collective efforts.

Education: I pledge to keep Education and Science Literacy at the forefront of our thinking and pivotal in our actions.

Relationships: I pledge to keep an open mind, to hear all voices, and practice tolerance and acceptance as the ACS continues to reach out; building new and productive relationships that support our strategic plan.

Outcomes: I pledge to help develop outcome-based metrics to guide the ACS on our journey.

I am fully committed and ready to lead this work on behalf of the ACS membership. I offer my 33 years of experience, my passion for chemistry and my productive, career-long involvement with the ACS as evidence that I have the necessary background, capability and determination to lead this Society forward. Likewise, I encourage each of you to renew your commitment to our profession and to ACS---its governance, vision and direction. We're compelled to seek the future together.

including Nobel Laureates and U.S. National Academy members.

By some quirk of fate, I was asked to join ACORP. Here again, Norm Hackerman was to lead this committee as Chair for many years, and, as Bob Curl writes, he worked tirelessly to preserve these research programs as necessary for Texas to develop into a research powerhouse to be reckoned with nationally. He staunchly defended the necessity for these programs as lately as this past legislative session.

We all recognized his wry sense of humor and his mater-of-fact demeanor. His opinions were strong – but how could you argue with a man who was usually right?

C. Rinn Cleavelin, Texas Instruments, ACORP. Being from the semiconductor industry and a West Texas appointee to ACORP in 1990, I was not that familiar with Dr. Hackerman or the many accomplishments that he had already made in his illustrious career, which spanned more than 50 years at that time. My first impression of the committee was that it was a “good-ol’-boys-club” with its members having many personal connections to the academic, industrial, and political elite of Texas. Of course, I wondered how I would fit in with such an auspicious group, but I was pleasantly surprised by the welcome reception of the entire committee, the ACORP supporting staff, and especially the committee chair, Norman Hackerman. Norm instantly reminded me of an uncle of mine who was a retired colonel in the U.S. Air Force. His demeanor of being tough on the outside, his physical stature, and his kindness and compassion on the inside, which I

observed over time, bore strong resemblances to my uncle.

During my long association with Norm on the committee, I was always impressed with his commitment for excellence in R&D and his desire to help the youth of Texas to develop into scientists and technologists that would lead Texas and the nation into the future. I can only hope that I will have even a fraction of the long and productive life that Norman Hackerman had. Norm will be greatly missed, but never forgotten for his wise counsel, leadership, and friendship.

Billy E. Welch, Former Director, Armstrong Laboratory, Brooks Air Force Base, ACORP. I first met Norman face to face at the Southwest Research Institute (SWRI) in the early ‘90’s. Norman had come to the Institute at Martin Goland’s request to talk about the Advanced Research and Advanced Technology Programs. At the time, Martin, the Director of SWRI, was a member of the Advisory Committee on Research Programs, and I was the Director of the Air Force’s Armstrong Laboratory at Brooks Air Force Base. I was fascinated by Norman’s ability to boil a lot of stuff down to the essence, his continual emphasis on excellence, the importance of peer review, and student education. Some years later I was asked to participate on the Advisory Committee and rapidly learned that my first impressions were correct and that association with Norman Hackerman was a pleasure and a privilege.

Norman Hackerman’s contributions to science are indeed legendary. His singular impact on science in Texas was, is, and will continue to be

significant. Through his involvement in ACORP, Norman has worked tirelessly to insure that we have stayed on course, that peer review is the ONLY way to sort grant applications, that excited undergraduate and graduate students are the future for Texas, and that the highest quality in all that we do is the only acceptable level. He will be missed on the ACORP, but he has left a well-marked path to the future.

Robert Curl, Rice University Chemistry Faculty, ACORP. I have been acquainted with Norman Hackerman since 1970 when he became President of Rice University, but I feel that it was only after I joined ACORP a few years ago that I really came to know him, as we struggled together to guide and promote the Texas higher education research programs, ARP and ATP. When Norman was President at Rice, our relationship was like that of the army private (me) to the commanding general (Norman). The private knows little about the general. Working with Norman at ACORP, I saw how deeply concerned he was with promoting the education of students and the development of the universities in Texas. I observed how he was putting his best effort and thought into the common good. While he liked to keep the meeting on track and complete the agenda, Norman listened long and carefully, responded thoughtfully, and focused on the positive. I saw leadership in action. Texas has suffered a great loss. We can console ourselves with the realization that we were very lucky to have had him with us for almost a century working hard for the common good right up to the end.

Kenneth H. Ashworth, Former Texas Commissioner of Higher Education. Toward the end of my 21 years as Texas Commissioner of Higher Education, I tried to persuade Norm Hackerman to write down his ideas about technology transfer from basic science. I told him that he had a great book in the making. He said he couldn't even read his own notes and said there was no way he could do it. So, I had a speech he gave to the Coordinating Board and some testimony he gave to a legislative committee transcribed to show him he already had a beginning. I was intrigued by his analogy of basic science as a flywheel that occasionally threw off ideas that were picked up by a smaller wheel, technology, and converted into uses for mankind. He still demurred, so I inveigled him into some luncheon conversations which I would record. From those sources we came up with "Conversations on the Uses of Science and Technology", published by UNT Press in 1996 and translated into Chinese a couple of years later.

At one point in our talks I asked Norm what first got him interested in chemistry. He told me about a seminal development in surface chemistry in the '30's in which Irving Langmuir and Katherine Blodgett were able to measure how many molecules were in a sodium palmitate film by making a thin layer only a molecule thick. He said as he was studying in college his neighbors kept asking him why he didn't become a doctor, like all good Jewish boys. He told them he was interested in science. Then they asked him what he was going to DO with it, and he didn't have an answer. They thought he was

wasting his parents' money. To think that Norm Hackerman could have become a physician!

At our last lunch together about a month before his death, Norm said, "Ken, the Chinese are getting way ahead of us in science. You know why?" When I said I didn't, he said in complete seriousness, "Because they are reading our book, and people in this country aren't."

Norbert Dittrich, President, The Welch Foundation. Robert Welch established The Welch Foundation for basic chemical research, since he believed that advancing chemistry would get to the root of some problems of the world and also improve the lives of all. Our mission is Advancing Chemistry – Improving Life.

For 25 years Norm led the Scientific Advisory Board in helping carry out that mission. Norm personified Mr. Welch's vision for basic research in chemistry. We receive hundreds of complex proposals, but Norm was able to get to the root chemical question of each proposal. He could get to the heart of a complex issue and articulate an answer even nonscientists would understand. With Norm you may not have liked the answer, but you always knew where he stood on an issue.

Norm was key in establishing the Welch Summer Scholar Program and the Departmental Research Grant Program. Both programs expose young students to a real-world experience of basic research with the hope of expanding each student's lifetime interest in science. The Foundation established the Norman Hackerman Award in Chemical Research to

recognize younger researchers for their work in the state of Texas. The award is meant not only to recognize the young scientist's work, but we hope it will be encouragement and inspiration to those who are embarking on careers dedicated to increasing our understanding of chemistry. Norm would glance to the past but primarily focus on the future by teaching undergraduates. He was planning on having a class this fall at The University of Texas.

I was blessed to have the privilege and good fortune to have known Norm as a scientist, administrator and a friend. Norm was, and continues to be, an inspiration to all of us at The Welch Foundation.

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