



# The **T**est ube

## The Chemistry Department

### 1980 Newsletter

Texas Tech University  
Lubbock, Texas

An annual letter of information for and about the Graduates and other friends of the Chemistry Department of Texas Tech University.

Edited and Produced by  
Gary L. Blackmer and Henry J. Shine

To our readers:

The start of a new decade sees the birth of a new publication, an annual newsletter from the TTU Chemistry Department that is to be sent to its graduates and others who have had a close association with the department. We hope you will find it informative and interesting.

This first issue gives a brief history of the department's past, and a look at its present, including news of current activities of the faculty.

In future issues we want to have lots of news about the current activities from you, our graduates, and others with close ties to the department. On the last page of this issue is a card that we hope many of you will take the time to fill out and return, telling us your current address (if the one to which this newsletter was sent is not correct), news about yourself, and things about the department that you would like to see covered in subsequent issues.

We hope that the annual publication of this newsletter will be a useful link between you and former acquaintances at Tech, and also between you and the current Department. Naturally we also hope that whenever you happen to come back to the Tech campus you will pay a visit to the department.

So our best wishes to all of you for 1980, and we hope to hear from many of you about your current activities.

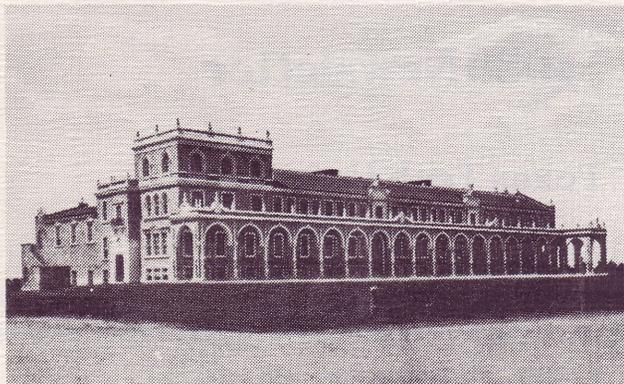
Sincerely,

John L. Kice  
Chairman, Dept. of Chemistry

This newsletter will be the first of a continuing series. Its purpose is to bring news of the Department to its graduates and other friends and to obtain news of and from them.

Because this is the first in the series, it seems appropriate to review briefly the development of the Department so that we can place its current position more clearly in perspective.

## Yesteryear

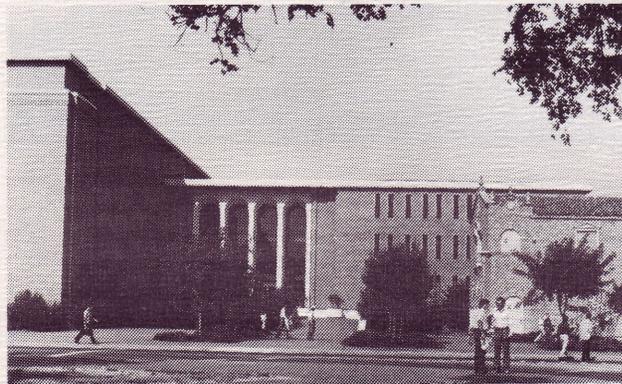


Texas Tech is itself a young University. Its doors were first opened in 1925. Chemistry was one of the original departments of what was then called Texas Technological College. The Department was first housed in part of the basement of the Administration Building, remaining there until the "old" Chemistry Building was ready for occupancy on January 1, 1929. Many of you will have spent all of your "chemistry time" in the old building and will remember the colonnaded front with its molded frescoes and, of course, the tabulation of the elements incorporated in the stone work. This building originally housed not only Chemistry, but also Geology, Physics, and Biology. The building was turned over to Chemistry entirely in 1951, and was renovated in the period 1956-1957.

For many years the Chemistry Department was, in fact, the Department of Chemistry and Chemical Engineering. Chemical Engineering, which was at first an option in the Department of Mechanical Engineering, was added to the Chemistry Department in 1933. This union lasted until 1959 when two separate departments were created and in 1960 the Department of Chemical Engineering moved into its own quarters in the Engineering Complex. Some of you may remember the large Chemical Engineering Unit Operations Laboratory in the basement of the building. This, in short time became the Department of Chemistry reading room, but our hopes that it might eventually house the University Library's chemistry holdings, and, in fact, serve as the Chemistry Library, have not been realized.

During its early years emphasis in the Chemistry Department was placed on undergraduate studies, even though the first Masters degree was awarded in 1932. With the appointment of Dr. Joe Dennis as head in the Department began its deliberate move toward graduate training. The year 1950 also marked the authorization by the Board of Regents (then

## Today



called Board of Directors) for offering the Ph.D. degree in Chemistry.

Steady progress took place during the period 1950-1965 in building a highly competent department in both the undergraduate and graduate sense. The "department" had by the mid 1960's long outgrown the available space. In fact, for more years than we like to remember the freshman chemistry laboratories were held in so-called "X" buildings, furnished with benches and lockers made for the most part in the Department's own carpentry shop. Planning for an addition to the building was begun in the 1960's. Initially, a small addition was contemplated to be devoted to graduate programs. But, by good fortune and the powerful arguments of the then head, Dr. Joe Dennis, authorization was given for the construction of a larger, fully functioning addition, one that was indeed larger than the existing building. Construction was started in the fall of 1968 and completed in late 1970, resulting in a beautiful, spacious building to the south of but connected with the old chemistry building. Now, the "new" building houses all of the research laboratories, most of the upper-class undergraduate laboratories and most of the faculty offices. The "old" building houses all of the freshman laboratories (no more "X" buildings!), and our tried and trusted Organic Chemistry 341 — long known as "Aggie Organic". The old building also houses the electronic, machine and glass-blowing shops, and the lecture rooms of long, long usage. The old, large C101 which for years resounded with the lectures in freshman chemistry still resounds (but not so frequently) under the designation of C112, and the organic chemistry battlefield, the C2 of yesteryear, is now C15, also used not so frequently. The new building has two bright, colorful, medium sized lecture rooms, and a large, beautiful lecture hall. Much of our classwork is conducted in those rooms.

# Now, what of the faculty?

How far shall we go back? The department began in 1925 with three members (Dr. Thornton Read, head, one associate and one assistant professor). The Department now has 23 faculty and 28 teaching assistants. What happened in between, and what news of some of the Department's stalwarts? Dr. R.C. Goodwin became head in 1930 and after being successively Dean of the Graduate School (1938), Dean of Arts and Sciences (1950), and President (1959) retired in 1966. Dr. Goodwin now lives in Gainesville, Fla. How many graduates remember sighing with relief at surviving the rigor of Dr. Goodwin's organic course? In 1926 two men joined the department who also were to stay with it (as Professors emeritus) for over 50 years: Dr. William C. Craig and Mr. William M. Slagle. Dr. Craig, responsible also for designing the periodic table in the facade of the old building, lives in a rest home in Hereford, Texas. Mr. Slagle passed away in Lubbock in 1977. Dr. Joe Dennis who joined the Department in 1941 and was its head from 1950-1969 retired in 1976. He and Mrs. Dennis still make their home in Lubbock. Miss Margret Stuart retired this year (1979) after serving in our Department for 33 years. These two members of our Department are known to countless graduates not only for their years of teaching but also for their work on the Pre-medical Advisory Committee of which each was, in turn, the Chairman. Each, we are pleased to say, is still a frequent visitor to the Department. For years "the" Chemical Engineering part of our joint department consisted of two men — Profs. A.G. Oberg (1939) and Jules Renard (1951), and each eventually retired from the separate Department of Chemical Engineering. Prof. Renard (who still has his small laboratory and office in our old building) and Mrs. Renard live in Lubbock. Prof. Oberg died in a car accident in 1977. That colorful personality, Dr. M.F. Stubbs, who "ran" the freshman program in the period 1963-1968 (after returning from New Mexico School of Mines) recently retired (for the third time) from the University of Albuquerque at the age of 80. Dr. and Mrs. Stubbs live in Albuquerque (when they are not traveling to various parts of the country!).

## The Department Today

The faculty today are, understandably, more numerous than in the formative years, and heavily oriented toward research. The 23 members are divided according to their research and teaching specialties among five divisions and the freshman program. They are listed in the following according to their division along with the date of joining the Department.

Analytical Chemistry: Dr. G.L. Blackmer (1971), Dr. R.G. Rekers (1955), and Dr. W.H. Smith (1976).

Biochemistry: Dr. J.A. Anderson (1961), Dr. D.B. Knaff (1976), Dr. J.S. Sevall (1974), and Dr. P.S. Song (1965).

Inorganic Chemistry: Dr. R.A. Holwerda (1974), Dr. J.L. Mills (1970), and Dr. R.E. Mitchell (1966).

Organic Chemistry: Dr. J.A. Adamcik (1957), Dr. R.A. Bartsch (1974), Dr. J.L. Kice (1975), Dr. J.N. Marx (1967), Dr. H.J. Shine (1954), and Dr. R.L. Willer (1978).

Physical Chemistry: Dr. W.G. Davies (1979), Dr. A.L. Draper (1959), Dr. R.L. Redington (1967), and Dr. R.E. Wilde (1963).

Undergraduate Programs: Dr. W.B. Guerrant (1968) and Dr. C.M. McPherson (1960).

Welch Professor: Dr. G.W. Robinson (1976).

The current chairman of the Department is Dr. John L. Kice who came to the Department as chairman following the term of Dr. H.J. Shine (1969-1975). Two members of the faculty hold lifetime distinguished professorships, Dr. H.J. Shine and Dr. P.S. Song, as Paul Whitfield Horn Professors. These professorships were established in the University in the name of its first president. There are currently 13 Horn Professors in the University. The Welch Professorship was established as an endowed Chair of Chemistry with a gift of \$1,000,000 by the Robert A. Welch Foundation of Houston. The income from this invested endowment supports the Welch Professor. The first Welch Professor (1970-1975) was the distinguished organic chemist, Charles W. Shoppee, F.R.S., who retired in 1975 and returned to his home in Australia. The present Welch Professor, Dr. G. Wilse Robinson, is distinguished for his work in spectroscopy, particularly now picosecond spectroscopy.

Working with the faculty in research are 63 graduate students of whom 28 are teaching assistants and 35 research assistants. There are also eight post-doctoral fellows in the Department, who are here from various parts of the world: England

(1), Hong Kong (1), Israel (1), Korea (1), Poland (2), and the U.S.A. (2).

The heart of the Department is kept beating by an indispensable staff, made up of three full-time and five half-time secretaries, three store room personnel, four electronics and machine shop technicians, a glass-blower, and a business manager.

The life-blood of the Department is, of course, its students. The Department, as from its early years, is one of the central departments of the University, serving approximately 5,250 non-majors each year, in programs from Arts and Sciences and most of the other Colleges of the University. The large enrollments are in freshman chemistry, chemistry for pre-nursing and similar students, and in organic chemistry. The Department's aim is to provide these students with the best possible instruction, and this is why all of the faculty teach in the undergraduate program. One of the faculty (Dr. Mitchell) devotes a major part of his time to organizing the freshman program, and another (Dr. Willer) devotes full time to organizing the laboratory work for the main course in organic chemistry.

On the undergraduate chemistry-major side, the Department has approximately 120 majors spanning the freshman-senior years. Our majors have no difficulty finding jobs in the chemical industry or in going on to graduate school. In recent years the Department instituted research courses in chemistry for undergraduates, and this has caught on very well among them. Currently 41 students are doing undergraduate research. Pre-professional (dentistry, medicine, pharmacy) students are an important part of our undergraduate program, and two members of the faculty (Drs. Blackmer and Knaff) serve on the pre-professional advisory committee.

As mentioned before, the Department is heavily committed to research in a wide spectrum of topics. This year (1979) members of the Department are carrying out research supported by individually obtained grants from a variety of private and government agencies, amounting to a total of \$633,900. The costs of doing chemistry, whether instructional or research, has increased in giant steps in recent years. Cost of chemicals (particularly those based on the oil industry), glassware (particularly standard taper ware) and equipment have soared. The Department's dependence on non-State sources of support is even more critical now than in earlier years.

Department of Chemistry  
Texas Tech University  
Lubbock, Texas 79409

We would be very pleased to hear from the Department's graduates. Send us your updated address and description of what you are now doing professionally or otherwise. If there is a particular inquiry you may have for news of the Department, let us have it please.

Name: \_\_\_\_\_

Date of Graduation (or Association with Department): \_\_\_\_\_

Address: \_\_\_\_\_

Current Position: \_\_\_\_\_

Item of news for us: \_\_\_\_\_

\_\_\_\_\_

Inquiry of news from us: \_\_\_\_\_

\_\_\_\_\_

Send Response to: Prof. H.J. Shine, Editor  
Dept. of Chemistry  
Texas Tech University  
Lubbock, Texas 79409

## In Appreciation

We certainly appreciate the generous gifts which some of you have given to the Chemistry Department in the form of scholarships and undesignated contributions. It costs a lot of money to attend school and some needy young chemistry student could sure use any assistance that you might give. The education of a chemist takes a lot of time, money, and effort, but we feel this is a very worthy endeavor.

The students, faculty and staff appreciate any assistance, monetary or otherwise, that you can give. If you desire to contribute, you can work directly through the Chemistry Department or through the Office of Development, Texas Tech University.