

CHEMICAL

chemistry & biochemistry
departmental newsletter

Chairman's Corner

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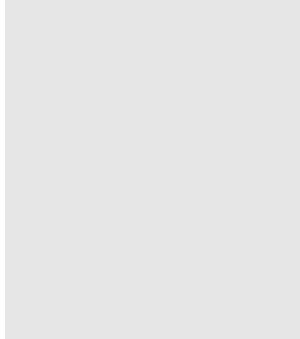
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Greetings to all our friends and alumni of the Department of Chemistry and Biochemistry at UT - Austin. By way of introduction, I am Marvin Hackert and I succeeded Alan Campion as Chair of the Department on September 1 of this year. One of our first projects was to revive the newsletter. We hope you will find it valuable and will enjoy receiving it. It is our intention to publish the newsletter on a semi-annual basis, once in the fall and another in the spring. We will be experimenting with the format and would welcome your suggestions on how to improve this newsletter.

Because it has been several years since our last newsletter, it is impossible to acknowledge all of our graduates and list all the notable events that have occurred in the interim, so we apologize at the start for these omissions. One area that we particularly want to emphasize in future newsletters, but are woefully lacking at present, concerns news items from our alumni. As noted below, our department has a homepage of the World Wide Web with an alumni section allowing you to send us your newsworthy notes via e-mail.

It doesn't take long sitting in the chairman's office to realize that there is a lot going on in our department. For the second year in a row, UT-Austin was ranked first in total chemical R&D spending according to C&EN (August, 1995). Research funding for the Department is derived from many sources with ~60% coming from federal agencies, ~22% from various foundations, ~10% from industrial sources, and the rest (~8%) from the State and other entities. It is a tribute to the quality of our faculty that they have done so well in light of the increasingly stiff competition for research funds. Their successes benefit the University in many ways and provide opportunities for excellence in research training for both graduate and undergraduate students in our department.



Dr. Marvin Hackert

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Electronic Give and Take

The Department of Chemistry and Biochemistry is wired! For those of you who delight in "surfing the Web," we now have a home page that is frequently updated. For example, you can read the electronic version of this newsletter by accessing the home page, which will also provide you with the option of sending e-mail messages to us containing information about yourself, items for inclusion in future newsletters, and questions about departmental activities. Alternatively, you may wish to e-mail us directly. However you do it, we'd love to hear from you! Finally, send us your own e-mail address so we can add that information to our departmental database. You can do this either electronically or by supplying your address on the envelope enclosed with this newsletter.

Home page address (Department):

<http://huckel.cm.utexas.edu/>

Home page address (University):

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e-mail address:

chemalum@mail.utexas.edu

Compositions

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Chairman's Corner

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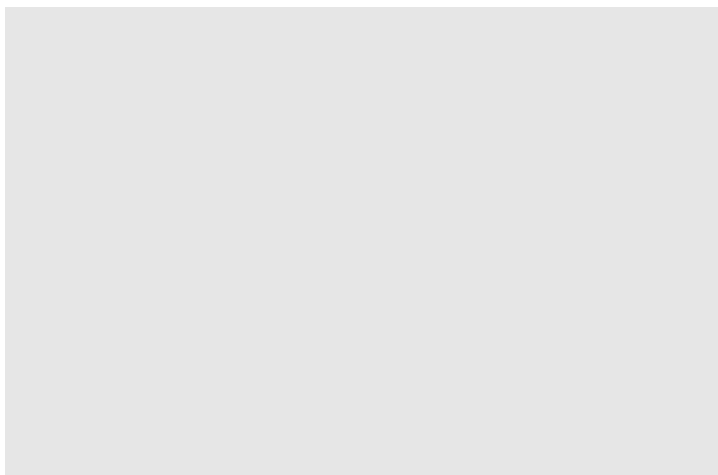
The recently released National Research Council report places us in the top 8% of Ph.D. programs in chemistry in the country (13th in overall quality out of 168 departments ranked and 5th among state-supported institutions). Enrollments and research activity within the department continue to climb. We currently have 743 declared chemistry and biochemistry undergraduate majors, approximately 278 graduate students and nearly 90 postdoctoral fellows in the department. Last year we graduated 39 chemistry and 57 biochemistry ACS-certified majors, and awarded 42 Ph.D.s and 15 M.A.s. According to the latest report from the ACS Committee on Professional Training, our department ranks 1st in ACS-certified B.S. degrees and 13th for doctoral degrees.

There have been a number of changes in our faculty since our last newsletter. Profs. John Stanton (theorist, 1993) and David Hoffman (multidimensional NMR spectroscopy, 1993) have joined the department. Dr. Jason Shear (analytical) will also be joining the department next fall. Last year's promotions include Profs. Eric Anslyn, Jennifer Brodbelt and John McDevitt to the rank of Associate Professor. Recent retirements include Tom Morgan, Gerhard Fonken, Petr Munk and Jim Boggs. Several faculty have been honored with endowed positions since the last newsletter: Marye Anne Fox (Waggoner Chair), Grant Willson (Collie Chair Fellow), Jon Robertus (Clayton Professorship), Steve Martin (Pettit Professorship), Alan Campion (Dow Professorship), Richard Lagow (Vauquelin Professorship), Steve Webber (Josey Professorship), and Marvin Hackert (Shive Professorship). More information about our faculty and staff can be found elsewhere in this newsletter.

There are several changes on the horizon that will allow us to build on what I feel is an already very strong program in Chemistry and Biochemistry at UT-Austin. Faculty in our department received three major shared-equipment grants last year. The largest of these resulted in the installation of four new NMR spectrometers in Welch Hall this past summer. The Board of Regents has approved funding for addressing health and safety issues in the west wing of Welch Hall. A building committee, co-chaired by Prof. Bill Wade and Associate Dean Peter Riley, is very active; the scope of that project should be known later this year with renovation to begin by the middle of next year. Welch Hall is also scheduled for rewiring for improved access to the Internet. Finally, we anticipate establishing a computer laboratory in Welch Hall that will allow our students and those in natural sciences more ready access to personal computers and the Internet, while enabling us to expand our course offerings that utilize computer-assisted instruction.

My hope is that I have given you a sense of a strong program striving to do better. The rule-of-thumb these days is to do more with less. Higher education is frequently a target for funding cut-backs from the state legislature. Those of you who have voiced your support for the mission of higher education, we thank you. As we move ever more in the direction from a state-supported institution to that of a state-assisted institution, we must recognize that we as individuals can play a vital and more direct role in maintaining quality programs at UT-Austin. I encourage you to consider the opportunities of how your tax-deductible contributions could help the many fine programs in our Department. For those many friends who have supported the Department in the past, we thank you. It is only with your help that we can continue to meet our mission of excellence in both teaching and research.

- Marvin Hackert



Dr. Upali Weerasooriya representing Vista Chemical presents a check to the Department, May 1995. Pictured are Prof. Marvin Hackert, Dr. Weerasooriya and Prof. William Wade.

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During the past four years, gifts of over \$1,800,000 have been received by the Department of Chemistry and Biochemistry.

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Pictured are Hoechst Celanese Corporation's Academic Excellence Award recipients for 1995: Mr. Eddie Pylant, Outstanding Chemistry Graduate Student; Dr. Gary Williams, VP of Technology and Business Development, HCC; Dr. Jerry Broussard, Research Associate, HCC; Prof. Alan Campion, Chairman, Department of Chemistry and Biochemistry; Mr. David Cliffler, Outstanding Chemistry Graduate Student; and Mr. Anthony Holbert, Outstanding Chemistry Undergraduate Student.

Development Depends On Departmental Donations

The Department of Chemistry and Biochemistry continues to benefit from donations of money and equipment from individuals and corporations. During the past four years, gifts having a total value of over \$1,800,000 have been received, of which nearly \$1,300,000 came from individuals. The donors are listed elsewhere in the newsletter (pages 13 and 14), and their contributions are gratefully acknowledged here.

Six new endowments have been established since 1991, four of which directly benefit undergraduate and graduate students. These four, and the size of the endowment including matching funds, are the BASF Endowed Scholarship and Fellowship (\$50,000), the Norman Hackerman Endowed Presidential Scholarship (\$39,342), the Welch Foundation Graduate Research Endowment (\$750,000), and the Leon O. Morgan Endowed Fellowship (\$25,000). The income from these endowments currently allows the department to award approximately \$104,000 annually in fellowships and scholarships to our graduate and undergraduate students.

The other two new endowments are intended for faculty and are the M. June and J. Virgil Waggoner Regents Chair in Chemistry (\$1,000,000), and the Dow Chemical Endowed Professorship in Chemistry (\$100,000). The initial beneficiaries of these endowments are Professors Marye Anne Fox and Alan Campion, respectively.

Contributions from our alumni, friends of the department, and industry are crucial to our continuing success in attracting and retaining an outstanding group of faculty and students. We hope that those of you who have made donations in the past will continue to do so and that those of you who have not will make us part of your giving program. You may also designate the Department of Chemistry and Biochemistry when giving to The College of Natural Sciences as part of their annual fund-raising efforts, although a portion of any donations made through the college are retained there. Finally, if you desire information about specific development efforts toward which you could contribute, please contact Marvin Hackert (Chairman) or Joyce Thoresen (Office of Alumni and Industrial Relations).

Bob Black, Sr. Vice President and Head of the UT-Austin Texaco Team, presents a check to UT President Robert Berdahl.

Partners in the Community: UT STC & Department of Chem & Biochem Sponsor Young Scientists

In 1992, the University of Texas Science and Technology Center (UT STC) for Synthesis, Growth, and Analysis of Electronic Materials began working with Zavala Elementary School on a Young Scientists program to promote sixth grade students' interest in science, math, and engineering. The UT STC added Barrington and Ortega schools during the last year, making a total of three Young Scientists groups at these elementary schools, all of which serve large numbers of minority and low income students. The program has been unanimously endorsed by the Austin Independent School District's Board of Trustees. The AISD endorsement and its financial support of this model program, originally funded by the National Science Foundation's Education and Human Resources Directorate,

was applauded by the STC and the participating schools.

One goal of the Young Scientists program is to prepare the children for admission to the Kealing Junior High Science, Math, and Technology Magnet program when they reach seventh grade. During the spring, at each of the three schools, approximately twenty students are selected for the Young Scientists from the fifth grade classes using the same matrix employed for admission to the Kealing Magnet Program: student letters, parent letters, teacher recommendations, grades, and test scores. Since the Zavala Young Scientists program opened, 15 Zavala students have been accepted into the magnet program, compared with one student prior to the program's inception.

The first Young Scientists from Barrington and Ortega will be eligible to attend Kealing in the fall of 1996.

The STC has long hoped to involve other departments and organizations in sponsorship of Young Scientists classrooms, and this year the Department of Chemistry and Biochemistry became a partner at Barrington, "adopting" the Barrington Young Scientists. Departmental staff member Dr. Vincent Lynch serves as the UT contact for the Barrington Young Scientists, arranging field trips, working with mentors, and making regular visits to the classroom. The Department also assists by providing science materials and supplies to the class.

A twenty-minute video on the science-focused classroom is available for teachers, administrators, parents, and potential partners/adopters who want to initiate a Young Scientists program. Written materials accompany the video, and the UT STC outreach staff can share advice about program start-up. For more information, contact Pam Cook or Nicole Chittenden at (512)471-9462, or send e-mail to cmab710@utxsvs.cc.utexas.edu.

At a follow-up meeting for Project STEP campers, families work together to solve a science mystery.

.....
"If you want every day to be a challenge, if you really want to exercise your creativity..."

Seminars on Electronic Materials

Each year, the UT STC offers several seminars of interest to academic and industrial scientists and engineers working with electronic materials. In 1995-96, seminars are scheduled approximately once a month, on Monday evenings at 5:30. For more information, or to receive announcements, contact the UT STC office at (512)471-9462 or by e-mail at: cmab710@utxsvs.cc.utexas.edu.

Research Fellowships Available for Undergrads

Chemistry majors interested in the area of electronic materials have a rare opportunity to participate in cutting-edge research — and receive a fellowship in the bargain. Freshmen, sophomores, juniors and seniors have participated in the Undergraduate Research Experience and Practice (UREP) program since the UT STC was established in 1991 with a multimillion dollar National Science Foundation grant.

The \$300/month fellowships in many cases free students from outside jobs, allowing them to spend ten or more hours a week with graduate students and postdoctoral fellows on interesting surface chemistry problems dealing with the synthesis, growth, and analysis of electronic materials. Monthly meetings for UREP students bring them up to date on projects within the UT STC. As an interdisciplinary organization, the UT STC exposes UREP fellows to techniques and approaches from outside chemistry, giving their education a breadth it would not have otherwise. Many past participants have gone on to prestigious graduate research programs.

Project STEP

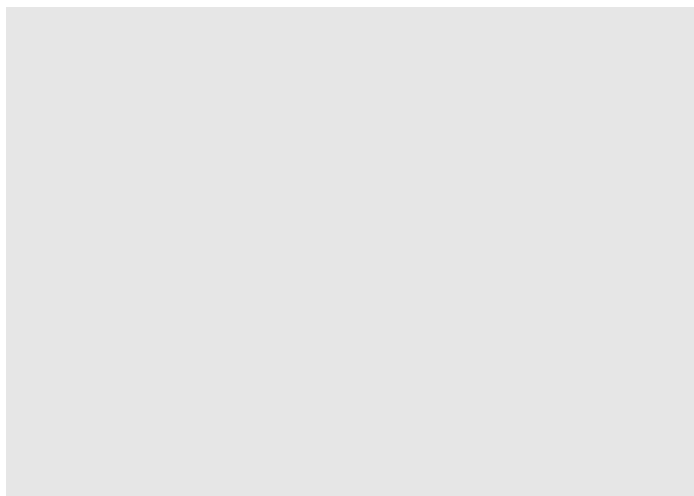
For the fourth year in a row, the UT STC ran its summer day camp, Project STEP, with great success. Twenty boys and twenty girls enjoyed two-week sessions in which they studied the properties of light, the periodic table, ratios and proportions, and other topics relevant to the field of electronic materials. Nicole Chittenden, lead teacher of the camp and a two-year staff veteran, will become camp director in 1996, when Project STEP begins serving only Young Scientists from the UT STC's three target schools,

Zavala, Ortega, and Barrington.

"The idea is to provide continuity for the kids," says Chittenden.

"After sixth grade, they come to Project STEP. After seventh grade, we offer them another camp called STEP Up, which offers morning science projects and in the afternoon introduces kids

more broadly to the UT campus." The next "step" will be STEP Beyond, after eighth grade. During this one-week program, campers will develop science demonstrations that they can present at their former elementary schools during the regular academic year, encouraging younger students to enter the Young Scientists program and set their sights on a college education.



Project STEP campers

Bridging the Gap Between Teaching and Research

Research is interesting, creative, and sometimes even lucrative. Many undergraduates are drawn to the challenges of chemical research. Only a handful of others consider teaching as a career, and as a result, few of our primary and secondary teachers have a strong chemistry background. Without this, they can't help their students to explore the chemistry of the world around them — to become researchers of their own environment. Bringing more chemists into the classroom would help. But why would a chemistry major choose to teach?

"If you want every day to be a challenge, if you really want to exercise your creativity, then teaching is a great choice," says Todd McDowell, sixth-grade teacher of a science-focused class, the Zavala Young Scientists.

"Middle school students are very accessible and very honest," says Lynn Kirby, an eighth-grade science teacher in the Kealing Junior High Science, Math and Technology Magnet Program. "They'll ask you anything and tell you anything."

Master teachers Kirby and McDowell spent most of June 1995 sharing their knowledge, techniques, and enthusiasm with four chemistry undergraduate apprentices in a new program called the Teaching Bridge. A three-year grant from the Henry and Camille Dreyfus Foundation brought them together for a three-week intensive session that involved designing and implementing hands-on science activities. For two weeks of the program, the master and apprentice teachers spent their mornings with a "guinea pig" class of rising eighth and ninth graders and their afternoons in a seminar exploring various pedagogical models, reviewing, and preparing lessons. Stipends were paid to both the master teachers and the apprentices.

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The Teaching Bridge

continued from page 5

Overseeing the program were Prof. Mike White, Director of the UT STC, Jim Barufaldi, professor of curriculum and instruction and head of UT's Science Education Center, Mike Doyle, chemistry professor at Trinity University and past president of the Council on Undergraduate Research, and Pam Cook, director of outreach programs for the UT STC.

The Teaching Bridge, by recruiting from declared chemistry and chemical engineering majors, is designed to let well-educated scientists who are considering teaching, but have not yet made a commitment, explore their interest. As Mike Doyle, a vocal spokesperson for curriculum reform, pointed out, "A solid understanding of science is requisite in today's world, and we need able, knowledgeable teachers who aren't afraid of science." Jim Barufaldi concurred. "Middle school is where we start to lose kids in math and science. Our best teachers are needed to help turn that around."

For the master teachers, one unforeseen benefit was getting updated on various aspects of science. "The 'bridge' goes both ways," Todd pointed out. The master teachers also spent two weeks in Mike White's laboratories learning to understand and use environmental scanning electron microscopy and X-ray photoelectron spectroscopy. "I'm taking a lot of great stuff back to my classroom with me," said Lynn.

The master teachers plan to return, with a new group of apprentices, for the summer 1996 session of the Teaching Bridge. Undergraduates interested in exploring middle school teaching can pick up applications in the UT STC office, Welch Hall 3.310, beginning in January 1996.

News from the Graduate Recruiting Office

The world of graduate recruiting has become increasingly competitive in the last few years. Gone are the days that the Chemistry and Biochemistry programs could sit back and expect 50 to 60 college graduates to enroll at UT Austin. Other departments around the country have become extremely aggressive in pursuing students by offering all-expense-paid visits to the campus and signing bonuses. Consequently, graduate recruitment in the Department of Chemistry and Biochemistry at UT has followed suit by funding visits by prospective students and increasing the number of fellowships available to them.

Fortunately, enticing some of the most talented students in the nation to join our program is a relatively easy sell, given the excellence of our Chemistry and Biochemistry faculty, coupled with the overall stature of the university and the beauty and cultural diversity of Austin. Even in the face of serious questions raised nationally about the surplus of science Ph.D.s, the Department

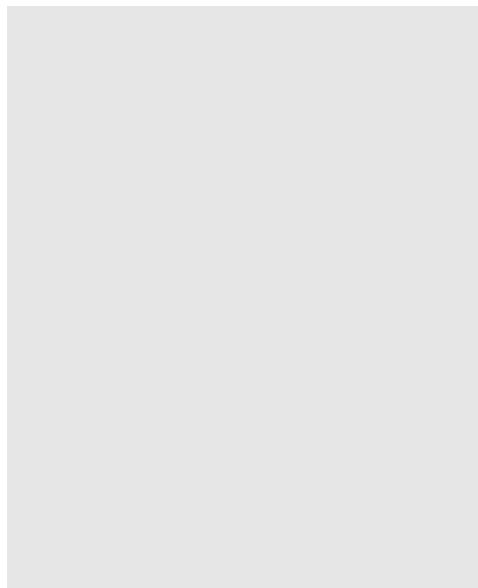
has seen significant increases in the number of applicants. For the 1994-95 academic year, a near-record 63 students enrolled in the program, a clear sign that recruiting efforts were perhaps too good! This past year, in an effort to maintain the overall size of the graduate student program at a manageable level, tighter admission standards were implemented and the target of 42 new students was realized.

As the two-year recruiting cycle draws to a close, considerable reshuffling has taken place in the recruiting office. Prof. David Laude has become the undergraduate adviser. Mamie Williams, who served as Graduate Admissions Coordinator for a number of years has moved to the Lower Division Chemistry Office to work with Sandra Godfrey. The newly tenured Eric Anslyn has enthusiastically agreed to take on the challenges of Graduate Recruiter. He will be working closely

with Barbara McKnight, our Graduate Coordinator, in the Graduate Office.

Several changes will occur this year in the graduate recruiting process. Handling of the thousands of documents associated with the 500-700 applications now will be coordinated, electronically, through the Graduate School. This should greatly relieve the paperwork burden on the Department. In addition, given the increasingly interdisciplinary nature of chemical research, the evaluation process will take on more of a committee feel, with professors from each of the divisions meeting to participate in the evaluation process. This approach will provide for a much more rapid and fairer assessment of the incoming students.

Eric and Barbara are looking forward to the new recruiting year with great enthusiasm and the highest expectation that the Department will once again land yet another in a continuing line of fine graduate classes!! If you know of any capable prospective students, we urge you to direct them to our program. The quality and reputation of our Department is closely tied to the talents of the graduate students we are able to attract to it.



Chemistry and Biochemistry graduates Diana Watkins (Ph.D) and Michelle McCalmont (M.A.) were among the banner carriers for the Graduate School at Commencement, May 1995.

... and from the *Graduate Adviser*

The graduate programs in Chemistry and Biochemistry continue to evolve with the changing trends in the scientific community. For example, in response to the blurring of the traditional boundaries among the subject areas of chemistry and in an effort to accommodate more interdisciplinary research, we have adopted a uniform system for advancement to candidacy across essentially all areas of the Department. The new requirements encompass both courses and the candidacy examination itself. The latter is comprised of an oral defense by the candidate of the research project that forms the basis of the Ph.D. dissertation and of an original research proposition. The examining committee consists of three faculty drawn from throughout the Department. With respect to coursework, the plan of study must encompass three distinct areas of science and/or engineering, but a sequence of courses is no longer specified. This provides for greater flexibility in designing a set of formal courses most relevant to each student's interests.

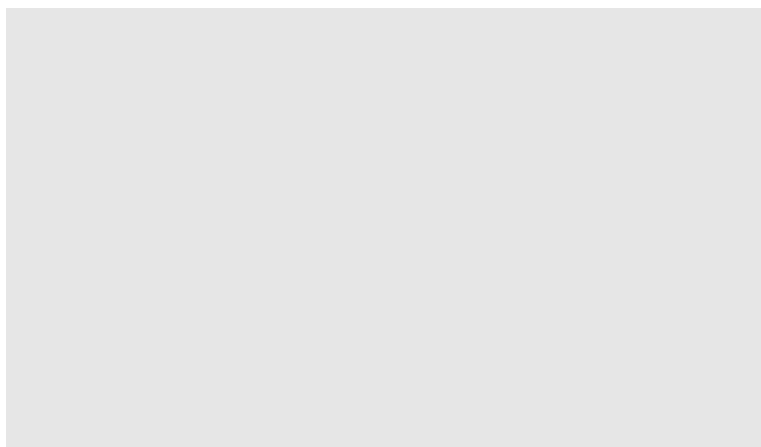
To address the growing concern about the job market for doctoral candidates and the budgetary changes that are affecting many funding agencies, we have adopted a slightly more conservative approach to graduate student admissions. However, the caliber of our incoming graduate students continues to increase, and the Department is as productive and active as ever.

During the fall of 1995, we welcomed 42 new students to our program, compared to 63 new students who entered last year. This number brings our total enrollment for the fall of 1995 to 277 students in the Chemistry and Biochemistry programs. Of that total group, 43 consider themselves aligned with Biochemistry. Over the past two years, we have averaged a graduation rate of 24 new Ph.D.s and about 11 M.A.s per year.

The majority of students are currently funded as Research Assistants (about 135 per year), while the rest are supported through departmental Teaching Assistantships (about 115 per year) or some type of fellowship (30 per year). One major source of our fellowships has been a Department of Education grant aimed at funding graduate students classified as underrepresented minorities. Several industrial corporations have also supported individual graduate students through company-sponsored fellowships. We are especially appreciative of all our corporate donors who continue to show genuine interest in the continued success of our Department.

I have only been the Graduate Adviser for one month, but I have gained an enormous amount of enlightenment about the needs and aspira-

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The Fall 1995 entering class of Chemistry and Biochemistry graduate students with Graduate Adviser, Prof. Jennifer Brodbelt.

Exchange Program Underway

The Department of Chemistry and Biochemistry has pioneered a new undergraduate exchange program for students of chemistry and other natural sciences. Under the guidance of Prof. James Boggs, the University has joined with a small number of other major American universities to form a consortium that arranges exchanges with a similar consortium of 20 universities in all of the European Union countries.

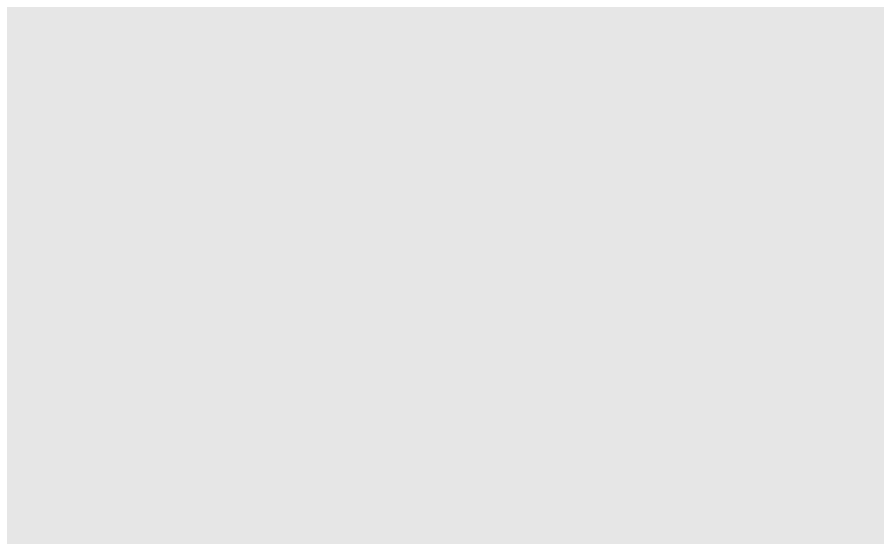
The program typically involves a year of overseas study. The student registers for courses in the normal manner at his or her home university, then goes to the foreign university and takes similar courses there. Since tuition is paid at home, and living expenses at the partner universities are very similar to those in Austin, anyone who can afford to go to UT can afford to study under this program in Europe. The partner universities all have strong science programs so that courses equivalent to those at UT can generally be found and the student can make normal progress toward a degree.

In this, the third year of the program, twelve UT students are studying in Europe and nineteen European students are at UT- Austin. Represented are most of the natural science areas, but by far the majority are in chemistry. Perhaps surprisingly, very few UT students choose to go to English-speaking countries, but prefer locations where they can perfect their abilities in French, Spanish, Italian, or German.

The NATO Institute

Prof. Stephen E. Webber was Director of a NATO-sponsored Advanced Study Institute entitled "Solvents and Self-Organization in Polymers". The meeting, held this past August in Belek, Turkey, also involved Prof. Petr Munk of this Department as part of the organizing committee. These NATO meetings are similar in general format to a Gordon conference, involving invited speakers who give tutorial lectures, and "students", who are often experienced researchers themselves. NATO funds these meetings with the objective of fostering scientific cooperation among scientists in the various NATO countries. As a sign of the changing times, the organizers are encouraged to invite lecturers and students from the former Soviet Union and Eastern European countries. Approximately 65 students and 17 speakers from a number of countries participated in the meeting. Two graduate students, Andy Eckert and Thomas Martin, from UT-Austin were in attendance and presented posters, as did a recent UT graduate, Dr. Minmin Tian.

The topics discussed were broad, including the theoretical physics of self-assembling charged polymer brushes, polymer micelles, the use of polymer micelles in drug delivery, and chemical synthesis of amphiphilic polymers. The meeting presented an excellent opportunity for relaxed exchange of ideas between scientists working in fields that are often regarded as rather distant from each other as well for the viewing of exquisite Greek and Roman ruins dotting the Mediterranean coast of Turkey.



Welch Hall lab housing the new 300-MHz instruments. The superconducting magnets are placed at a maximum distance to minimize interaction between their magnetic fields.

Career Services, Industrial and Alumni Relations Office

The Career Services Office provides job search help for students, postdoctoral fellows and alumni. During the 1994-95 academic year, 179 individuals were registered with our office. Job seekers may participate in on-campus interviews and receive direct mailing of appropriate job openings. Employers may participate in on-campus interviews, post jobs, and/or request database searches and resumes.

The Industrial and Alumni Relations portion of the office serves as liaison between the Department and industry, alumni, and benefactors. We are available to help with information regarding faculty and programs, and alumni are encouraged to report any news items such as promotions, retirements, changes of address, etc. Also, the Industrial and Alumni Relations Office is pleased to accept any gifts to the Department.

Write to: Department of Chemistry and Biochemistry
Career Services, Industrial and Alumni Relations
The University of Texas at Austin
Austin, TX 78712

Fax: (512) 471-6835
Telephone: (512) 471-5916
e-mail: joyce@mail.utexas.edu

Department upgrades its NMR facilities

This past summer witnessed considerable noise and disruption in the Research Instrument Laboratories wing of Welch Hall as four new NMR spectrometers were installed more or less simultaneously. As part of this installation, two eleven-year-old instruments, including our first 500-MHz spectrometer, were decommissioned, and their superconducting magnets were used as components in two of the new spectrometers. This reuse of such magnets continues a tradition established in the Department last year when the fifteen-year-old magnet from our first superconducting spectrometer, an NT-200 wide bore, was incorporated into an FT ioncyclotron resonance spectrometer constructed by the group of Prof. Laude.

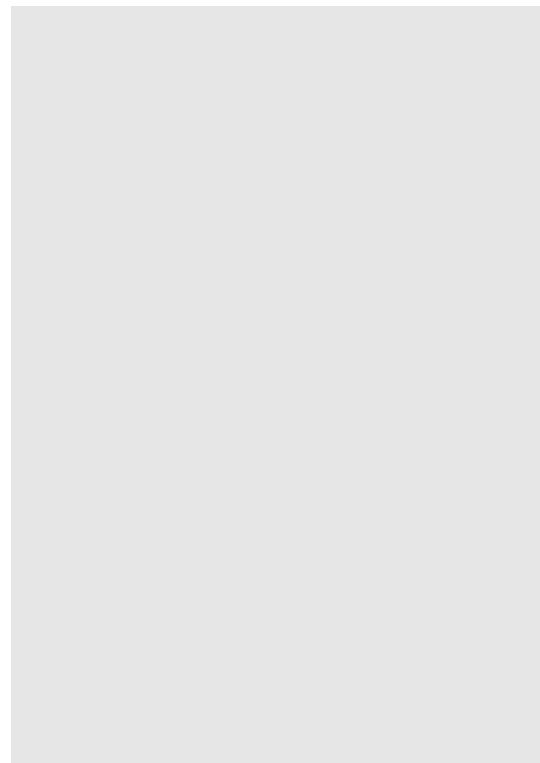
Three of the new spectrometers, two Varian Unity Plus 300s and a Varian Unity Inova 500 are available for use by research personnel throughout the Department, whereas the fourth, another Varian Unity Inova 500, is dedicated to support the research of Prof. David Hoffman of this Department and Profs. John Beale and Laurence Hurley of the College of Pharmacy. Their instrument is equipped with gradient coils that make it especially useful for the acquisition of NMR data on biological molecules.

All four of the new spectrometers as well as the Bruker AMX-500 are interconnected by way of an ethernet, which also makes data from them available to users outside of the NMR facility itself. Thus, a researcher in principle may sit at a workstation anywhere in the world and process NMR data generated by one of our instruments. We anticipate that a

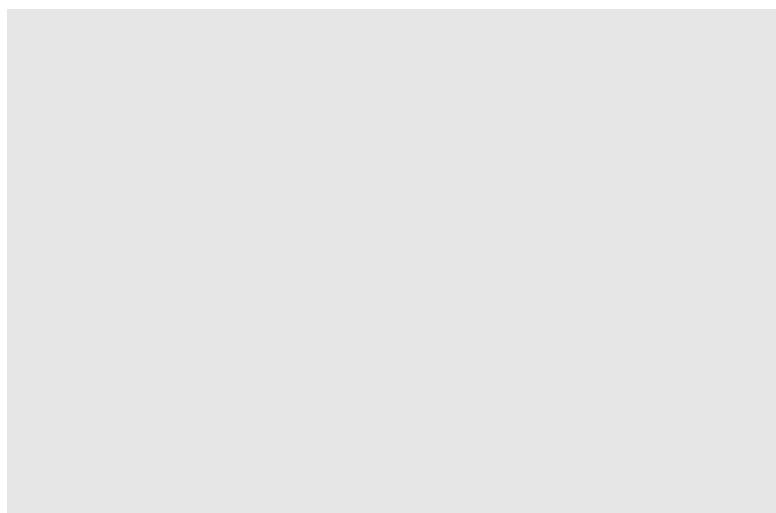
number of research groups throughout the Department and elsewhere will take advantage of this capability.

The new instruments were purchased with funds supplied by a variety of sources, including the NSF, the Department, and the Colleges of Natural Sciences and Pharmacy. Their installation brings the total number of NMR spectrometers in our Department to eleven, and allows execution of state-of-the-art NMR experiments for both coursework and research.

Needless to say, we are extremely proud of our NMR facilities, and invite you for a visit to check them out for yourself!



For the first time in eleven years, the superconducting magnet from our old 500-MHz NMR spectrometer is allowed to warm to room temperature.



Graduate student Chris Cameron uses the new 500-MHz instrument to study biological samples

John W. Mallet Chemistry Library
and the
A.E. Skinner Chemistry Library Endowment

The Mallet Chemistry Library continues to be one of the busiest branch libraries on the UT Austin campus. In 1994–95 alone, more than 237,000 persons entered its doors, used over 117,000 books and journals, and asked more than 6,000 reference questions. Many more people used the library's information services without ever entering the library because it is an active site within the World Wide Web (WWW) environment. Its home page provides access points to chemical information both locally and around the world via the address:

<http://www.lib.utexas.edu/Libs/Chem/first/mallet.html>

In addition there is the UT Library Online information system (UTLOL), a gateway to many electronic resources provided by the General Libraries for students and faculty. Accessible via the WWW and Telenet, these services offer a wealth of factual and bibliographic information to UT library users onsite or through remote access at home or office. The UT Library Online home page is at:

<http://www.lib.utexas.edu/>

The A. E. Skinner Chemistry Library Endowment had a total of \$60,264 on August 31, 1995. As book prices continue to increase, income from the endowment is all the more important for sustaining and further developing the collection.

Among the titles recently purchased with endowment funds are the Aldrich Library of ^{13}C and ^1H FT-NMR Spectra, an important set for spectroscopy; the Handbook of Data on Organic Compounds (3rd edition) and the Encyclopedia of Reagents for Organic Synthesis. Funds from the endowment were also used to partially fund the purchase of Chemical Abstracts 13th Collective Index, to be published in 1997.

Approximately twenty-four percent of the Mallet Library's total book acquisitions come from gifts, primarily from Profs. Royston Roberts, book review editor of *Journal of the American Chemical Society*, and J. J. Lagowski, editor of *Journal of Chemical Education*.

David Flaxbart has been the Head Librarian of the Mallet Library since May, 1992, managing and directing activities.

A. E. SKINNER CHEMISTRY LIBRARY ENDOWMENT

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Reflections from the past Chair

It's been a little more than a month since I returned full time to research and the withdrawal symptoms have eased. Marv Hackert asked me to reflect a bit on the past four years in the life of the Department; my first reflection is that they sure went fast !

In my view, the outstanding developments of the past four years were clearly the fine progress made towards promotion and tenure of our truly exceptional group of Assistant Professors, the addition of two equally promising Assistant Professors and an internationally recognized chaired professor, the commitment of funds and planning for the renovation of the West Wing, a number of major new endowments and the establishment of a Strategic Planning process with our first ever External Review. Since the other developments are covered elsewhere in the Newsletter, let me briefly describe the Strategic Plan and Review. With all of our faculty lines essentially filled a few years ago, with the continued decline in State support and with a new University President, the time was right to assess the state of the Department and to plan for the future. We spent nearly a year, in committee, in town meetings and in faculty meetings reviewing ourselves. In the end, we committed to a series of objectives which included to strive to be recognized as one of the top five departments in the country and to focus our research on synthesis, analysis and theory with applications to problems in materials science and biology. Specific steps to reach these goals were outlined, including areas for future faculty appointments, shared equipment needs, curriculum improvements and a development plan. A panel of distinguished experts spent two days with us, reviewing the Department and our plans

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... and from the Graduate Adviser

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tions of our graduate students. I have also developed an appreciation for all the staff, students, and other faculty who contribute their time and energy to the well-being of our graduate program.

Should you desire additional information about our graduate activities or have comments or questions about the program, please feel to contact me or Barbara McKnight at the e-mail addresses below.

Jennifer Brodbelt, Graduate Adviser
Barbara McKnight, Graduate Coordinator

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Davis Named to Academy of Distinguished Teachers

Prof. Raymond Davis was one of twelve faculty members from throughout the University named this past Spring as inaugural members of the newly established Academy of Distinguished Teachers. The goal of the academy, one of the first of its type in the U.S., is recognition and enhancement of teaching, particularly at the undergraduate level. Members are selected annually on the basis of their outstanding teaching, personal commitment to students and the learning process, and ability for inspiring and motivating students in the classroom. Although the first group of faculty was selected by the Executive Vice President and Provost, in consultation with deans, department chairs and students, the qualifications of future honorees will be evaluated by a committee that includes current members of the academy, other faculty, and students. Members will serve in the academy for a period of eight years, and the total membership will be limited to 80 professors in active service, or approximately 6% of the tenured faculty.

As a member of the academy, Prof. Davis is entitled to the perquisites normally accorded holders of endowed faculty positions and the title of Distinguished Teaching Professor. This prestigious award is another in a long line of recognitions he has received for his teaching at the undergraduate level. Among them was designation as a Piper Professor, an honor that involves faculty in institutions of higher education throughout the state of Texas and that has been accorded to only seven faculty UT faculty members during the existence of the award.

ALUM RETORTS**1950**

Leland L. Smith, B.A., M.A., Ph.D. (Henze) ~ Currently Professor of Biochemistry, The University of Texas Medical Branch, Galveston, Texas, having served 31 years on the faculty. Interests are in the oxidative chemistry and biochemistry of steroids, particularly of cholesterol, in oxygen biochemistry, and in physical methods for natural products.

1961

Stanley Cavitt, Ph.D. (Gardner) ~ Serving as Awards Chair, ACS 1995 Executive Committee of the Central Texas Section.

1967

William A. Kennedy, B.A., B.S. ~ Is Director of Austin Laboratory of Huntsman Chemical, formerly Texaco.

1968

Ronald Jandacek, Ph.D. (Simonsen) ~ Holds the title of Principal Scientist at Procter & Gamble Miami Valley Laboratories and is working in areas related to the chemistry and biochemistry of lipids. Author of 40 publications and 3 book chapters, and listed as inventor on 9 patents in the area of fats and oils. Cincinnati Chemist of the Year, 1995.

1974

John Dale Butler, B.S. ~ Earned M.S., Acoustic Engineering, from Naval Postgraduate School. Selected for promotion to the rank of Captain, U.S. Navy (March 1995). Currently assigned as Assistant Program Manager for the Seawolf class nuclear-powered attack submarine.

1975

Michael C. Pirrung, B.A. ~ Professor of Chemistry at Duke University. Established The Pirrung Scholarship to nurture undergraduates with an interest in scientific research in chemistry. Named Outstanding Young Alum by UT-Austin Ex-Students' Association, Spring 1995.

1977

Neal Grice, Ph.D. (Pettit) ~ Serving as HS Coordinator, ACS 1995 Executive Committee of the Central Texas Section.

1981

Bruce E. Koel, Ph.D. (White) ~ Holds a faculty position at the University of Southern California. ACS-PRF Grant for Fundamental Research in the Petroleum Field.

1991

Kimberley R. Cousins, Ph.D. (Gilbert) ~ Holds a faculty position at California State University-San Bernardino and was recently married.

1992

David A. Atwood, Ph.D. (Jones) ~ Appointed to a faculty position at North Dakota State University. ACS-PRF Grant for Fundamental Research in the Petroleum Field.

Andrienne C. Friedli, Ph.D. (Fox) ~ Appointed to a faculty position at Middle Tennessee State University. ACS-PRF Grant for Fundamental Research in the Petroleum Field.

IN MEMORIAM

Louis W. Schleuse, B.A., 1938, died June 14, 1995 at the age of 95. A former faculty member of the University of Texas at Austin College of Pharmacy. Survived by his wife, Oleta V. Schleuse.

Dorothy Burr Banks, B.A. (Chemistry), 1923; M.A. (Bacteriology), 1926, died September 28, 1995 at the age of 93. Member of the President's Association, the Chancellor's Council at The University of Texas at Arlington, the Littlefield Society, and the Chancellor's Council at The University of Texas Health Science Center at San Antonio. Survived by sister, Catherine Burr Tripp.

Mary Beth Baxter Lasater, (Chemistry), 1949; Ph.D. (Education), 1971, died October 2, 1995.

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Reflections from the past Chair

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and provided a ringing endorsement. Two years later, we are right on track. I have always thought that one of the distinguishing features of this Department is its collegiality and ability to govern by consensus; this experience proved it.

In closing, let me say that it was a privilege, and a lot of fun, serving as Chairman. My faculty colleagues assisted enormously by serving on various committees and in the various Advisers' offices. The real work, of course, was done by the dedicated staff in the Chairman's Office to whom I give my heartfelt thanks for a job well done.

-Alan Campion

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