

25th ANNIVERSARY OF BUCKMINSTER FULLERENEp. 5

Southwest

RETORT

November
2010

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FIFTY YEARS AGO IN THE SOUTHWEST RETORT

The October tour speaker was Texas native **Dr. Gregory R. Choppin**, currently Associate Professor of Chemistry at Florida State University. After receiving his Ph.D. at the University of Texas under **George Watt**, he worked at Lawrence Radiation Laboratory at UC-Berkeley, where he was a co-discoverer of element 101, Mendelevium. His talk will be on "Ion Exchange Studies of Lanthanide and Actinide Complexes."

At Texas Instruments **Morton Jones** presented a paper on "Gallium Arsenide Transistor" given at the AIEE meeting in Chicago Oct. 9-14. **Drs. David A. Jeffrey** from the University of Arkansas and **Gerald D. Risinger** from Iowa State University have joined the chemistry faculty at Arlington State College. At Texas Woman's University **Dr. William L. Mecay** attended the Second Annual Conference of the California Association of Chemistry Teachers at Pacific Grove, CA.

At the University of Texas a one year grant of \$30,000 from NSF was awarded to **Drs. Jeff C. Davis, Jr., Joseph J. Lagowski**, and **Rowland Pettit** to aid on NMR studies of association with Group III elements. The grant will supplement \$51,000 from the University to purchase an NMR spectrometer for the chemistry department. **Dr. Allan J. Bard** has received a two year, \$17,600 NSF grant to study "Effects of Secondary

Reactions in Controlled Potential Coulometry."

At Humble Oil in Baytown, **Dr. E. O. Fischer** from the University of Munich conducted a course in "Organometallic Compounds." **Dr. F. W. Lampe** has resigned to accept a position as Associate Professor of Chemistry at Penn State University. At the University of Houston **Dr. A. Zlatkis** attended the International Symposium on Gas Chromatography held last summer in Edinburgh.

At Baylor, graduate student **Herman C. Custard, Jr.** (*a former Retort editor*) is the proud father of a son, **Herman C. Custard, III**. The University of Arkansas ACS local section has been selected as a recipient of the 1961 ACS Local Section Public Relations Award. Arkansas faculty members **Drs. Arthur Fry** and **Samuel Siegel** attended the 8th Conference on Reaction Mechanisms held at Princeton University.



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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 106.42	47 Ag 107.87	48 Cd 112.411	49 In 114.818	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 186.207	76 Os 190.23	77 Ir 192.222	78 Pt 195.084	79 Au 196.967	80 Hg 200.59	81 Tl 204.383	82 Pb 207.2	83 Bi 208.98	84 Po (209)	85 At (210)
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Southwest Retort

SIXTY-THIRD YEAR

November 2010

THE 25th ANNIVERSARY OF BUCKMINSTERFULLERENE

Reported by Dr. Sean O'Brien, Texas Instruments

Editor's Foreword. *It is fitting that Sean O'Brien report on these festivities, as Sean was one of the five individuals credited with the discovery of this interesting molecule. Retort readers with long memories will remember his two part article in the January and February issues of the 1997 Southwest Retort on the happenings in Stockholm in connection with awarding of the 1996 Nobel prize to Smalley Kroto, and Curl for the identification of buckminsterfullerene. As a co-discoverer, Sean was invited to Stockholm along with the awardees. You readers are also directed to page 36 of the Nov. 1, 2010, issue of C&EN, which has a brief article on the celebration along with a picture of Sean plus Kroto, Curl, ACS President Francisco, Rice President Leebron, and Houston Mayor Parker.*

The 1985 discovery of a new form of carbon (C₆₀, buckminsterfullerene) was a landmark event in the history of carbon chemistry. Rice University celebrated the 25th anniversary of this discovery with a series of events beginning Friday, Oct. 8. The British Consul General Paul Lynch hosted a dinner at his home for Sir Harry Kroto. My wife Jennifer and I were invited, and we dined with Bob and Jonel Curl, Harry and Marg Kroto, and some of the local British Consulate representatives.

Saturday, my teenagers took the Rice admissions tour; then we had a private tour of the Space Science Building including the carbon nanotube labs. Most of the Smalley Institute facilities were new since my last visit.

On Sunday, Oct. 10, Rice hosted a luxurious gala dinner at which the discovery team was reunited: Nobel Laureates Bob Curl and Harry Kroto along with Jim Heath and myself. The dinner tables were elegant with a buckyball centerpiece at each table. Along the wall was a tall ice

sculpture carved with a soccer ball image. A series of speakers included Texas Lt. Governor David Dewhurst, US Representative David Culberson, and former Senator and Virginia Governor George Allen. The keynote speaker was former Texas A&M President David Bowen.

Former Rice President Malcolm Gillis participated in the entertainment, a musical composition entitled "The Nano Symphony" with narrative. Pres. Gillis' narrative was taken from Rick Smalley's testimony before Congress for the National Nanotechnology Initiative.

The next morning the discovery team was reunited on stage for a long discussion of the historical events surrounding our work, the controversy, and the future of nanotechnology. We reminisced about the fairly hostile rejection our work endured during 1986 and 1987 and discussed cluster science. One point I felt was overlooked was that Rick Smalley had probably earned his own Nobel Prize for cluster science before we ever saw the first carbon mass spectrum. His outstanding work was pushed aside and almost forgotten by the creation of fullerene science.

The four remaining members of the team united for a photograph; then the keynote speaker at lunch was Senator Kay Bailey Hutchison. That afternoon a series of technical talks began starting with Professor Mildred Dresselhouse, who had recently celebrated her 50th year at MIT, followed by Don Huffman, who was responsible for isolating the first macroscopic sample of C₆₀.

Phaedon Avouris from IBM talked in great detail about graphene science.

That evening the ACS and the Chemical Heritage Society took center stage as the Space Science Building (site of our discovery) was designated as a National Historic Chemical Landmark. ACS President Joe Francisco led the presentation along with Houston Mayor Annise Parker and Rice President David Leebron. Harry Kroto gave a lengthy plea for a rejection of the attacks on evolution. Former ACS president Bill Carroll was also there. The festivities included a portable planetarium show, food and drink, and tours of the third floor where our labs were located. Many graduate students and their families were there, and the festivities continued well past dark with laboratory tours and good food.

Tuesday morning the talks continued with a Skype presentation from England given by newly minted Nobelist Andre Geim. He had committed to attend many months ago, but the news of his Nobel forced a change in his schedule. The event transformed into a state of the art conference on Wed. and Thurs. as the Lockheed Martin Advanced Nanotechnology Center of Excellence at Rice (LANCER) had a formal review.

Rice did a fantastic job of celebrating the discovery, honoring Rick Smalley, and merging this all with a cutting edge scientific conference. I plan to attend the 50th anniversary in 2035!

ANA-LAB HONORED AGAIN!

Ana-Lab Corp. in Kilgore has received the Seal of Excellence for 2010-2011 from the American Council of Independent Laboratories (ACIL). The award was announced in October at the organization's annual meeting and is good through Oct. 2011. "This award demonstrates Ana-Lab's commitment to the quality of data and services provided to the corporation's customers," said Bill Peery, Jr., executive vice president of Ana-Lab. "This award sets Ana-Lab apart from other laboratories by demonstrating our continued commitment to quality and customer service."

Any testing laboratory that wants to be recognized as a participating laboratory must maintain proof of annual ethics training and an early detection system for questionable analytical practices, submit a signed code of ethics and distribute satisfaction surveys to their customers. "The Seal of Excellence participants demonstrate that they are proud of the quality they achieve and always operate with customer service as a top priority," wrote Marlene Moore, program administrator.

This marks the seventh consecutive time Ana-Lab has received such recognition. Ana-Lab was organized in 1965 by Dr. Charles Whiteside and now has 114 employees with regional offices in Shreveport, LA, Norman, OK, Austin, Houston, Dallas, Brownsville and Amarillo.

RETORT MAILING DELAYS AND ROSTER UPDATES

You readers will have noticed that this *Retort* issue is even later than usual. We have been striving to update our mailing rosters. With the addition of students as ACS members, we do our updating in the October/November time frame to insure that student movement has been completed after the start of the new academic year. We have to get permission to access the ACS rosters for our six member sections. We were able to do so for Dallas-Fort Worth, but permission has been delayed for our other five sections. This November issue uses a partially updated roster; we hope that the updating will be complete with the December issue. There are other changes coming with *The Southwest Retort*, but you will hear about those in our January issue.

CHEM GEMS & JOULES

Jennifer Cruze Wins ACS SW Regional Teaching Award! The Nov. 15 D-FW ACS meeting honoring Schulz Award Winner Jennifer Cruze turned out to be a dual celebration. Word was received a

few days earlier that Jennifer had won the 2010 ACS Southwest Regional Award for High School Chemistry Teaching. Jennifer received that award at the December SWRM meeting in New Orleans.

Those attending the November meeting to hear Jennifer's talk on "Teaching and the Law of Thresholds" learned first hand how dynamic Jennifer is as a teacher and how fortunate her students are to have this charismatic personality teaching them. A threshold was ultimately defined as change. Her Power Point presentation was interspersed with cartoons, all of them funny and some of them very pointed. To illustrate how we need to communicate with students in their own language, she showed a cartoon of how communication has changed through the ages. It starts out with ancient man painstaking carving out symbols in stone. Then came moveable type, mass publication, and e-mail. The final stage is Twitter, with the cartoon student saying, "140 characters--- what more is there to say?"

To illustrate that what is fair for one student is not fair for another, another cartoon showed a professorial character in front of a student body consisting of a cat, an elephant, a seal, a goldfish, a monkey, a bird, and a frog. The professor says, "To insure a fair selection, you all get the same test. You all must climb that tree."

Jennifer described how one of her students Maria failed the TAKS test by one question and failed again in a repeat. Jennifer then took a released TAKS test and took it apart. After making the appropriate analysis, she was able to focus student efforts in the right direction, so that Maria did pass the test.

Jennifer gave much credit to her

parents for taking her kids one night a week for two and half years so that she could get her Master's degree in Interdisciplinary Science from UTA. She also credited her husband Dennis for doing household duties that allowed her to teach.

The last slide on Jennifer's presentation was Van Gogh's striking painting of an elderly man titled "On the Threshold of Eternity." However, I prefer to close with Jennifer's next-to-last slide, which I quote in its entirety.

"The Law of Thresholds is multifaceted as is teaching and chemistry. Anticipate and embrace the change. Put the work in ahead of the curve. Chemistry instruction must continually change to meet the ever changing needs of our student population. Ground your work in scientifically proven methods and in brain research. Stay informed, educated, and true to yourself. Put the kids' needs first in all decisions and be there to carry your younger colleagues across the threshold."

National Chemistry Week: Partial Report. Here is a partial report of National Chemistry Week (NCW) activities from TCU, UTA, and Tarleton State University.

The TCU Student Affiliate Chapter of ACS also known as Chemistry Club is new on the TCU, yet they already have 15-20 very active and enthusiastic members. Very early on the group adopted the goal: "Share chemistry with the campus, community, and eventually the world." In addition to a number of other events throughout the semester,

they set out to make an impact on campus with NCW featuring a highly visible event targeting different groups each day. On Monday, the entire club encouraged everyone on campus to “wear your favorite chemistry T-shirt” and was quite successful. Periodic table T-shirts were seen all over campus. On Tuesday the group constructed and helped consume a Periodic Table of cupcakes. Departmental faculty were the first to snag their element of choice. Department Chair Bob Neilson was quick to grab his favorite, boron and nitrogen, his initials and elemental components of his research. Fabulous Flubber was presented to students during lunchtime at the library mall where students could learn how to make flubber and the principles behind its properties. On Thursday a Chick-Fil-A Sandwich Sale fundraiser for the group’s local efforts proved to be successful. On Friday the club relaxed a little with a Pizza-rama for the undergraduate and graduate chemistry students in the chemistry library. The week concluded on Saturday with a visit to the “adopted” elementary school where our students are tutoring kids for the TACS exam in science.

The group hopes to eventually have funds to do magic shows around the city as well. Kudos to this enthusiastic and hard working group of students and their faculty advisor, new assistant Professor **Kayla Green**.

The UT-Arlington Chemistry Biochemistry Student Affiliates carried out NCW activities on National

Mole Day (Oct. 23). Chapter President **Chris Parikh** and members **Mahmuda Farha** and **Christopher Wilson** carried out a demo at a Starbucks close to the University. The students did a density experiment with water and isopropanol plus beads of different densities. A “tornado” experiment was performed with boiling ethanol. Also, National Mole Day fliers were passed out.

To celebrate NCW the Tarleton State University Student Affiliate Chapter hosted a “Green Chemistry” seminar by **Dr. Kevin Chambliss** of Baylor on Oct. 21. Other NCW events included a “Mole Day Bake Sale” and a Homecoming Float on 10/23 cosponsored with two other science clubs.

Chemistry Olympiad. The new coordinators for the Olympiad are **Drs. Kathleen Holley** of UNT and **Brad Pierce** of UTA. The preliminary Olympiad exams will be very early, March 5. The exams will take place at three locations, at UT-Arlington, at UNT, and at Tarleton State University.

UNT’s Diana Mason Honored. At the recent CAST meeting, UNT’s **Dr. Diana Mason** received the Rosendo Garcia Chemistry Spirit Award.

Around-the-Area

University of Arkansas.

Senior honors chemistry student **Hannah Henson** was voted 2010 Homecoming Queen. Henson is in the Kumar lab where she participated in the 2010 COBRE REU summer program and received a SURF grant for her research. She received the ACS award and Honorary Scholar recognition and continues to make the Fulbright College Dean's list.

NIH will provide the Center for Protein Structure and Function with a \$5.4 million grant over the next five years to continue the research it has established over the past decade. The new funds will help expand the five already established core facilities within the center and provide start-up funds to scientists with innovative ideas for new research projects.

Johanna M. Rankenberg successfully defended her doctoral dissertation. Her advisor is **Roger Koeppe**. She plans to return to her native Netherlands for a few months before beginning a postdoc at Kent State University.

The 2010 Arkansas INBRE Research Conference was held in Fayetteville. More than 500 faculty, students, and researchers from 24 colleges in Arkansas and surrounding states participated. Of the 44 posters present in the chemistry and biochemistry division, 14 feature participation from this department.

Bob Gawley received an NSF grant for "Dynamics of Chiral Organolithiums: Enantiomerizations

and Resolutions." **Ryan Tian** received an NSF grant for "Synthesis of Hyperbranched Copolymers on Novel Nanostructures for Polymer Electrolyte Fuel Cell Applications." He attended an NSF panel review in Sept. and attended the Smart Materials Research Conference Oct. 31-Nov. 2.

Participants at the ABI Fall Research Symposium in Little Rock Sept. 29 were **Suresh Kumar**, who gave a talk, and **Matt McIntosh**, **Julie Stenken**, **Roger Koeppe** along with undergraduate **Omar Salem** gave posters. Stenken gave a talk at the "Monitoring Molecules in Neuroscience" meeting in Sept. in Brussels, while graduate students **Anthony Herbaugh** and **Anupama Aggarwal** presented posters.

Colin Heyes gave an invited talk at the ACS Midwest Regional Meeting in Wichita and also talks at Northeastern State University and Arkansas State University. **Matt McIntosh** gave a talk at Hendrix College. **Nan Zheng** gave talks at both Missouri State University and the University of Central Arkansas. **Joshua Sakon** attended the American Society for Bone and Mineral Research on Toronto Oct. 14-20, where he presented three poster with his colleagues from Japan. Graduate student **Beth Emerson** gave a paper at the Midwestern Association of Forensic Scientists meeting in Kansas City Oct. 4-8, while graduate student **Randy F. Espinal Cabrera**

gave a poster at the Lab-on-a-Chip World Conference held in San Diego Oct. 28-29.

Suresh Kumar, Paul Adams, postdoc **Srinivas Jayanthi**, and grad students **Nick Gleason, Ryan Thurman**, and **Vitaly Vostrikov** presented papers at the GRASP NMR meeting at the University of Kansas Oct. 29-30.

South Plains

Texas Tech University. The Tenth Henry J. Shine Lecture took place on Nov. 15. The speaker was **Professor Aaron Ciechanover** of the Tumor and Vascular Biology Research Center at Technion—Israel Institute of Technology and the 2004 Nobel Laureate in Chemistry. His talk was on “Why Our Proteins Have To Die So We Shall Live.”

Heart o’ Texas

Baylor. The chemistry department hosted the 5th Annual Advanced Instrumentation Workshop Oct. 29-30. Present were 25 students and five faculty from twelve different schools.

Wichita Falls-Duncan

P. K. Das of Cameron University Wins SW Nalley Award. The Ann Nalley ACS Regional Awards for Volunteer Service to ACS were instituted in 2006 when Ann was ACS President. A devoted volunteer herself, Ann thought that there should be further ways to acknowledge ACS volunteers. This year’s winner of the Nalley Award for the Southwest region is Paritosh K.(P.K.) Das of Cameron University, Ann’s home university.

Retort readers with long memories will remember that P.K., then with Phillips in Bartlesville, was the winner of the 2002 Oklahoma Chemist Award. Our magazine published a profile on P.K. in the December, 2002, issue (Vol. 55. No. 4, pp. 5-6). At that time P.K. was honored for his important computational work designed to improve Phillips’ chemical processes and catalysts.

Before his early retirement from Phillips, P.K. was active in the Northeast Oklahoma ACS Section. He served as secretary and chair of that section, and under his leadership the section won the outstanding section performance award in both 1996 and 1997. In 2001 he served as Co-Chair of the Oklahoma Pentasectional Meeting. The meeting was an outstanding success and resulted in the largest ever attendance by chemists and students of the region. He was also organizer/coordinator of community outreach activities in the Northeast Oklahoma ACS section. After his move to Cameron, P.K. served as secretary and then chair of the Wichita Falls-Duncan section. He was the program chair in 2008 for the Pentasectional Meeting held at the Halliburton Technology Center in Duncan. This meeting was again well-attended.

P.K.’s service throughout his residence in Oklahoma exemplifies the highest standard of volunteer work for ACS. *The Southwest Retort* congratulates P. K. Das on this well-deserved award and challenges its readers to emulate P.K.’s efforts.

Dallas-Fort Worth

New Officers for 2011. Here are the results of the D-FW ACS elections: Chair, **Aaron Fletcher**, Dallas Baptist University; Treasurer, **Kirby Drake**, Klemchuk Kubasta LLP; Councilor, 2011-2013, **Linda Schultz**, Tarleton State University; Alternate Councilor, **Mary Anderson**, Texas Woman's University.

Meeting-in-Miniature. The tentative date for the Meeting-in-Miniature is Saturday, April 16. The event will be held at Tarleton State University in Stephenville.

Texas Christian University. TCU welcomes new assistant professor **Kayla Green** to the faculty this fall. She is establishing her new lab at TCU in the field of bioinorganic chemistry, specifically metals in medicine. She obtained her Ph.D. at Texas A& M in 2003 with **Marcetta Y. Darensbourg** as mentor. She then did a postdoc with **Dean Sherry** at UTSW Medical Center in Dallas. Her current graduate student is using N-heterocyclic amines to extract metal ions from beta-amyloid for possible Alzheimer's disease therapy. Her current undergraduate student is developing ferrocene-based biosensors to detect biologically relevant molecules such as VEGF produced in excess by cancerous tissues. She is currently teaching advanced inorganic chemistry and is sponsor of the TCU Student Affiliate Chapter of the ACS (*see Chem Gems & Joules*).

Dr. Ben Janesko and collaborator **Edward N. Brothers** of Texas A&M Qatar have received a three year, \$1,039,143 research grant from

the National Priorities Research Program of the Qatar National Research foundation to study "Density Functional Approximations That Accurately Predict the Activity and Selectivity of Heterogeneous Catalysts." **Prof. Manfred Reinecke** recently was appointed to the Honorary Editorial Board of *Botanics: Targets and Therapy*. **Welch Prof. Eric Simanek** received a one year NSF grant from the Office of Cyberinfrastructure to support research, education, and outreach activities involving TCU undergraduates and the local schools. He also received funds to study dendrimers laden with the cytotoxin BrefeldinA.

UT-Arlington. **Dr. Brad Pierce** gave a presentation at the ACS SW/SE Regional Meeting in New Orleans. His undergraduate student **Josh Crawford** and graduate student **Wei Li** presented posters there. **Dr. Krishnan Rajeshwar** gave an invited paper at the Electrochemical Society in October at Los Vegas. He also co-organized a symposium there on "Photovoltaics for the 21st Century." The same week he attended the Scialog Program meeting of Research Corp. in Tucson, AZ, as a panel member. Two special seminars took place on Oct. 22. **Prof. Karel Lemr** of Palacky University in the Czech Republic spoke on "Desorption Nano Electrospray: A Useful Analytical Tool", while **Prof. Vladamir Havlicek** of the Czech Academy of Sciences talked on "Mass Spectrometry Imaging: Principles and Applications." Both scientists were visiting

****Continued on Page 14****

SMU Chemistry

- Ph.D. Program -

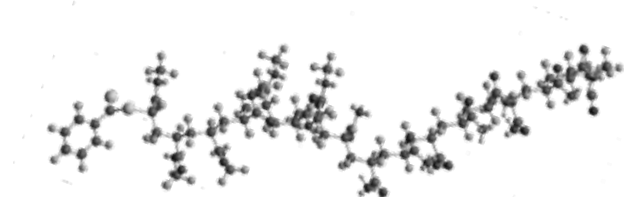


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****Continued from Page 12****
the labs of UTA's **Kevin Schug**.

**Call for Nominations for
Doherty and Schulz Awards.**

Nominations are invited for the 2011 Wilfred T. Doherty and Werner Schulz Awards. Nomination forms are available online at the D-FW website or through the D-FW Awards Committee Chair, **Dr. Paul Sood**, Access Pharmaceuticals, 2600 N. Stemmons Fwy, Ste 176, Dallas, TX 75207-2107, Tel. 214-905-5100, x 214, E-Mail, paul.sood@accesspharma.com.

Nominations are due to Dr. Sood by Mar. 14. Seconding letters may accompany nominations. Each nomination should contain a cover letter that carefully highlights the nominee's accomplishments. Nominations remain active for five year but should be updated annually.

The honorarium for the Doherty Award is \$1500 and an engraved plaque; that for the Schulz Award \$1000 and an engraved plaque. A large photo of the Doherty Award winner will be displayed permanently in the Gallery of Doherty Award winners, Berkner Hall, UT-Dallas. A large photo of the Schulz Award winner will be displayed for one month at the Science Place 1 in Dallas, and then the photo will be displayed permanently in the Gallery of Schulz Award winners, Science Bldg., Tarleton State University. A traveling plaque stays at the winner's high school for the year of the award. The two winners will normally

receive their awards and give their lectures at a fall meeting of the section.

The Doherty Award is given for excellence in chemical research or chemistry teaching, meritorious service to ACS, establishment of a new chemical industry, solution of pollution problems, and advances in curative or preventive chemotherapy. The impact of these accomplishments may be either of local or national significance. Nominees may come from industry, academia, government, small business, etcetera. The nominee should be a member resident in the area served by the D-FW ACS Section, and the work on which the award is based should usually have been done in this area.

The Schulz Award is given to high school chemistry teachers like **Dr. Werner Schulz**, who bring something extra to the teaching of chemistry. The nominee or nominator need not be ACS members. Nominees should show excellence in chemistry teaching as demonstrated by testimonials from students and fellow teachers, results in student competitions, and diligence in updating and expanding scientific/teaching credentials. The D-FW section stretches from Abilene on the west to Sherman on the north to Commerce on the east to Stephenville on the southwest.

To maintain the stature of these awards, a continual flow of high quality nominees is needed. Please do your part.

January, D-FW ACS Meeting

Meet DFW's New Young Investigators

Learn about exciting research in the DFW Section

Saturday, January 29, 2011, ca. 8:45 A.M. to 4:00 P.M.

Fondren Science Building, Southern Methodist University, Dallas, Texas

Directions and parking details will be found at <http://faculty.smu.edu/pwisian/dfwacs.htm>

To **register** (ca. \$15, includes a light lunch) send email to pwisian@smu.edu or call 214-768-2483 by Thursday, January 27 to guarantee your lunch will be ordered. You are welcome to attend without ordering lunch. Payment by check or cash will accepted when you arrive at the meeting.

Keynote Speakers New Welch Chairs

Eric Simanek, Texas Christian University

Dennis Smith, University of Texas at Dallas

Young Investigators

Jungmo Ahn, UTD

Onofrio Annunziata, TCU

Chuo Chen, UTSW

Steve Cooke, UNT

Sergei Dzyuba, TCU

Subhrangsu S. Mandal, UTA

Steven Nielsen, UTD

Kevin A. Schug, UTA

Brent Sumerlin, SMU

Guido Verbeck, UNT

Invitation to all POSTDOCTORAL RESEARCH ASSOCIATES in the ACS-DFW Local Section

All postdocs are invited to present a poster on their current research from ca. **noon to 1:30 pm**. This is an excellent opportunity to network in the local section, meet local academic and industry leaders, and or develop collaborative research projects.

Please send your name, email address, a descriptive title, authors, and affiliation to Patty Wisian-Neilson at pwisian@smu.edu by Wednesday, January 12, 2011. Details on poster sizes will be sent when your poster is approved for presentation.

**FEBRUARY D-FW ACS MEETING
FEBRUARY 9, 2011
“FROM BEHEMOTH TO BARELY
VISIBLE: THE EVOLUTION
AND FUTURE OF SCIENTIFIC
INSTRUMENTATION”**

The meeting will be held from 7:30-10:30 p.m. at Arts 5th Avenue in Fort Worth. It is co-hosted by the D-FW ACS Section and the Fort Worth Life Sciences Coalition. Details will follow on www.fwlsc.org and www.acsdfw.org. Co-sponsorships are still available. Direct questions, comments, and suggestions to info@fwlsc.org.