TAKING TO THE STREETS …….....p. 5
ACS MEETS IN BIG D in 2014 .....p. 8

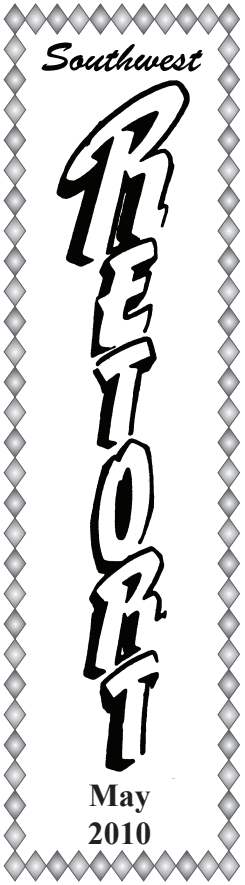

TABLE OF CONTENTS

INDEX OF ADVERTISERS

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Fifty Years Ago in The Southwest Retort

The ACS April National Meeting in Cleveland was attended by six University of Texas (*now UT-Austin*) faculty members: **Drs. George W. Watt, Robbin C. Anderson, Gilbert H. Ayres, Frederick L. Crane, P. D. Gardner,** and **Norman Hackerman**. With support from the Welch Foundation, prominent chemists have been giving one week's worth of lectures in Austin. In March **M. J. S. Dewar** of the University of Chicago spoke on "Some Investigations into Structure and Reactivity." April saw **Arthur C. Cope** of MIT speaking on "Elimination Reactions of Amine Oxides and Quaternary Bases." The May speaker, **H. S. Gutowsky,** of the University of Illinois, presented "Chemical Studies by Means of Radiofrequency Spectroscopy."

NSF and AEC are joint sponsors of a $20,400 grant given to Texas Woman's University for support of an In-Service Institute for teachers of science and mathematics. Participating from chemistry is **Dr. Helen A. Ludeman. Dr. Robert W. Higgins** from TWU attended the Spring ACS National Meeting in Cleveland. At East Texas State (*now Texas A&M-Commerce*) **Dr. Richard W. Neithamer** and **Dr. Garson P. Shulman** have been given grants from Research Corporation. The grants will also pay for the purchase of an infrared spectrophotometer. These grants start the inauguration of an active research program at the master's level.

At TCU **Dr. W. H. Watson** has been promoted to associate professor and **Dr. J. E. Hodgkins** has been given tenure. At North Texas State College (*now UNT*), **Drs. Price Truitt** and **J. J. Spurlock** attended the ACS national meeting in Cleveland. Dr. Spurlock has been elevated to the Vice Presidency of NTSC. At Anderson Clayton **Russell Walker** attended the American Oil Chemists' Society Meeting in Dallas, and he also attended an NMR school given by Schlumberger in Ridgefield, CT. **Dr. John Spessard** has joined Convair-Fort Worth in the Process Control Group. At TI **Dr. Gordon Teal** chaired the technical program committee for the IRE International Convention.

Papers at the Spring ACS meeting were given by the following University of Arkansas chemists: **William K. Noyce, Arthur Fry, Manfred Eberhardt, Ikuo Ookuni, Samuel Siegel, Gerard V. Smith, Kurt H. Sterns, William Ves Childs,** and **Edward S. Amis**.

Chatterjee is 2010 Oklahoma Chemist

The 2010 Oklahoma Chemist Award was announced April 10th at the Pentasectional Meeting in Norman, OK. This year's winner is **Dr. Jiten Chatterjee**, recently retired from Halliburton Energy Services in Duncan. A profile of Dr. Chatterjee will appear in a future issue of *The Retort*.

Southwest Retort

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Southwest Retort

SIXTY-SECOND YEAR May 2010

TAKING CHEMISTRY TO THE STREETS … IN YOUR NEIGHBORHOOD

by Nancy Blount, ACS

Nancy Blount is Assistant Director for Society Communications in the American Chemical Society Office of Public Affairs. Reach her at n_blount@acs.org or 1-800-227-5558, x-4440.

One of the things I like about visiting Texas is that people here are plain-spoken. They say what they mean and in a way that is simple and direct. It's a wonderful trait that all of us should keep in mind every time a sales person, a banker, or someone else in the "real" world asks us what we do. Alas, far too often our responses sound like this:

"I'm modeling photosynthetic pathways to understand energy conversion…"

To any of your colleagues at a D-FW local section meeting, that would make perfect sense. But to the average Joe or Joanne nonscientist you might meet at the barbeque, cocktail party or family reunion, it will likely put the brakes on any further conversation.

To paraphrase a line from a Tom Cruise film, "You *lost* me at chemistry."

The sad truth is that a vast communications gap exists between scientists and the general public. The bottom line is most people admire us, but don't really understand what we do nor realize how science, particularly chemistry transforms their lives.

But that could change with just a little bit of help from you. ACS Chemistry Ambassadors is an exciting initiative that seeks to engage and inspire ACS members to speak comfortably and confidently to the public about the positive contributions of chemistry. In essence, we hope this effort will put --- as ACS Past President Tom Lane likes to say --- a human face on our science and help everyone from elementary school students to taxi drivers to your next door neighbors connect with the chemistry in their daily lives.

Since its debut last summer, more than 3,000 ACS members have expressed an interest in becoming an ACS Chemistry Ambassador. And we're hoping you'll take the time to become one, too. All it takes is a willingness to share and teach. And it doesn't have to be formal. In fact, if you've ever helped answer a child's chemistry question or explained what you do to a fellow airline passenger, then you're well on your way to becoming an ambassador for our science. All the tools and tips you need to take the next step are available at www.acs.org/chemistryambassadors. The website even has short video clips showing examples of how to speak simply about your work.

I know it can be done. I had the privilege of joining Bill Carroll's "Taking Chemistry to the Streets" presentation at your local section meeting in March to discuss this new program. I think it's fair to say we had some skeptics in the room when we started, but with thanks to chair Denise Merkle and others who participated in the role-play, the results were encouraging and contagious. Many folks stayed afterwards and shared their own outreach experiences and successes with taking chemistry to the streets of Dallas. If you were at that meeting, I hope you took home some good ideas for speaking simply about your work, and I hope you are acting on them! But in case you missed it, here are a few tips about getting started.

1. **Think big picture with small words.** Can you relate what you do to something most people are familiar with---the search for new energy sources, clean water, safe food, new medicines, homeland security or the environment? Maybe you make new materials that will make life more comfortable. Maybe you teach the next generation of doctors, inventors or policymakers and help them understand that chemistry is essential to our future well-being. Start at the 50-thousand-foot level. Avoid jargon. Use words people recognize. Once you have their interest, they'll ask you for more detail. But provide it in moderation. Imagine trying to explain what you do to a fifth or sixth grader.

2. Catalyze. Try to find out more about the person with whom you're speaking. Learning more about that person's life will help you find ways to relate your work to him or her.

3. **Keep your 'ion' on current events.** Try to connect your work or our science to what is in the news. It will help your listeners relate and spark their curiosity.

4. **Memorize your own periodic table.** For some of us, off-the-cuff remarks are difficult, particularly if we want to avoid drifting back into what Joel Achenback of the *Washington Post* calls "biotechnonanogenomicology" speak. So take a few minutes to jot down a few thoughts about your work. Try to simplify it using everyday language. Then reread it and simplify it even more. What you're shooting for is a short phrase that sums up what you do, such as, "I'm a chemist---I turn old rags into paper" or "I'm an analytical chemist---think CSI without the dead

bodies."

And instead of photosynthetic pathways, how about "I'm a chemist. I study how plants use the sun's energy to make their own food, because understanding *that* will help put affordable, efficient solar panel on trains, planes, cars, and *your* home."

Once you're satisfied with your statement, memorize it and make it your personal "tagline," or "elevator speech," as we sometimes call them. I'm happy to help, and I'd love to add your elevator speech to our growing collection on the Chemistry Ambassadors website. Bill Carroll is also a master at this, so don't hesitate to practice with him.

CHEM GEMS & JOULES

Chemistry Olympiad Results. Eleven high school students qualified to take the National Chemistry Olympiad exam on the basis of their scores on the local exam on March 13. Following is the list of qualifiers, their schools, and their high school teachers: **Benny Renard**, TAG Magnet, *Deborah Maner*; **Zach Zukowski**, Prosper High School, *Jason Taylor*; **Alan Zhao** and **Sagar Parikh**, Jasper High School, *Pamela Grow*; **Daniel Y. Lee** and **Raghuveer Achukola**, Coppell High School, *Bob White* and *Sally Urquhard*; **Moez Aziz** and **Adam Goldman**, St. Mark's School of Texas, *Jon Valasek*; **Stephanie Su** and **Carolyn Bu**, Texas Academy of Mathematics and Science, *William Acree*.

BCCE and ACT2 Meetings Upcoming. This is a reminder of two important meetings coming up for chemical educators. The ACT2 Biennial Conference is being held June 28-July 1 in Katy, TX. Unfortunately, we are now past the early registration date, so registration will have to be onsite. The registration fee of $135 covers workshops, plenary sessions, conference program, tote bag and goodies, t-shirt, ice cream social, banquet, and ACT2 dues. For further information, check out the ACT2 website at http://www.statweb.org/ACT2/.

The Biennial Conference on Chemical Education (BCCE) is coming to the University of North Texas Aug. 1-5. Again, we are now past the early registration date, so the regular registration fee is $300, while secondary educators pay $250. You can still register online, however. The registration pages are at https://callevents.unt.edu/ei/getdemo.ei?id=5&s=_27WOXTNBU. Additional information is available at http://www.bcce2010.org, and through the General Chair, Dr. Diana Mason, dmason@unt.edu.

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

Coffer, Cruze Win Doherty and Schulz Awards

D-FW Awards Chair **Laszlo Prokai** , the Welch Professor at the

UNT Health Science Center, has announced that the winner of the 2010 D-FW Doherty Award is **Professor Jeff L. Coffer** of TCU, while the winner of the Werner Schulz Award for outstanding high school chemistry teaching is **Jennifer L. Cruze** of Carroll High School in Southlake. Both winners will receive their cash awards and plaques at a fall meeting of the D-FW section. Both winners will also be profiled in a future issue of *The Retort*.

ACS NATIONAL MEETING RETURNS TO DALLAS IN 2014

It had appeared to D-FW chemists that the ACS national meeting was not going to return to Dallas anytime soon, as Dallas was not anywhere on the future schedule of national meetings. However, Washington, D.C.'s scheduling problems proved to be Dallas' gain. It was announced at the March ACS Council Meeting in San Francisco that Dallas would replace Washington, D.C for Spring, 2014. There were a number of conferences scheduled for D.C. that same time, so ACS could not be guaranteed the needed amount of space; hence the change. A couple of smart aleck councilors went to the microphone and muttered about the distance between hotels and the Dallas Convention Center, but D-FW councilor **Angela Wilson** strongly defended Dallas, pointing out that a new convention center hotel would be available then. Anyway, Dallas is the site. D-FW ACS members are forewarned that a lot of help is going to be needed. Be ready to volunteer yourselves to the national meeting chair starting a couple of years in advance.

AREA STUDENT AFFILIATES HONORED

In past issues we have noted that several of our area ACS student affiliate chapters were honored, but this news has appeared in a piecemeal fashion. Therefore, here we are listing all of the honorees from areas served by *The Southwest Retort*. The ACS Society Committee on Education has selected from the many ACS student affiliate chapters 35 to be considered outstanding, 67 as commendable, and 119 for honorable mention. In addition 55 were named as Green Chemistry Student Chapters. Our listings include the name of the honored institution, **chapter presidents**, and *faculty advisors*.

Outstanding Chapters. Texarkana College, **Brett Jackson**, *Patricia Harmon and Mike Buttram*; University of Mary Hardin-Baylor, **Shannon Woodruff**, *Darrell Watson*; UT-Dallas, **Khoan Vu**, *John Sibert*.

Commendable Chapters. Northeast Texas Community College,

Samantha Johnson, *Lawrence Brough and James Archer*; Tarleton State University, **Cody Anderson**, *Peter Bell and Howard Nance*; UT-Tyler, **Heather McBride**, *Donald McClaugherty*.

Honorable Mention Chapters. Texas Tech University, **Sean Lee**, *Robert Blake*; Wayland Baptist University, **Zachriah Hawkins and Stephanie Skiles**, *Joel Boyd*.

Green Chemistry Student Chapters. Tarleton State University, Texarkana College, University of Mary Hardin-Baylor.

Around-the-Area

University of Arkansas

Drs. Suresh Kumar and Z. Ryan Tian were both promoted to Associate Professor with tenure. On Honors Night, April 22, the department gave more than $10,000 in awards to 30 chemistry majors and two graduate students. On Honors Night, junior and senior honors students are required to make poster presentations of their research. Seniors must also submit a written thesis and give an oral defense. There are 250 chemistry majors and 22 students pursuing a chemistry minor. Of the majors, 44 have a 4.0 GPA, 63 have between ad 3.7 and 3.9 GAP, and 76 are honors students.

Here is a listing (*hopefully complete*) of student honorees. *Barbara Wertheim Campbell Award,* **Kellie Ong, Jaime Nelson, Zach Lewis Elizabeth Srader;** *A. W. Cordes Teaching Award*, **Nicole Vanderbush;** *ACS Award*, **Drew Avery, Joseph Courtney, Omar Salem, Mary Smith, Rodney LaGrone;** *Coulter Jones Award*, **Rory Henderson, Tony Hoyt, David Joseph, Brian St. Clair**; *Frederick A. Kekulė Award*, **Ryan Shinabery**; *Jacob Sacks Award*, **Sigrid Johannesen**; *A. W. Cordes Award*, Roger Williams; *Kathy Noland Chemistry Award*, **Timothy Burnside**, *Honorary Scholars*, **Ryan Bauer, Hunter Dunn, Chris Duvall, Amir Francis, Rebekah Langston, Shannon Mumma, Kaila Pianalto, Christina Ragland, Leah Ramey, Matthew Sharum, Galen Tobey, Jacob Dufour, Shigehiro Komatsu, Matthew McMahon, Andrew Price, William Stanton**. Poster presentations on Honors Night were also given by **Molly Steen, Kristi Anderson, Kirby Weltson, Tyler Rogers, Caitlin Williams, Nick Tinquist, Rhys Moore, Ashley Martfeld, Lauren Hall, Hannah Henson, Jacob Wooldridge, Hiroko Takeuchi, Jonathan Schmidt, Cory Garren, Daniel Vo, Geri Burkett, Lukas Hockman, John Sherrill, Jacob Burns, Kaitlin Castleberry, Katie Hamblin, Natalie White**.

Julie Stenken and graduate student **Venkat Venkatakrishnan a**ttended the Biomaterials Society meeting in Seattle April 21-24.

Heart o' Texas

Baylor University. Bekram Subedi received a C. Gus Glasscock, Jr. Endowed Fund of Excellence in Environmental Science for his proposal "Mercury Contamination in Edible Fish from the San Jacinto River Waste Pits." **Dr. Patrick Farmer's** lab also received a Glasscock award to study "Photodye/Metal Oxide Combinations for Solar Cells."

South Plains

Texas Tech University Welch Professor Bill Hase participated in the DOE Basic Energy Sciences review of the molecular theory and modeling program at the Pacific Northwest National Laboratory Mar.18-20 in Richland, WA. He also presented a talk at the Workshop on Roaming Radical and Multiple Mechanism Reactions held April 18-20 at Argonne National Laboratory.

Dr. Jorge A. Morales gave an oral presentation at the 50th Sanibel Symposium held at St. Simons Island, in Georgia in March. The Sanibel Symposium is perhaps the leading conference for quantum chemistry and quantum biology. His postdoc **Thomas V. Grimes** and graduate student **Patrick M. McLaurin** gave poster presentations at this conference. An additional coauthor was **S. Ajith Perera**.

Dr. Carol Korzeniewski gave an invited lecture in the Symposium on Optical Science and Emerging Energy Technologies at the San Francisco ACS meeting. **Dr. Edward Quitevis** gave an invited talk at the Symposium on Physical Chemistry of Ionic Liquids at the same meeting. **Horn Professor W. David Nes** presented a talk at Kansas State University on April 14.

East Texas

The Section's meeting on April 8 at Ana-Lab featured **Dr. Steven I. Dutch**. His topic was "Beware the Pseudoscientist." Here is a "heads up" on the fall schedule. The Sept. meeting will be Sept. 14 at Stephen F. Austin State University and feature **Wayne Jones** on the topic "Molecular Wires as Chemosensors and New Materials for Electronic Packaging." The speaker on Oct. 6 at Texarkana College will be **Mary Virginia Orna**, and the speaker on Nov. 3 at Kilgore College will be **Robert Bates.**

Jerome Stavinoha of Eastman Chemical Company in Longview, TX was named a Fellow of the Industrial & Engineering Chemistry Division of the American Chemical Society. Full details can be found in the April 2010 issue of the *Southwest Retort*. (Photo Courtesy of Rick Stolle.)

Dallas-Fort Worth

NSF REU at Texas A&M-Commerce. Texas A&M-Commerce is hosting the NSF 2010 Research Experience for Undergraduates (REU) summer program. The program supports ten students from

seven area community colleges and three students from Texas A&M-Commerce. Each of the students will received a $3700 stipend plus housing for the 10-week program, which started June 2. Community college students selected are **Alex Best, Christina Castle, Josh Galloway, Hossein Ganjizadth, Elizabeth Long, Khoa Hguyen, Patricia Rhodes Juana Rivas, Carlos Tovias,** and **Jreada White** with alternates **Katy Kidwell, Aaron Phillips** and **Hien Tran**. Students from A&M-Commerce are **Will Lian, Jeremiah Secrest,** and **Jeffery Sun** with **Maria Duran** as an alternate.

Meeting-in-Miniature. The 43rd annual D-FW Meeting-in-Miniature was held April 17 at UT-Dallas. The cash awards for prizewinners were $150, 1st; $125, 2nd; and $100, 3rd.

In the graduate division the first place winner was **Zachary Nixon** of UT-Arlington. **Chen Zhou** and **Chi-Cheng Chiu**, both of UTD, tied for second and third place. In the undergraduate division, there was a tie for first and second place between **Neelam James** of Austin College and **Khiem Vu** of UTD. Third place went to **Bahar Abbassi** of Austin College. A meeting like this needs lots of volunteer support. Kudos go to organizers **Steven O. Nielsen** and **Jung-Mo Ahn**. The section's thanks also go to judges **Rahy Abdelaziz, Peter Bell, Josef Borvak, Sergio Cortes, Kayla Green, Grace Kalaw, Audrey Lugo, Denise Merkle, Phillip Pelphrey, Edson Perez, Kevin Schug, Linda Schultz, Bradley Smucker, Claudia Taenzler,** and **Mary Teasdale**. The section is also grateful to session chairs **Kenneth Balkus, Michael Biewer, Gregg Dieckmann, Warren Goux, Mihaela Stefan, Inga Musselman, John Sibert, Ben Lund,** and **Jie Zheng.** Next year's meeting will be hosted by Tarleton State.

UNT Chemistry Department Centennial. The Chemistry Department at the University of North Texas will celebrate its centennial during Homecoming 2010. During the fall of 1910, Dr. Wallace N. Masters founded the chemistry department at North Texas State Normal College, which evolved through the years to become a major research institution of the University of North Texas.

The Chemistry Centennial Celebration will begin Friday afternoon, Oct. 15, and run through the evening of that day. During the afternoon, activities at the Chemistry Building will include student poster sessions, a tour of the building with its facilities and historic display, a presentation of the history of AXE (the first chapter of this professional chemistry society in the state of Texas), and a continuous slide show showing the history of the department. During the evening, a dinner will be held at nearby Fremaux's Metropolitan Catering, where a history of the department will be presented by **James L. Marshall** and where other anecdotes and stories will be given by alums and other visitors.

The cost is planned to be $35, which will include a souvenir glass with historic inscriptions. Everyone is invited---alumni and other guests, students, and other interested persons from academia and industry. Interested persons are encouraged to respond at this time, indicating if they might attend the day's activities and/or the evening's activities. If one is communicating by mail, please include an e-mail address for easy exchange of messages.

Contact: Susan Brockington, Undergraduate and Graduate Program Coordinator, Chemistry Student Services Office, 1155 Union Circle, Box 305070, Denton, TX 76203, E-mail susanb@unt.edu.

UT-Arlington. Dr. Kevin Schug received the UTA College of Science Research Excellence Award for 2009-2010. He also received the 2010 Sigma Xi (UTA chapter) Award for Outstanding Mentor at UTA. **Dr. Krishnan (Raj) Rajeswar** attended the 217th Meeting of the Electrochemical Society in Vancouver, BC April 25-30. He gave an invited talk in a symposium on "Electrode Processes Relevant to Fuel Cell Technology." At this same meeting he also co-organized a symposium titled "Combinatorial Screening of Materials for Energy Conversion and Storage."

Dr. E. Thomas Strom organized and chaired a symposium at the San Francisco ACS Meeting on "100+ Years of Plastics. Leo Baekeland and Beyond." ACS Books will publish the proceedings as a symposium book. Strom and **Dr. Seth Rasmussen** of North Dakota State University will be co-editors of this book.

The UTA chemistry and biochemistry department gave their awards on April 8. The CRC Handbook Award for Outstanding Freshman was given to **Nam Le Tran**. The Robert F. Francis Award for Outstanding Sophomore went to **Pinaki Bose**, while the R. L. Hoyle Award for Outstanding Junior was given to **Travis S. Ho.** The John T. Murchison Award for Outstanding Senior went **Brandall Ingle**, and the ACS Award for Outstanding Chemistry/Biochemistry Major went to **Brian Stamos**. **Aaron Morgan** won the ACS 2010 Undergraduate Award in Analytical Chemistry.

The Chemistry and Biochemistry Society Outstanding Member Award went to **Sandra Spencer**, and the Outstanding Chemistry Clinic Tutor Award was given to **Linwood Alan Whitener**. The Undergraduate Teaching Award was earned by **Diego Lopez**, while the Undergraduate Research Award went to **Arti Bashyal**. The Graduate Teaching Award was received by **Heather Lima**, and the Graduate Research Award was given to **Panduka Koswatta**.

Richard Timmons is a PI on a $63,859 Norman Hackerman Advanced Research Award given by the Texas Higher Education Coordinating Board. The grant deals with the development of inexpensive organic semiconductors. The co-PIs are Oliver Chyan of UNT and Avin Cula of the University of Houston.

UT-Dallas. Drs. John Ferraris, Inga Musselman, and **Ken Balkus** were awarded a three year, $1 million grant from the DOE Office of Fossil Energy to create a new class of membranes that produce hydrogen from coals while scrubbing out greenhouse gases like carbon dioxide. **Dr. Mihaela Iovu Stefan** has received a two year, $100,000 Welch grant for "Semiconducting Liquid Crystalline Polymers." **Dr. Ken Balkus** has received a two year, $100,000 Welch grant for "Zeolite Encapsulated Metal Complexes."

TCU. Dr. Tracy Hanna received a two year Welch grant to study "Intramolecular Bismuth- and Antimony –Carbon Bond Formation and Reactivity." Her graduate student **Bernat Martinez** gave a dissertation seminar on "Synthesis and Characterization of Early and Late Transition Metallocalixarene Complexes." Her graduate student **Kim Brien** presented a dissertation seminar on "Bismuth Aryloxide Reactivity: Kinetics of Thermal Decomposition and Resulting Organic Oxidation Products."

SMU. Dr, Brent Sumerlin was awarded a 2010 SMU Ford Research Fellowship by the SMU Board of Trustees. He gave a seminar at Texas Tech University, and he also gave a presentation at a symposium at the University of Southern Mississippi honoring the late **Charlie Hoyle**.

THE CHEMIST'S BOOKSHELF

"The Poisoner's Handbook: Murder and the Birth of Forensic Medicine in Jazz Age New York"

by Deborah Blum, The Penguin Press, 2010,
319 pages, $25.95, (ISBN 978-1-59420-243-8)

Reviewer, Danny L. Dunn, E-Mail (dannyldunn@sbcglobal.net)

In the 1800's and early 1900's, murderers frequently poisoned their victims. Poisons were difficult to detect in human tissue, and the cause of death was often confused with cholera, influenza, or pneumonia. In 1918 the New York City did not have any forensic science laboratories, and the medical examiners in the state of New York were either corrupt or basically incompetent. This all changed with the appointment of Dr. Charles Norris as the Medical Examiner of New York City. Norris immediately established a forensic laboratory in Bellevue Hospital and hired a new forensic chemist, Alexander Gettler.

Norris was an able administrator and an experienced pathologist. He surmounted budget battles with corrupt mayors and the political influence of Tammany Hall to build a department that set forensic standards for the rest of the country. While this is an intriguing story,

Gettler is of more interest to chemists, because he developed many sensitive wet analytical methods for poisons in human tissue for the first time.

For example, to detect methyl alcohol (a common poison in the prohibition era) he would take a chunk of tissue, heat it in a water bath until it turned into a dark sludge, acidify, and cool it. The addition of potassium dichromate would oxidize any methanol present into formaldehyde whose stinging smell was unmistakable. Cyanide was similarly detected by a final addition of Prussian Blue, which turned a brilliant blue color in the presence of cyanide. It's a pity that Gettler didn't have one of today's LC/MS/MS instruments to use.

Blum discusses many interesting murders using poison which were solved by Gettler (including the famous Ruth Snyder poisoning case). However, many deaths by poison were caused simply by the political and technological conventions of the time. The most obvious example is prohibition. Prohibition started in 1920 and was repealed in 1933. Interestingly, during this period more alcohol was consumed and more public drunkenness was evident than before prohibition. Methyl alcohol was commonly used as a denaturant, because it is difficult to completely remove from ethyl alcohol by distillation. However, not only did bootleggers not completely remove it, they made their own methyl alcohol by the destructive distillation of wood and added it to stretch their product. Some bootlegged alcohol was even found to be pure methyl alcohol. Needless to say, cases of blindness and methyl alcohol related deaths started increasing significantly. Norris made several attempts to point out to the government that prohibition was causing a huge increase in deaths due to methyl alcohol poisoning. However, government officials consistently indicated that if someone died it was their own fault, as they were engaged in an illegal activity. It was clearly a different age.

In the 1920's the automobile craze started. In 1922 New York decided to pass a law that all automobile operators had to be licensed. With the introduction of the automobile came increased deaths due to carbon monoxide poisoning. However, many more carbon monoxide deaths were caused by illuminating gas, which gave off a particularly bright light when burned and was commonly used for lighting, stoves, and heaters. Auto exhaust contains about 25% carbon monoxide. Illuminating gas was a mixture of about 40% carbon monoxide and hydrogen. Obviously, a leaky appliance could be deadly, and you could readily commit suicide by "sticking your head into the oven." Blum discusses one case where a man smothered his wife with a pillow and created a gas leak to make it look like an accident. Gettler was able to show that the victim's blood contained carbon dioxide (typical of smothering) and not carbon monoxide. This led to a conviction.

In the 1920's the dangers of radium were still not well understood. Pierre and Marie Curie had discovered this element, and it was successfully being used to shrink tumors. Radium use quickly spread to consumer products. There were radium-laced face creams, pain-relieving liniments, and radium water. The most famous was Radithor---a tonic guaranteed to restore vigor and energy (remember the FDA didn't have any teeth to enforce product claims until about 1938). Mysteriously, a number of workers at the US Radium plant in Orange, NJ, fell ill, their teeth fell out, and they developed an unstoppable anemia that resulted in death. US Radium had developed a "self-luminous" paint which was used to make wristwatch dials that glowed in the dark. All of the sick employees were dial painters. It seems that the workers were taught to shape their brushes with their lips in order to paint the tiny numbers on the dials. In addition, they sprinkled the luminous liquid in their hair so their curls would twinkle in the dark. The women were found to be so contaminated with radium that they were exhaling radon gas. Gettler demonstrated that the victims' bones would fog x-ray film wrapped in black safety paper, which verified that radium was being deposited in their bones and causing long term damage.

My main criticism of the book is the lack of pictures. I would have loved to see pictures of Norris and Gettler or the old Bellevue forensics laboratory. These pictures are hinted to reside in the archives of New York City. Ruth Snyder was one of the first women to be executed in the electric chair at Sing Sing. One of the witnesses was a reporter who took a picture of Ruth Snyder with a secret camera when the current surged through her body. This picture, which is easily found on the internet, was on the front page of *The Daily News* the next day and sold 1.5 million copies. It would have been appropriate to include it for historical completeness. Nevertheless, anyone interested in U.S. and/or chemical history will enjoy reading this book.

Editor's Comment: *Those interested in reading about poisoning in ancient times might enjoy the recently published book "The Poison King" by Adrienne Mayor. This is a biography of Mithradates VI, the Great, King of Pontus and after Hannibal, Rome's most dangerous enemy. Mithradates not only resorted to poisoning his enemies, but he would take small amounts of poisons to inoculate himself from being poisoned. This procedure apparently worked, as he lived to age 72.*

PERIODICAL

Dionex Endows Chair at UT-Arlington

California-based Dionex Corp., an industry leader in chromatography, has endowed the Hamish Small Chair of Ion Analysis in the Department of Chemistry and Biochemistry at UT-Arlington. Dionex gave the University a gift of $500,000, which was matched from UT-Arlington natural gas royalties. Dionex senior science officer Christopher Pohl said, “Hamish Small is one of the giants of modern analytical chemistry. We at Dionex wanted to honor his many contributions to analytical chemistry by permanently endowing a chair named in his honor and feel that the University of Texas at Arlington is a perfect setting for such an honor.” The Hamish Small Chair will be the second endowed chair in the UT-Arlington Chemistry Department. The department also has a Welch Chair filled by **Dr. Daniel Armstrong**.