

# CHEMICAL *Compositions*

chemistry & biochemistry  
departmental newsletter

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## *Mallet Library*

### *A departmental resource of long standing*

The Chemistry Library has existed almost as long as the University. Its history closely follows the development and expansion both of the Chemistry Department and of the General Libraries, from modest beginnings in the late 19th century to national prominence today. Dr. John W. Mallet, the first Chairman of the Faculty and Professor of Chemistry, noted the importance of an adequate library as early as 1882, a full year before classes at UT began. But the information needs of scientists were treated rather casually by early administrators, and the fledgling Chemistry Library was largely the result of informal efforts by chemical faculty members to acquire and house the important books and journals in their own labs and offices.

**The Early Years** - Like most academic chemistry libraries in the U.S., UT's began as a departmentally controlled collection that was not directly affiliated with the Main Library. Faculty bought books with a meager budget, and the only library staff was typically a secretary or stenographer doing double duty in the library room. Professors and graduate students had keys to the rooms where collections were housed, and oversight of the facility was minimal at best. But the faculty took their library resources seriously. The chemical library received prominent mention in early UT course catalogs:

***"The University has the beginnings of a well-selected chemical library, which will be open to the students at proper times. The principal foreign and American chemical journals on the shelves of the library offer to the advanced students all the current literature of the science."***

*(University Catalogue, 1884-85)*

In 1887 the Regents made no funding available for the library, but the journal subscriptions were maintained by student contributions (a gesture that wouldn't be possible today!). By 1891, when the Chemistry Department moved from the basement of Old Main to the new Chemical Laboratory building, the library collection numbered around 500 volumes and was housed on the second floor. When Dr. Henry Harper became chairman of the Chemistry Department in 1894, he began a campaign to expand the library's collections and budget. With the Regents' help, a complete run of *Liebigs Annalen der Chemie* (1832-96) was purchased in 1899 from a laboratory in Germany, for \$700 — an event that Harper called "one of the most important events in the history of the School of Chemistry." This and other acquisitions enhanced the collection, which already included runs of the *American Chemical Jour-*

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## Chairman's Corner

Greetings once again to all our friends and alumni of the Department of Chemistry and Biochemistry at UT-Austin. I want to thank all of you who sent us comments or took advantage of our homepage on the WWW. We do appreciate hearing from you and want *Chemical Compositions* to be your resource for keeping up with what is happening in *your* department.

The *hot* topic in the department right now is safety as it relates to fire and chemical hazards. Many of you probably have heard that there was a fire in one of the organic labs on the 5th floor of the West Wing of Welch Hall. No one was injured in the fire and thanks to the brave and dedicated



Marvin Hackert

actions of the Austin Fire Department, the fire was contained to just the one laboratory.

Fortunately, that area of the building is part of a planned renovation project. As a result of the fire, we are moving up some of the pre-move steps to ready the West Wing for the renovation scheduled to start next spring. Labs throughout the building are undergoing a thorough house-cleaning, and the department is currently working with the University and AFD to review safety and chemical storage procedures for Welch Hall. A proposal of how best to address

physical and procedural changes to improve safety is expected by mid-November. I feel confident that these steps, the associated physical recommendations coming out of the University study, and the West Wing renovation project will help make Welch Hall a safer place for us all to work and enjoy doing chemistry in the future.

On a brighter note, I can look back on the past year and see a lot of positive changes that have occurred to improve on what is a very strong program in Chemistry and Biochemistry at UT-Austin. Over the past year we installed two 500 MHz NMR spectrometers, a new image plate X-ray detector system for protein crystallography, built two computer labs on the 2nd floor, and are presently wiring Welch Hall for improved network access to the WWW. We also have been informed that NSF will fund our proposal for a new mass spectrometer with biomacromolecular capability. This instrument will be very valuable to our faculty and also serve as a resource on campus for the molecular biology community. The new molecular biology building will be completed next year, and I look forward to the role our department can play in supporting the growth of programs in structural biology, molecular recognition, chemical biology, etc., on the UT-Austin campus.

I would like to comment on two smaller projects that are underway. The first is the installation of picnic tables in the courtyard areas of Welch Hall. These tables will serve to foster informal interactions and exchange of ideas among our faculty, students and staff. The first five tables are in place

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## News from the Graduate Front

As the global scientific climate changes from year to year, the graduate student class evolves as well. For the past two years, the average GRE scores (combined verbal and quantitative) of our new graduate students have increased from 1221 to 1250, whereas their upper-division GPAs have declined slightly from 3.55 to 3.42. These ranges underscore the high level of selectivity of the Graduate Program in Chemistry and Biochemistry, and our continuing commitment to emerging as a top ten graduate program by the year 2000.

The incoming class size grew from 41 to 58 students over the past two years. The reason for this large range reflects our own efforts at controlling the size of the class to best meet the needs of the department and the vagaries of accurately predicting acceptance rates in any given year. Our aim is to maintain the quality of the entering

class, while also fine-tuning the size to fit the needs of the ever-evolving faculty research programs.



Prof. Jennifer Brodbelt

The level of international

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## *Microcomputer facility opens amid fanfare*

*Lab to aid in chemistry course instruction*

After several years of planning and preparation, the College of Natural Sciences and the Department of Chemistry and Biochemistry opened the Welch Microcomputer Facility in October, 1996. The official opening of the labs was celebrated with an open-house. Among those joining Prof. Hackert at the ribbon-cutting ceremony were Dean Mary Ann Rankin, Associate Dean John Werth, and Prof. Wayne Danielson (College of Communications), an early supporter of student-oriented computer labs and former Chairman of the Faculty Computer Committee (FCC).



*And the Welch Microcomputer Facility is reality. Participating in the official opening are from l to r: Prof. Marvin Hackert, Dr. Wayne Danielson, Dean Mary Ann Rankin, and Associate Dean John Werth.*

instituted ITAC computer fee assessed to all students and will continue to be supported and updated from this source of funds. Support personnel for the labs consists of a newly appointed Department of Chemistry and Biochemistry Computer Services staff. At present the staff includes a Manager of Computer services (Dr. Larry Poulsen), a Network Specialist (Chang-Ming Huang), a Programmer Specialist (Frank Townsend), a Webmaster (Chris Jones), and student proctors.

The Department is greatly indebted to a number of groups and individuals who transformed this important project from a dream into reality. These include the ITAC Committee, the FCC, the College of Natural Sciences, Academic Computing, and the Campus Network staff. We especially thank Chang-Ming Huang for his heroic efforts in getting these labs connected to the network and making all of the software work in this new state-of-the-art facility.

**Powerful Hardware/Software and Internet Connectivity Available** -The facility consists of two computer laboratories designed for general purpose access and for computer-aided instruction in a variety of chemistry courses. The PC lab contains 31 student stations consisting of Dell model GXM166 Pentium-based computers, and the Mac lab contains 32 student stations consisting of Apple model 7200 Power Macs. All of the stations have 32 megabytes of RAM, high resolution 17-inch color monitors, one gigabyte hard drives, and 100 megabyte removable media Iomega Zip drives. Each computer is connected to the Internet with 10 base T Internet access cards and is loaded with Web browsers, FTP, E-mail and other necessary Internet access software. Software packages available for use at the stations in both labs include Microsoft Office, DeltaGraph, Corel Draw, eXodus, and Mathematica.

**Financial and Technical Support Critical** - These labs were funded from the recently



*Network Specialist Chang-Ming Huang*

## West wing renovation

### *At long last*

Final plans are underway for renovating the west wing of Welch Hall, but before providing an overview of the impending project, let's review the genesis of the building, which houses all but four of the faculty in the department. The original wooden chemistry building was replaced in 1928 as a result of its burning to the ground. Construction was completed in 1930 and is the wing of the building adjacent to 24th Street. It contained approximately 100,000 sq. ft. of combined teaching and research space. Following the second World War, the department went into a serious growth mode, and by 1961 completion of the "West Wing" added 40,000 sq. ft. of space, the bulk of which housed research groups. In 1978, a major addition of 250,000 sq.

ft. completed the present Welch Hall facility. This last addition consisted of research space and truly great lecture hall facilities, with some administrative space thrown in for good measure.

The 1930's building was extensively remodeled in 1980, and by the time we entered the 1990s, it became obvious that the West Wing was in serious need of remodeling. The utilities were undersized or non-functional, the hoods were of insufficient capacity for modern synthetic organic and inorganic synthesis, and the air-handling system for the whole wing was on its last legs. Additionally, that section of Welch Hall fell dangerously short in meeting ever-tightening safety regulations.

Following extensive discus-

sions with the administrative officials, it was recommended that the entire West Wing be remodeled, and the Regents approved allocation of 4.5 million dollars for the project. Committees were formed, meetings were held, and after two years, it was concluded that the monies appropriated were insufficient for the scope of the project.

After taking yet another detailed look at the specific needs throughout the West Wing, it became clear that physical and analytical chemists are not as hard on the facilities as the organic and inorganic folk are. So the scope of the project was focused to primarily Levels 4 (inorganic) and 5 (organic).

More meetings ensued, con-

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## Chairman's Corner

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and have already proven their value; more are needed. The second project is an effort to develop an historical record of the department. This project got a major boost from our chemistry librarian, David Flaxbart, who has compiled a wonderful picture story of our first 50 years. Can you name the eight individuals who comprised our chemistry faculty from 1882-1936? Well you can if you check out our history page on our website. We now have a chronological list of nearly all our past faculty, but I am in need of stories, pictures, etc. to enrich this project and welcome whatever information you can provide. We hope to compile all this information into a booklet that would be widely available to our students and alumni.

There have also been changes in our faculty. Profs. Jason Shear (Analytical) and Karen Browning (Biochemistry) joined our faculty this fall. Promotions went to Brent Iverson (Associate Professor) and David Laude (Professor). Look for stories on these and other topics in this issue of our newsletter.

My first year in the chairman's office has provided me with a better perspective on our Department and its students, faculty, staff and alumni. I thank all of you who have contributed to our Department with your resources of time and money. This newsletter has a complete list of friends who have donated to the department during the past academic year. It is a pleasure to recognize and acknowledge the vital role that such individuals play in helping us maintain our quality programs at UT-Austin. The financial support of our alumni is a critical factor in helping us to meet our mission of excellence in both teaching and research.

We wish you all success and happiness for the upcoming holiday season!!

## Once more, dear friends...

### *The Mallet Library faces serious financial challenges*

Any practicing chemist knows the importance of connecting to the literature. Chemistry is a collaborative effort where our “collaborators” are both temporally and geographically dispersed. Indeed, we often don’t know who or where they are at any moment in our work and “where” is not often important. No serious chemist would spend much time on a project without knowing the literature. And we, in the Department of Chemistry and Biochemistry at The University, are in the business of educating serious chemists. We have an obligation to provide a broad spectrum of users with the appropriate instructional materials—cutting edge, books and journals—a *collection* that no individual practicing chemist or chemist-to-be can personally afford. The Mallet Library is our collective repository for the purposes of teaching, and the faculty does all it can to garner resources for that repository. Some donate books—we are fortunate at this moment in time to have the editors of two major journals who are in the position of donating extra review copies to the library; departmental efforts are made to extract the maximum resources from The University; and private donations are sought to supplement The Mallet’s resources.

The Mallet bibliographic resources have to stretch beyond the core ideas associated with chemistry. Faculty research interests at The University invariably lie at the “cutting edges” of the discipline, which includes such diverse areas as material sciences, molecular biology, and oth-

ers that are yet not easily classified in convenient pigeon holes. If no one offers a defining name, it’s “chemistry” because the research is done by chemists. It is from this point of view—an interest in the molecularity of the world—that chemistry has been called “the central science.” And it is this point of view that puts additional strain on The Mallet’s obligation to provide materials for teaching and



Prof. Joseph Lagowski

learning at all levels.

**Support Declining** - The pressure on The Mallet to provide resources is exacerbated by the steady decline in University support for all libraries, a reflection of the overt shift of the Legislature away from the historical funding patterns for higher education. In 1987, the State provided \$0.40 out of every dollar that The University spent; in 1996, it provided less than \$0.30. Historical data indicate that The University has gone from a “state-supported” institution to a “state-assisted” one since the 1960’s, a subtle change in wording that portends significant changes in operating

philosophy. The burden of supplying important materials in certain disciplines has shifted from the State to those who have—or should have—a deeper interest in the subjects they teach, i.e., the university, the college, and the department.

#### **Meeting the Challenge** -

Clearly, we need to ensure a more stable source of income for the future of The Mallet and its mission. The only logical strategy is the establishment of a sufficiently large endowment to produce a reasonable cash flow for an ill-defined future. *That* was the basic reason that the Skinner Endowment was established in 1990—to start a process that could offset the change in philosophy that changed The University from being state *supported* to being state *assisted*. As “state assistance” decreases, the need for an endowment increases. The Skinner Endowment has not grown much since its inception.

The critical times for endowments are the early years, when the corpus should be maximized by events such as major contributions. Thus, we are forced into a strategy which attempts to create an endowment through “many smaller gifts.” I urge you to consider carefully whatever personal opportunities you may have available to you to help enlarge the Skinner Endowment. Current and future students and faculty will be forever in your debt—even if they don’t know it. You’ll know it, which is the more *important* knowledge!

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## Faculty profiles: Prof. John Stanton

### *A transplanted Yankee*

Born in Japan and reared in the Philadelphia suburbs, I graduated from the University of Michigan in 1984 with two degrees: an M.S. in chemistry and a B.G.S. (bachelor of general studies). After leaving Ann Arbor, I joined William N. Lipscomb's research group at Harvard and worked on theoretical studies of electron deficient compounds; receiving my Ph.D. in 1989. Seeking to learn more about the methods of quantum chemistry, I moved to Gainesville, Florida, and joined Rodney J. Bartlett's group. In Florida, my research dealt mainly with the development of efficient computational strategies to calculate electronic energies. In addition to learning quite a bit about the methods of many-body physics and their application to molecular systems, the time in Florida converted a former Yankee into a lover of warmth and sunshine. Resolved to stay in the South (much approved by my Georgia-born wife!), I was fortunate to be offered a position at UT-Austin. My wife Heather and I, and our not-yet-two-year-old daughter, Juliet, made the 1000 mile (exactly) drive from Gainesville to Austin during an early July heat wave in 1993.

**Research Interests** - My research interests are in the development and application of methods based on many-body perturbation theory and related treatments of correlation energy to molecular structure, reactivity and spectroscopy. Particular emphasis is placed on the study of electronically

excited states and magnetic properties. Along with a frequent collaborator, Jürgen Gauss (a professor at Universität Mainz in Germany), we have succeeded in developing the first methods to calculate first-order properties (such as dipole moments and forces on nuclei) for excited states at a high level of theory; we have also been the first to work out approaches for calculating nuclear magnetic shieldings using high-order perturbation theory and a related model known as the coupled-cluster approximation. As a result of these advances, highly accurate calculations of vibrationally resolved electronic spectra and NMR chemical shifts can now be performed. Recently, my group has been involved in a fruitful collaboration with the experimental organic chemistry group of R.J. McMahon at the University of Wisconsin. In this research, the methods developed by ourselves and Gauss have been applied to study carbenes such as  $\text{H}_2\text{C}=\text{C}=\text{C}:$ , which are found in great abundance in the interstellar medium but have only an ephemeral existence in the laboratory. Like all good collaborations, the questions posed by the experiments in Madison serve as motivation to develop new methods. Accordingly, efforts are now underway to extend the excited state treatments so that they can be used to elucidate photochemical mechanisms and explore effects associated with breakdowns of the Born-Oppenheimer approximation.

**Life Beyond Computations** - In my spare time, I am a homebody who enjoys being with his family and watching my two daughters, Juliet (now 5) and Audrey (age 2), grow and learn. A runner, I do between 30 and 60 miles per week during warm months but tail off in the winter due



*Prof. John Stanton*

to the "cold" December-February weather in Austin. I am also an avid reader (especially history and biographies), enjoy frequent trips to Deep Eddy for family swims, and try to do the *American-Statesman's* (almost too easy) crossword puzzle every day.

## *Faculty promotions: Prof. Brent Iverson*

### *Excelling in research & teaching*

My research program is focused in areas that are related through a common theme: the chemistry of large molecules with well-defined structure. One area of research involves developing new ways to improve antibody molecules. Antibodies are used for everything from detecting pollutants in the environment or our food supply to medical diagnostic tests or even new ways of treating diseases.

A different project in the lab is aimed at producing large molecules exhibiting well-defined higher order structures based on abiotic folding patterns. Our first success in this area is "aedamers", aromatic electronic donor-acceptor assemblies which are prepared by solid phase synthesis as a linear chain containing strategically placed alternating electron-rich and electron-deficient aromatic units.

My efforts in teaching have been in lower-division and graduate courses. One of my main interests here has been developing computer animations for use during lecture. By using a mobile Silicon Graphics Indigo2 Extreme computer system we are able to project animated molecular images live in front of the class with state-of-the-art resolution and real-time control over movement. Molecular properties, even molecular orbitals, can be displayed and rotated in any direction.

We have also animated reactions using AM1 calculational methods and are now in the process of placing the computer animations on the World Wide Web for detailed study by students. Although very much under construction, our website has been incorporated into the new Virtual Campus project at UT, and can be found at <http://huckel.cm.utexas.edu/groups/iverson/info.htm>. You should be warned that this website was designed to be used on campus computers, and some of the files are rather large to be downloaded over phone lines.



*Prof. Brent Iverson*

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## *Prof. David Laude*

### *Newly promoted professor a man of many hats*

Since coming to UT-Austin, I have actively participated in a variety of teaching, advising and administrative duties. For example, I currently am the undergraduate faculty advisor, and faculty advisor to the American Chemical Society Student Affiliate, which serves as a platform for increasing undergraduate participation in the research, academic and social activities of the Department.



*Prof. David Laude*

Another pet project of mine is a program that provides science enrichment at minority elementary schools in Austin. Each semester approximately 50 undergraduates participate in developing a curriculum for hands-on science instruction. These undergraduates then teach over 1000 students on a weekly basis.

My primary teaching duties are the upper-division analytical chemistry courses, and I take pride in having received two major teaching awards for these efforts, the Texas Exes Award for Distinguished Teaching in the College of Natural Sciences and the Jean M. Holloway Award for Teaching Excellence.

My research program currently is focused on Fourier transform ion cyclotron resonance mass spectrometry (FTICR). This involves studies of the

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## Faculty Honors and Promotions

**AL BARD** was honored by the **Universita de Bologna** with the “**Sigillum Magnum**” in Bologna, Italy, for recognition of his work in electroanalytical chemistry.

**JENNIFER BRODBELT** received the **Iota Sigma Pi Agnes Fay Morgan Research Award**.

**RAY DAVIS** was the recipient of the **Jean Holloway Award for Teaching Excellence**, selected to hold a **1996-1997 Dads' Association Centennial Teaching Fellowship** during the 1996-1997 fall semester, and a runner-up for the **Advisory Council Teaching Excellence Award**.

**MARYE ANNE FOX** was appointed as a life-time “**Academico Correspondiente**” (Foreign Academician) of the Royal Academy of Sciences and Arts, Barcelona.

**MARVIN HACKERT** has been elected to serve as **Vice Chair** of the **U.S. National Committee for Crystallography**.

**BRENT IVERSON** was named as an **Alfred P. Sloan Research Fellow** and was promoted from Assistant Professor to **Associate Professor**.



*Prof. Raymond Davis*

**JOE LAGOWSKI** received the 1996 **Southwest Regional American Chemical Society Award**.

**DICK LAGOW** received an **American Chemical Society Award for Creativity in Fluorine Chemistry**.

**DAVID LAUDE** was promoted from Associate Professor to **Professor**.

**STEVE MARTIN** received a **Arthur C. Cope Scholar Award**. This award which recognizes and encourages excellence in organic chemistry consists of a certificate and an unrestricted research grant.



*Our departmental roster of Holloway Awardees from l-r: Alan Campion (1989), Stephen Monti (1972), Raymond Davis (1996), and David Laude (1993).*

**JOHN STANTON** was selected as an **Alfred P. Sloan Research Fellow**.

**MIKE WHITE** was elected as a trustee of the **American Vacuum Society**.

**JIM WHITESELL** was named a **Fellow of the American Association for the Advancement of Science** in recognition of his achievements as a chemist and an educator.

**DAN ZIEGLER** was awarded **Lifetime Membership** in **ISSX (Intl. Soc. for the Study of Xenobiotics)** and was recognized by a symposium in his honor.

## *New faculty - two of our "own" added in 1996*

### *Prof. Karen Browning - Biochemist*

I am not exactly a newcomer, having been in the department as an undergraduate, a postdoctoral fellow, a research scientist and lecturer. I hit the floor running this fall teaching a section of CH339K, the first semester biochemistry course. I am trying out some new tools for teaching biochemistry: computers and molecular modeling of biomolecules, making lecture notes available to the students via a webpage (<http://www.cm.utexas.edu/courses/CH339K/>).

My research on messenger RNAs and protein synthesis continues a theme from my graduate work in the Department of Biochemistry at the University of Illinois and continued at UT-Austin when I worked with Joanne Ravel. Satellite tobacco necrosis virus (STNV) RNA is unique in that it does not have the usual m<sup>7</sup>GpppG functional group or "cap" on its 5' end. Using molecular biology skills I learned during my postdoctoral work in the Department of Chemistry and MIT, I cloned the STNV messenger RNA so that large quantities of the RNA could be synthesized in vitro. Our work showed that the 5' and 3' ends of STNV RNA must be in communication during the initiation process and that at least one initiation factor is involved in the process. Our studies with protein synthesis factors from wheat germ led to the

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*Prof. Karen Browning*

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### *Prof. Jason Shear - Bioanalytical chemist*

After receiving my B.S. in Chemistry at UT-Austin in 1989, I went on to do my doctoral work at Stanford University under the direction of Richard Zare and Richard Scheller. My studies there centered on bioanalytical chemistry, and involved collaborations between the Chemistry Department and various biological programs. Afterward, I joined Watt Webb's research group in the Applied Physics Department at Cornell University as a postdoctoral fellow, where I spent two years designing chemical and biological applications for multiphoton excitation. I am excited to have the opportunity to come back to UT, where I am currently setting up my research program and will begin teaching in the Spring. In my role as teacher, I hope to pass on the enthusiasm I was exposed to by faculty during my own undergraduate coursework here, because this was a strong factor in my choice of chemistry as a career.

Research in my group will be directed toward bioanalytical technique development with the goal of characterizing fundamental chemical properties of individual neurons. An ideal analysis approach for studying neurotransmission at individual synapses would provide chemical profiles of many neurotransmitter species with millisecond time resolution and with a sensitivity capable of quantitatively assaying the contents of the smallest packets (or "vesicles") of neurotransmitter — approximately 1000 molecules. Toward these goals, we are actively involved in development of rapid microcolumn chemical separation procedures, new imaging techniques, and novel detection approaches that draw on recent advances from both the biology and physics communities. We are hopeful that these strategies will enable measurements to be made that help reveal fundamental characteristics of neuronal communication and response.



*Prof. Jason Shear*

Austin represents a big change from my last home in Ithaca, New York. I

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## Mallet library

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*nal*, *Chemische Berichte*, *Journal of the American Chemical Society*, *Chemisches Zentralblatt*, *The Analyst*, and a handful of other major titles. (A large part of the chemical literature of the time—books as well as journals—was in German, but this did not deter American chemists since knowledge of German was a requirement in those days.) Harper and his colleagues felt strongly that a good chemical library was as essential to quality research and teaching as modern laboratory facilities and equipment—a fact that remains true today. Under the faculty's guidance, the library grew steadily during the first decades of the 20th century, adding back runs and new subscriptions to many major journals. But the chemistry collections were generally not represented in the University's main card catalog, and the library's existence was largely unknown to persons outside the department.

The Chemistry Library survived a major disaster in October 1926, when fire destroyed the old Chemical Laboratory building. Thanks to the foresight of Dr. Harry Lochte and Dr. Eugene Schoch, the library had been moved earlier that year from its firetrap quarters on the second floor to a room near a ground floor exit. When the fire alarm was sounded, Lochte organized firemen to hold the flames at bay while the library's collection was carried or thrown out of the building. Most of the books and journals were saved, though some volumes bear the scars of smoke and water damage to this day. The library was relocated to quarters in the new Biology Building while a new chemistry building was constructed.

The Chemistry Library moved into the new Chemistry Building (today known as Welch Hall) in 1931 where it was housed on the fourth floor. In 1934 it was named for Dr. Mallet.

**The Modern Era** - By the 1940s the various departmental libraries on campus were being consolidated and transferred to the control of the central UT Library system. Collections had been getting out of control, and card catalogs and circulation files were not being properly maintained. Book losses were a growing problem. There was a clear need for closer supervision and oversight. As part of this process, the task of selecting books and journals passed from faculty to trained librarians, and library staffing and hours became more formalized. The Mallet Library quickly outgrew its fourth floor home, but it was not until 1978 that an addition to Welch Hall allowed the library to move to its present, more spacious quarters under the new central courtyard. The opening of the new Library Storage Facility in 1993 enabled many older and fragile books and journals to be moved out of the Chemistry Library, to ensure adequate expansion space for some years to come. Today the Mallet Chemistry Library has over 70,000 volumes covering all areas of chemistry, chemical engineering, and human nutrition. It is an integral resource for teaching and research, and is one of the most heavily used libraries on the campus.

**Librarians Key to Success** - Although the heart of a library is its collection, its soul might well be the librarians responsible for nurturing it and facilitating the use of its resources. History has failed to record the names of those who may have served in the capacity of librarian prior to 1925. Indeed, the earliest known report on the library to the University Librarian was made by Prof. Harry Lochte in 1924. The first professional librarian, Martha Thurlow, was appointed in 1944, and we have had only six others since then. The names of some of these individuals may be familiar to you, so we are listing them and their periods of service: Martha Thurlow, 1944–1949, Ivan Trombley, 1949–1951, Aubrey Skinner, 1951–1985, Christine Johnston, 1986–1991, JoAnne Newyear, 1991–1992, David Flaxbart, 1992–present.

If you're interested in the early history of the Department of Chemistry and Biochemistry, see the exhibit on the Worldwide Web at <http://www.lib.utexas.edu/Libs/Chem/history/history.html>



*David Flaxbart*

-- *David Flaxbart, Chemistry Librarian*

**ALUM RETORTS****1952**

**Robert H. Perry**, Ph.D. (Hatch) ~ remembers Roly Pettit and his sense of humor and playing tennis with Norm Hackerman and John Dice, who were “tough to beat.”

**1954**

**Louis E. “Jack” Kidwell, Jr.** Ph.D. (Hatch) ~ retired from industrial chemistry research in 1984 and became a “full-time exercise and diet ‘nut.’” He is involved in volunteer projects for Schumpert Medical Center and for his church.

**1958**

**Joseph Satterfield**, Ph.D. (Henze) ~ reports his daughter, Mary Satterfield-Doerr, is following in her father’s footsteps and is enrolled in UT-Austin graduate school, Chemistry and Biochemistry, and is working under Dr. Joseph Lagowski.

**1964**

**Daniel J. Najvar**, B.S. (Chemistry) ~ retired from Dow Chemical USA after over 28 years in research and development. He reports his new career is writing on continuous improvement leading to the transformation of organizations.

**1965**

**Robert George Landolt**, Ph.D. (Roberts) ~ featured in *The Chronicle of Higher Education*, June 14, 1996 issue, for his work at Texas Wesleyan University teaching undergraduates to do research with data bases. His project, Undergraduate Cooperative Access to Information Resources, has attracted the interest of other colleges and universities; and, with the help of funding from the Dreyfus Foundation, he will visit about 20 institutions to demonstrate his techniques.

**1967**

**John E. McClure**, B.S. Chemistry; Ph.D. Molecular Virology, Baylor College of Medicine ~ is now R&D Scientist at Ramco Labs, Inc. in Houston.

**1968**

**Warren Dexter White**, Ph.D. (Cowley) ~ current title: Manager, Dow-UT Support Lab at The Dow Chemical Company.

**1969**

**George A. Moczygemba**, Ph.D. (Lagowski) ~ employed by Phillips Petroleum Company, Bartlesville, Oklahoma.

**1970**

**John E. Cuddeback**, B.S. Chemistry (1966), Ph.D. (Watt) ~ currently working at International Technology, Austin, Texas.

**1972**

**Michael W. Burgett**, Ph.D. (Reed) ~ named president of Applied Imaging in February, 1996, moved from New Jersey to California as a result.

**John V. Kenkel**, M.A. (Bard) ~ in his 20th year on the faculty at Southeast Community College, Lincoln, NE; winner of the 1996 Chemical Manufacturer’s Association National Responsible Care Catalyst Award for excellence in chemical education at the 2-year college level; the 1996 Chair of the Committee on Chemistry on the Two-Year College; author of an analytical textbook for 2-year college chemistry technician programs, now in its second edition; married with 3 teenage children.

**ALUM RETORTS****1974**

**John Dale Butler**, B.S. Chemistry ~ at a recent Change of Command ceremony, took command of the TRIDENT Strategic Submarine Program. Captain Butler's awards include the Meritorious Service Medal with gold star, Navy Commendation Medal, and Navy Achievement Medal in addition to other personal and unit awards. He is married to Commander Eileen Butler, Navy Nurse Corps, and they have two sons and a daughter.

**1977**

**Joseph S. Francisco**, B.S. Chemistry; Ph.D. MIT, 1983 ~ currently a Professor at Purdue University. This past summer he presented a seminar to the department entitled, "The Interaction of Man-made Material with the Environment."

**1978**

**Diana L. Lundelius**, B.A. Biochemistry ~ currently Senior Project Manager for ATC/A TEC Associates, a nation-wide environmental consulting firm. She has published several articles in national technical journals and has been designated as her company's national technical leader for environmental management and auditing services. Another of her roles is mentoring and training junior staff. She writes it is her chemistry background that has been the foundation for her success: "I have never forgotten the satisfaction I received from my hard work, participation, and contact with the UT Chemistry Dept."

**1979**

**Louis W. Elrod**, Ph.D. (Roberts) ~ after sixteen years at Texaco Exploration and Production Technology Department research lab, moved to Geotechnology Research Institute at the Houston Advanced Research Center. As a research scientist he works on problems involving petroleum exploration, production and related environmental concerns.

**1982**

**Brian B. Laird**, B.S. Chemistry, Ph.D. (Chemistry) University of California at Berkeley, 1987 ~ after postdoctoral and lecturer positions in New York, Germany, Salt Lake City, Australia and Wisconsin, is an Assistant Professor on the faculty at the University of Kansas, Lawrence, Kansas.

**1983**

**Thane Kreiner**, B.S. Chemistry, Ph.D. (Neurosciences) Stanford University, 1988, MBA Stanford University, 1994 ~ is Program Manager, Strategic Marketing and Project Management for Affymetrix, Inc., Santa Clara, California. Affymetrix is a biotechnology company that uses combinatorial chemistry to manufacture DNA chips for use in genomics and diagnostics.

**1985**

**Kenneth M. Merz, Jr.**, Ph.D. (Dewar) ~ was promoted to Associate Professor at Penn State University and recently awarded a Guggenheim Fellowship.

**Martin Jay Rabinowitz**, Ph.D. (Gardiner) ~ employed by NASA Lewis Research Center in Cleveland, Ohio. States he is "a scientist adrift in a sea of engineers." Research interests include mediating the environmental impact of commercial supersonic aircraft and the thermodynamics and kinetics of semiconductor processing.

**Janet Nadya Younathan**, Ph.D. (Fox) ~ sends greetings from Eastman Kodak Company in Rochester, New York.

**1986**

**Robert Michael Newman**, M.A. (Lagow and Morgan) ~ is employed as a Contamination Control Engineer at Raytheon, Houston, Texas.

**Thomas L. Pettit**, Ph.D. (Fox) ~ teaching at University of Nevada at Las Vegas and at the Community College of Southern Nevada. He writes he is involved with an organization that provides housing for persons with AIDS and with the Unitarian Universalist Congregation of Las Vegas.

**ALUM RETORTS****1988**

**Peter Blass**, Ph.D. (White) - accepted a permanent research staff position in Dr. J.M. White's group at UT -Austin.

**1989**

**Tony Friddell**, B.A. Biochemistry; M.D., UT Health Science Center in San Antonio, (1993) ~ has completed his pediatric residency at Chattanooga Unit, University of Tennessee College of Medicine. He reports he will remain as chief resident in pediatrics this year, then he's bound for private practice.

**1990**

**Kim Dean**, Ph.D. (Webber) ~ employed by Sematech to develop photoresists for the next generation of semiconductor manufacturing.

**Joey Dodgen**, B.S. Chemistry ~ is now living in Atlanta.

**Elizabeth R. Gaillard**, Ph.D. (Fox) ~ is Assistant Professor at Northern Illinois University.

**1991**

**Robert Burgess**, B.A. Biochemistry, Ph.D. Molecular Biology, UT Health Science Center at Houston ~ currently working as a Research Scientist for Lexicon Genetics, Inc. in The Woodlands, Texas, with a focus on defining gene function through innovation in gene targeting.

**1992**

**Darren L. Williams**, B.S. Chemistry ~ has been studying physical chemistry with Dr. Joe Nibler, Oregon State University. Indicates he is ready to graduate and come back to Texas.

**1993**

**Jessica M. (Mislinski) Kingston**, B.A. Chemistry ~ currently a student at Yale University School of Medicine with an expected graduation date of May, 1998.

**Harry Chang-Chieh Wang**, B.A. Biochemistry ~ doing graduate work at the University of Houston, pursuing a doctoral degree in chemistry.

**1994**

**Brett Bradley Busch**, B.S. Chemistry ~ a third-year graduate student at the University of California, Irvine, working on a Ph.D. in chemistry under Prof. Ken Shea.

**Nicole Chittenden**, M.A. (White) - is an earth science teacher at Kealing Junior High, a magnet school in East Austin where the majority of students come from low income families. She prefers teaching at the middle school level where she feels there is a chance that a good teacher can have a significant impact.

**Claire Linda Maspero**, B.S. Chemistry; B.A. Geography, (1991) ~ married Mark Edward Palitza (B.A. Government, 1986) July 6, 1996. The couple resides in Austin.

**Richard Edward Thomas**, M.A. (Iverson) ~ is serving on the USS Ticonderoga as Weapons Officer and has been selected to serve on the USS George Washington as Main Propulsion Assistant commencing September 1997.

**1995**

**Julie Wei-Tsuan Lim**, B.A. Chemistry ~ working as a Financial Analyst at Enron Capital & Trade Resources in Houston, Texas, after enjoying six months of traveling, studying and enjoying life in China.

**Michael O'Leary**, B.A. Chemistry, B.B.A., (1995) ~ is with Delta Distributors in Tulsa, Oklahoma.

**Philip James Pye**, Ph.D. (Magnus) ~ is with Merck & Company, Inc. in Rahway, New Jersey.

**1996**

**Lisa Lopez**, B.A. Chemistry ~ is serving as an Americorps member for literacy and math in Austin, Texas.

**Eddie Plyant**, Ph.D. (White) - is now managing the UT-Austin, Department of Chemistry and Biochemistry's Electron Spectroscopy for Chemical Analysis. His expertise encompasses a variety of spectroscopic and other surface analytical techniques applied to molecular processes.

**IN MEMORIAM**

**William Ralph Cabaness**, B.A. Chemistry 1953, M.A. Chemistry 1953 (Lochte) died March 6, 1996.

**C. Dennis Fitzwilliam**, B.S. Chemistry 1937, died June 10, 1996, according to the *Ft. Worth Star-Telegram*. He is survived by his widow, Mildred F. Fitzwilliam.

**Edwin Elwood Glenn, Jr.**, M.A. Chemistry 1948, Ph.D. Chemistry 1951 (Hackerman) died September 14, 1996, according to the *Dallas Morning News*.

**Charles Clinton Jones**, M.A. Chemistry 1937, M.D. 1940, died August 22, 1996 according to the *Kerrville Daily Times*.

**Charles Thomas Kenner**, Ph.D. Chemistry 1939, died August 1, 1996 at the age of 86, according to the *Dallas Morning News*. He is survived by his daughter, Betty Purkey.

**Lowell Russell Patton**, B.A. Chemistry 1938, died, date unknown.

**Chessie E. Rehberg**, Ph.D. Chemistry 1941, died August 14, 1995 at Brevard, North Carolina.

**John Harrison Tyler III**, B.S. Chemistry 1955, died July 21, 1996 in Austin, Texas, according to the *Austin American Statesman*. He is survived by his daughters, Virginia Fleming, Flora Louise Tyler, and Robin Tyler; a son, John William Tyler; and five grandchildren.

**Reuben D. Wende**, B.A. Chemistry 1943, died February 18, 1994. He is survived by his widow, Mrs. Reuben Wende.

**Emmett N. Wilson, Jr.**, B.A. Chemistry 1948, M.D. (University of Texas at Galveston) 1953, died July 30, 1996 at the age of 71, according to the *San Antonio Express-News*. He was a physician for over 35 years. He is survived by his wife, Evangeline Ratcliffe Wilson, four children, 8 grandchildren, and a sister.

**RETIRED FACULTY**

**Philip S. Bailey** (Professor Emeritus) and his wife Jeanne moved to a retirement home in Ft. Worth this summer. Their address is 8000 Calmont Avenue, Apt. 345, Ft. Worth, TX 76116-3831.

**Michael J. S. Dewar** (Welch Professor Emeritus) recently suffered a fall in his apartment and broke his hip. He underwent successful hip replacement surgery and is recuperating at his residence. His address is The Atrium, Apt. 5111, 2431 Northwest 41st Street, Gainesville, FL 32606-7468.

*Development activities*

We presently have two endowments that are the focus of fund-raising activities. The first campaign is intended to augment the *corpus* of the Joanne M. Ravel Regents Endowed Fellowship in Biochemistry and has resulted in contributions of nearly \$10,000, all of which will be matched on a 1:1 basis. These monies came from 42 individuals and two companies. The second initiative is for the endowment supporting the Rowland Pettit Centennial Professorship in chemistry. Thus far twelve individuals have given or pledged over \$8,000 to this effort.

We are grateful to all those who have made commitments to these efforts or for other departmental purposes. A complete listing of donors can be found on pages 20 and 21 of this issue.

## Departmental history project underway



### Who are we?

*This photo of the departmental faculty was taken in the 1950's. The first person to correctly identify all 24 faculty shown will receive a special prize from the department! Current faculty and staff are not eligible - please submit entries to Joyce Thoresen via e-mail; [Joyce@mail.utexas.edu](mailto:Joyce@mail.utexas.edu) or simply mail your entry to the Department of Chemistry & Biochemistry, UT-Austin, Austin, TX 78712. Good luck! (Photo furnished by Dr. H. David Medley)*

*Do you have any materials that could help with our departmental history project?*

.....

### *News from the Graduate Front*

*continued from page 2*

vs. domestic students entering the program continues to fluctuate year-to-year. In the fall of 1995, 12 foreign students enrolled in the program, whereas in 1996, 20 foreign students began their graduate studies. The number of foreign applications continues to increase each year, and we are in the process of refining our strategy for optimum evaluation and selection of the most talented applicants.

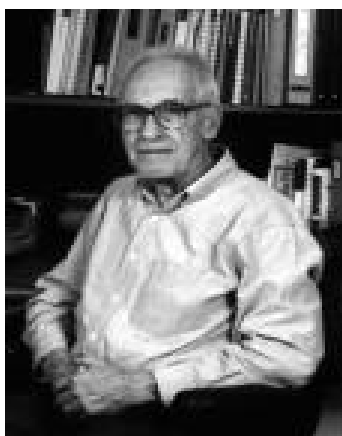
In the 1995-1996 academic calendar year, 41 students earned their doctoral degrees. The average length of time in the doctoral program was 5.0 years, but the duration ranged from 4.0 to 7.0 years, with most falling in the 4.5 - 5.5 year range.

The Graduate Office is in the process of developing a longer-term compilation of demographic statistics of the graduate students, and this interesting census will be reported in a future newsletter.

## Remembering colleagues

### *Stanley H. Simonsen*

Our Department lost a good friend and valued colleague this past year with the death of Stanley H. Simonsen on July 29, 1996. Stan joined our faculty in 1949, retired from teaching in 1988, and continued his active research program as Professor Emeritus. During this long career, he taught a wide variety of courses, mainly in analytical and general chemistry, and served on the supervising committees or as research director for many masters and doctoral degree candidates. His research, conducted mainly in X-ray crystallography and structural chemistry, has resulted in the publication of about 150 journal articles and numerous presentations at meetings and conferences. He was a recipient of one of the first research grants from the Robert A. Welch Foundation (his grant was number 17), and he continued to receive support from the Foundation until his death.



*Dr. Stanley H. Simonsen*

The computational demands of his chosen research area made Professor Simonsen one of the earliest computer users at UT, and he played a seminal role establishing computing as a research tool on this campus. In 1952, he and Professor Al Matsen obtained an IBM Card Programmed Computer at surplus from the Magnesium Corporation but the University administration was not yet ready to support such a novel gadget as an electronic computer. Using their own research grants and other sources, Simonsen and Matsen raised the money not only to equip Chemistry Building 117 with air-conditioning, but also to pay for the operation of air conditioners and the power (!) for the computer. They used that computer facility to great advantage in their own research programs and even made it available a few hours each day for the use of others. Prompted by the success of this initial use of computers in scientific research, the UT administration later established its first centrally supported computational facility, centering it around the IBM 650.

Stan is remembered by his many friends as a kind, warm-hearted person, totally generous with his time. He

*continued on page 18*

### *Royston M. Roberts*

With the passing of our good friend and respected colleague Royston Murphy Roberts on October 26, 1996, we are reminded once more of the paramount role played by the post-World War II faculty additions in the development of our present world-class department. Roy joined our department in September 1947, coming from Saul Winstein's laboratory at UCLA. We very nearly missed having him, however, because our first offer of the princely sum of \$3,000 per annum was scorned by Roy: it was *less* than his postdoctoral salary at UCLA. After intense negotiations, Roy finally acceded to a stipend of \$3,400!

Born and educated in Sherman, Texas, Roy graduated from Austin College, also in Sherman, in 1936 and then sought and obtained both his M.S. and Ph.D. degrees from the University of Illinois, Champaign-Urbana. He received an honorary Doctor of Science degree from Austin College in 1965, where he served on the Board of Trustees for many years.

After earning his Ph.D., Roy remained at Illinois for an additional year, during which he developed an improved synthesis of chloroquine, an anti-malarial drug, under the direction of Prof. C.C. Price. The process was patented and made it possible for the U.S. to make the drug and send it to hundreds of



*Dr. Royston M. Roberts*

*continued on page 19*

## Natural Sciences Hall of Honor

*continued from page 23*

Austin's Brackenridge Hospital (1947-1949), she opened a family practice in El Campo, Texas, in October 1949. She also served as City Health Officer (1968-73) in El Campo. After her retirement from private practice in 1974, she had more time and energy to devote to community service (as well as golf). In 1986, Casey cofounded with Lorraine Wyer, the Senior Ladies Golf Association of Texas, now numbering over 200 members and sponsoring two state tournaments a year. Casey moved to Wimberley, Texas, in 1981 and was soon serving on the Wimberley Senior Citizen Board. Continuing her philanthropy to UT Austin, she became a major contributor to the Clark Hubbs Regents Professorship in Zoology; the Zoology Scholarship Endowment for Excellence; the Carl Gottfried Hartman Graduate Fellowship Endowment Fund; and the Dorothea Bennett Memorial Graduate Fellowship Fund. The latter three supported research and travel for 24 graduate students in 1994 and 41 in 1995. In addition, she maintains the Lorraine I. Stengl Endowment Fund. Casey's 1991 donation of her 200-acre retreat, house, and outbuildings, near Smithville, added a major new resource to field biology studies at UT Austin. Appropriately named "Stengl 'Lost Pines' Biological Station," this Life Sciences facility operates as a satellite to UT Austin's Brackenridge Field Laboratory. Casey has served on the Department of Zoology Visiting Committee (1985-1990) and is a current member of the Chancellor's Council and the Littlefield Society.

## New faculty; Karen Browning

*continued from page 9*

discovery of an isozyme of factor eIF4F. This isozyme form (eIFiso4F) appears to occur only in higher plants and has not been found in mammals or other eukaryotes. We have cloned and expressed the two subunits of eIFiso4F and are carrying out studies to understand the interaction of the subunits with each other, other initiation factors, and with messenger RNA.

When I am not in the lab, teaching, writing, etc., I am spending time with my husband Mark and my kids. Thomas (8) and Kathryn (3) like to do "experiments" at home, especially the one involving acetic acid and sodium bicarbonate.

## West wing renovation

*continued from page 4*

struction costs increased, and after a year, it was concluded that additional funds were needed, which were approved by the Regents this Spring. The engineers and architects now agree that we have a workable project, and construction is planned to begin June 1997. The Spring of 1997 will find us trying to shoehorn the occupants of Levels 4 and 5 into other locations in Welch Hall, an exercise similar to that occurring when the 1930's building was renovated.

The entire wing will have an emergency watering system in the ceiling and will be automatically triggered if a fire breaks out; many of us have trepidation about this aspect of the project. Hood space, a vital need to the "modern" chemist who seems not to want to smell anything, will be increased by 25%, and a special facility for drying organic solvents without having to reflux them over alkali metals or hydrides will be constructed. Although the "foot print" of the West Wing will not change, the gain in hood space means its height will, by 25 feet, when the air-handling equipment is installed on the roof.

And that's not all you'll see when you visit the renovated West Wing. The chairman's office and procurement office (which many of you knew as our departmental seminar room from 1961-1978) will be gone, having been relocated to the 1978 addition, consolidating all of our administrative offices in a centralized area on Level 2. The placement office will also move to the same location, so for students and others this new configuration will represent a form of "one-stop" shopping.

Undoubtedly there will be some pain as we go through the process of renovation. Nonetheless, we will be able to console ourselves by having first-class organic and inorganic synthesis research space when the project is completed in 1998 (hopefully!).



*Prof. William H. Wade*

*-- Prof. William H. Wade*

### *Remembering colleagues; Stanley H. Simonsen*

*continued from page 16*

was especially helpful to younger faculty members, spending many hours helping them order equipment and materials, set up their laboratories, organize their courses, and learn to deal with the intricacies of life at a major university. He was influential, with his determined and vocal support and especially with the accessibility of his X-ray equipment, in establishing a state-of-the-art crystal structure service laboratory in the Department. An inveterate tinkerer, Stan also developed a computer-controlled system for the collection of X-ray diffraction intensity data in his laboratory long before the advent of commercial automated diffractometers. His teaching, whether in the classroom or as research supervisor, was characterized by a demanding commitment to excellence, both on his part and that of his students, and by a high degree of rigor, both tempered with clarity and thoroughness and leavened with his sharp (albeit dry) sense of humor. His greatest interests were family, church, teaching and research, and working with the youth and the adult leaders in the Boy Scouts of America. He was Scoutmaster of Troop 46 in Austin for eighteen years.

He was born August 25, 1918, in Missoula, Montana, and grew up in the Pittsburgh, Pennsylvania area. He received his undergraduate degree from the University of Northern Iowa in 1940, and he married Kathleen Fuller in 1943. After World War II, he was discharged from the US Army, where he had served as a medical technician. He then entered graduate school at the University of Illinois, Champaign-Urbana, where he received a master's degree and then completed his doctorate in chemistry in 1949. Throughout his career, he was an active member of the American Crystallographic Association, serving on various national committees and as organizing chairman for the Austin meeting of that association in 1987, and in the American Chemical Society. He was a member of the editorial board of the journal *Heterocyclic Chemistry*.

Dr. Simonsen's family requests that friends who so desire may make memorial contributions to one of the following: Wilshire Presbyterian Church Memorial Fund, 1507 Wilshire Blvd., Austin, Texas 78722; Presbyterian Children's Homes Endowment Fund, 702 Rio Grande St., Austin, TX 78701; The Boy Scouts of America Scholarship Fund, Capitol Area Council, 7540 Ed Bluestein Blvd., Austin, TX 78723; or the Stanley H. and Kathleen F. Simonsen Fellowship in Chemistry, Department of Chemistry and Biochemistry, UT- Austin, Austin, TX 78712.

Those wishing to contact Mrs. Simonsen or other members of the Simonsen family may do so c/o the Chairman, Department of Chemistry and Biochemistry, UT-Austin, Austin, TX 78712.

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### *Faculty profiles; David Laude*

*continued from page 7*

fundamentals of ion motion in trapped ion cells, development of novel FTICR instrument velocities that can be selectively trapped. This suggests a novel approach to ion mobility spectrometry that is readily applicable to biomolecules.

Recently we have demonstrated ion remeasurement techniques for FTICR that permit the same packet of ions to be stabilized and remeasured hundreds of times. This provides obvious signal enhancement benefits, but more importantly, may allow performing consecutive ion molecule reaction on the same ion population as a means to investigate ion structure and reactivity more thoroughly.

## *Remembering colleagues; Royston M. Roberts*

*continued from page 16*

troops in the Pacific during the latter stages of World War II. Roy then worked briefly for Merck, but his ambition was an academic career. So he accepted a Research Corporation Postdoctoral Fellowship to pursue postdoctoral work with Saul Winstein. Following his initial appointment here as Assistant Professor, he was promoted to Associate Professor in 1951 and then to Professor in 1961. He was appointed Professor Emeritus in 1992.

Roy's independent research program in physical-organic chemistry quickly became established and widely recognized. His journal publications number more than 125, and he is author or co-author of three books, as well as several book chapters and patents. His research interests centered especially on the mechanisms of Friedel-Crafts reactions and related rearrangements, but also embraced thermal rearrangements (he is well known for the "enolene" rearrangement), cyclialkylation, mechanistic studies using isotopic tracers, and the study of coal and lignite structure and chemistry. He supervised the research of 25 Ph.D. candidates and 22 Masters' Degree candidates. His book, *Serendipity: Accidental Discoveries in Science*, proved to be an international favorite, and his classic sophomore organic lab text (originally co-authored with Gilbert, Rodewald, and Wingrove and now with Gilbert and Martin) is still quite popular. He and his daughter Jean Ellen also co-wrote a children's version of the "Serendipity" book entitled *Lucky Science*.

Early in his career, Roy often taught the advanced physical-organic course in our graduate program, and throughout his career he contributed extensively to the teaching of "sophomore organic," both in the lectures and in the laboratory. He was always a well-liked lecturer, noted for his in-class quizzes and his friendly manner. Succeeding Phil Bailey, Roy served as the coordinator of sophomore organic chemistry for many years.

Roy was inspired by travel. In 1960, a Petroleum Research Fund International Fellowship permitted him to travel to Zurich, where he enjoyed a fruitful collaboration with Professor Hans Schmid. In 1967, he was invited to be Guest-Professor at the Philipps University (Marburg, Germany), and in 1976 he was awarded a Fulbright Fellowship to travel to the Bucharest Polytechnic Institute (Romania). In 1982, he traveled and lectured extensively in Egypt.

Roy was devoted to his lovely wife Phyllis (nee Benson) and to his four children (Richard, David, Stanley, and Jean), as well as to his church and community. He will be sorely missed, but his vital contributions to our science and to our department will continue to be remembered.

Professor Roberts' family has indicated that friends who so desire may make memorial contributions to any of the following:

University Presbyterian Church  
2203 San Antonio Street  
Austin, TX 78705

Hospice Austin  
3710 Cedar Street  
Austin, TX 78705

Royston M. Roberts Regents  
Fellowship  
Department of Chemistry and  
Biochemistry  
University of Texas at Austin  
Austin, TX 78712

*Whichever memorial you choose, please indicate in your letter that the memorial contribution is in memory of Dr. Royston M. Roberts.*

## *New faculty; Jason Shear*

*continued from page 9*

enjoy many outdoor activities that are difficult to pursue in upstate New York for much of the year (it's not so much fun to go running in a -20 °F wind chill!). Ithaca is located in the heart of the Finger Lakes wine country, so naturally I'm eager to compare Texas' wine-making efforts to the world class products available in New York.

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*continued on page 21*

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**Ph.D., Fall 1994**

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 Kathlynn Brown (Kodadek)  
 Jack Chan (Webber)  
 Shane Eisenbeis (Magnus)  
 Sharon Fox (Webber)  
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 Christopher Oalman (Martin)  
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 Minmin Tian (Munk)  
 Michael Van Hoy (Kodadek)  
 Steven Weghorn (Sessler)

**M.A., Fall 1994**

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 Armando Colorado (Brodbelt)  
 Everett McKinley (Gilbert)  
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 Sheila Zipfel (Anslyn)

**Ph.D., Spring 1995**

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 Eric Brucker (Sessler)  
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 Eva Simmons (Wyatt)  
 Mark Tesauro (Campion)  
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 Diana Watkins (Fox)

**M.A., Spring 1995**

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 Kevin Jessing (Kodadek)  
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**Ph.D., Summer 1995**

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 Jason Jackson (Holcombe)  
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**Ph.D., Fall 1995**

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 Victoria Campbell (Laude)  
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 Maurie Garcia (Mallouk/Laude)  
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 Bruce Kellerman (White)  
 Cheol-Young Maeng (Reed)  
 Edward Marcotte (Robertus)  
 Stephanie Muga (Appling)  
 Diann Alberas Sloan (White)  
 Mark Spaller (Martin)  
 James Tarrant (Magnus)  
 Allan Wagman (Martin)  
 Jiangong Yan (Reed)

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 Janaka Paulis (Wade)  
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 Michael Wallace (Iverson)  
 Erin Wiseman (Bard)  
 Ming Xia (Brodbelt/Moini)  
 Guanhua Yao (Wyatt)

**Ph.D., Spring 1996**

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 Elaine Brigham (Mallouk/McDevitt)  
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 Evdokia Kastanos (Appling)  
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 Thomas Martin (Webber)  
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 Timothy Murphrey (Rossky)  
 Katherine Potter (Robertus)  
 Russell Seguin (Parker)  
 Chaw-Long Shih (Wang)  
 Bryan Shiloff (Abell/Hackert)  
 David Stephens (Iverson)  
 Gina Stewart (Fox)  
 Xiaoyan Wang (Whitesell)

**M.A., Spring 1996**

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 April Kennedy (Martin)  
 Renee Mettle (Kodadek)

**Ph.D., Summer 1996**

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 Hua Jiang (Kodadek)  
 Rung-Kuang Lo (McDevitt)  
 Luis Montes (Lagowski)  
 Timothy Rhodes (Fox)  
 Christopher Sparks (Holcombe)  
 Ellen Verdel (Lagowski)  
 Mary West (Appling)

**M.A., Summer 1996**

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 Nicholas Crano (Fox)  
 Loreni Gonzalez (Bard)  
 Owen Lofthus II (McDevitt)  
 Dale Nicholas (Gilbert)  
 Heike Thompson (Fox)  
 Jennifer Vincent (Fox)

## Natural Sciences Hall of Honor

The College of Natural Sciences annually recognizes three or four of its most eminent alumni by inducting them into the College's Hall of Honor. This past spring, two of the three honorees, Dr. Lorraine I. Stengl and Dr. H. David Medley, earned degrees in our department. By reprinting the summaries of their educational and professional careers that were first published in the newsletter of the College, we hope you get a sense of the personal and professional accomplishments and of their continuing commitment to the University. *The following summaries were written by Michael Lyttle, Publications Editor for the College.*

### DR. H. DAVID MEDLEY Chemist and University Benefactor

David Medley began his long and successful scientific career after receiving his Bachelor of Science degree in Chemistry from Southwestern University in 1948. He then pursued doctoral studies in organic chemistry at The University of Texas, receiving his Ph.D. in



*Dr. H. David Medley*

Dr. Medley joined the staff of the Celanese Chemical Company, where he remained until his retirement in 1987. Dr. Medley began his career at Celanese in the research department. He held various executive positions in the company's New York, Louisville, and Dallas offices, including Vice President of Market-

ing. Prior to his retirement, Dr. Medley also served on the boards of Celanese Mexicana and National Methanol Company, a joint venture in Saudi Arabia. Throughout his career, Dr. Medley has been active in many professional organizations. A nearly 50-year member of the American Chemical Society, he is past Chairman of the Petrochemical Committee of the National Petroleum Refiners Association, a former board member of the Synthetic Organic Chemical Manufacturers Association, and a former member of the International Trade Committee of the Chemical Manufacturers Association. Dr. Medley and his wife Rosemary are longtime friends of The University and have given generously with their time and resources. He is a charter and Honorary Life Member of the Natural Sciences Foundation Advisory Council, and also serves on the President's Associates, Chancellor's Council, Longhorn Foundation, Lady Longhorn Associates, the Littlefield Foundation, and the Executive Council of the Ex-Students' Association. Dr. Medley has also maintained an active interest in outdoor activities, including golf, hunting, and fishing. In addition to his extensive volunteer

work, he also enjoys traveling with the Flying Longhorns.

work, he also enjoys traveling with the Flying Longhorns.

### LORRAINE I. STENGL, M.D. Physician and University Benefactor

In 1983, Dr. Lorraine I. (Casey) Stengl became a supporter of The University when she was contacted by Dr. Eldon Sutton in an appeal to fund a Centennial Professorship in Genetics to honor T. S. Painter, one of her favorite former teachers. Casey has been a generous contributor since that time. Her roots lie deep in UT Austin. She received two degrees from UT in 1939: a B.A. in Chemistry and a B.S. in Secondary School Education. She then attended the Medical



*Dr. Lorraine I. Stengl*

College of Pennsylvania and was awarded her M.D. in 1947. After an internship and residencies at

*continued on page 17*

## Reminiscences

Robert Perry (Ph.D., 1952, Hatch) visited the department early this fall. During the course of our conversation, we started reminiscing about some of the faculty from that era, a few of whom I met when I arrived in 1965. Bob had a number of interesting recollections about Norm Hackerman, Lewis Hatch, George Watt, Henry Henze, and Harry Lochte that I've asked him to commit to paper so that his remembrances (properly edited!) be shared with others. Consider this an open invitation to all of you to submit any "war stories" you have to tell about the faculty, staff, and students who were in the department when you were. With your stated permission, we'll incorporate your reminiscences in future issues of the newsletter. They'll also become part of the historical record of the department that Marv Hackert is actively compiling.

-- Jack Gilbert

## Whoops, we goofed!!

Due to an oversight, we failed to list a scholarship awardee in the spring issue of *Chemical Compositions*: Alexa Raney was the recipient of the Pirrung Scholarship, which is administered by the Ex-Students Association. Ms. Raney graduated with a B.S. degree in biochemistry in May of 1996 and is presently employed by Radian International LLC. Funding for this scholarship comes from an endowment established in 1994 by a gift from Dr. Michael Pirrung (B.S. 1975), who is now a professor of chemistry at Duke University.

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