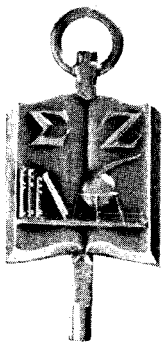
THE SIGMA ZETAN



VOLUME XIX SAN ANTONIO, TEXAS, DECEMBER 1947 NUMBER 1

OUR LADY OF THE LAKE COLLEGE

THE SIGMA ZETAN

Official Organ of SIGMA ZETA

ZIGMA ZETA HONORARY SCIENCE SOCIETY

NATIONAL COMMITTEE APPOINTMENTS FOR 1947-1948

Committee on affiliation with the National Association of Honorary Societies:
C. W. Bennett, *Kappa Chapter*
W. H. Eller, *Kappa Chapter* (Chairman)

Founder's Cup:
Gilbert W. Faust, *Zeta Chapter*
D. E. Miller, *Xi Chapter*
One additional member to be selected at the National Meeting.

Student Papers:
Each chapter should have a committee to stimulate work on student papers for the local chapter. (The best of the papers should be selected for presentation at the National Meeting). One member of the committee should be designated as a member of a national committee of which the national president will be the chairman. Each representative should work with the national president.

DEDICATION

SIGMA CHAPTER is very proud to announce that it has outgrown its babyhood. We are happy to pass on the cradle to our new member, CHAPTER TAU. We hereby extend a hearty welcome to our newcomer with the wish that its babyhood days my be brief and pleasant. To CHAPTER TAU we dedicate this issue of THE SIGMA ZETAN.

FROM AND ABOUT OUR NATIONAL RECORDER-TREASURER

Some time ago all of the chapters received a two-page announcement from our National Recorder-Treasurer. The circular letter was a summary of points discussed and acted upon at the meeting of the National Conclave held at Westerville, Ohio, last April. Along with the circular each chapter received a number of report blanks. At this time Mr. Faust has singled out a few of these items to be stressed again:

(2) "Membership reports should be made on these forms and the National initiation fee of $2.00 for each new active member should be remitted with the report. Membership records and certificates are prepared from these reports, so they MUST BE COMPLETE AND LEGIBLE."

(4) "According to plans announced at the Conclave, stationery and cuts of the key have been made available to the chapters. . . . The stationery will be sold in any quantity at these prices:

1c for each sheet
1c for each envelope
75c for each 100 (sheets or envelopes or both)"

(6) "The petition for the establishment of a chapter at the Teachers College at East Stroudsburg, Pennsylvania, has been approved by the necessary majority of the chapters. One of the first orders of business this year will be the formal installation of this chapter (TAU)."

Now ABOUT our National Recorder-Treasurer.

Gilbert W. Faust

All of you who have not yet had the pleasure of meeting Mr. Faust, may do so now. You may be interested to know that Mr. Faust has been teaching in the Chemistry department of Central State Teachers College at Stevens Point, Wisconsin, since 1935; has occupied the office of National Recorder-Treasurer of Sigma Zeta since 1942, with the exception of 27 months spent on active duty with the Navy. On December 20, of this year, Mr. Faust intends to say his "I Do" to Miss Helen M. Weber, a very accomplished young lady. Miss Weber is a graduate of the University of Wisconsin and is, at present, vice president of the Weber Lifelike Fly Company of Stevens Point, the world's largest manufacture of the artificial flies that are used as lures by fishermen. During the war, Miss Weber was with the Red Cross and saw duty at Great Lakes, Illinois, at Washington, D. C., and overseas on Mindoro and Manila.

I am sure that I am voicing the sentiments of all SIGMA ZETANS in saying that our good wishes will accompany Mr. Faust and Miss Weber on December 20, and will remain with them during a long and happy life.

(The editor)

A NOTE FROM THE NATIONAL EDITOR

Pictures dispersed throughout the pages of The Sigma Zetan would, no doubt, enhance its value and arouse more interest. The additional cost of cuts can not, of course, be borne by the National Treasury. Chapters might send in cuts of their officers, members, or activities, which have already been used in their school papers or local papers and thereby save the extra expense of engraving. If you are in favor let your editor hear from you.

At the National Conclave last April, the Alumni Committee stressed the fact that each individual chapter should keep in touch with its Alumni. A number of points were presented by means of which this could be accomplished. Are you in favor of adding an Alumni Corner to The Sigma Zetan? We have published Alumni news from one of our Alumnae members in the December 1946 issue and are including two more in this issue, not as an innovation, but simply due to lack of material to fill a reasonable number of pages in The Sigma Zetan. What is your reaction to this? Shall we continue it? Will your chapter contribute?

Sister Mary Clarence.

STUDENT PAPER PRESENTED AT THE NATIONAL CONCLAVE OF SIGMA ZETA APRIL 1947

MAP DELUSION AND PROPAGANDA

By ERNEST E. MELVIN
Kappa Chapter, Illinois State Teachers College, Macomb, Illinois.

Maps are one of the most important media for the imparting of geographic information at the present time as in the past. In order to become media of education, it has become necessary to put on these maps various symbols and lines denoting the information which they are designed to represent. For this reason, boundaries have become an important problem in that while they may really exist, they can also be accurately represented on maps.

It might be well to consider the psychological background of the situation in order to see how such methods can be made effective. The relationship of propaganda to social psychology is evident in that the type of propaganda and the form it may take is dependent on the arrangement of social norms. Social norms may be described simply as established social habits. By manipulation of these habits, the powers that be, can make the policies rational to the public as a whole. Old habits must be broken and new ones established before the process of propaganda can be made efficient.

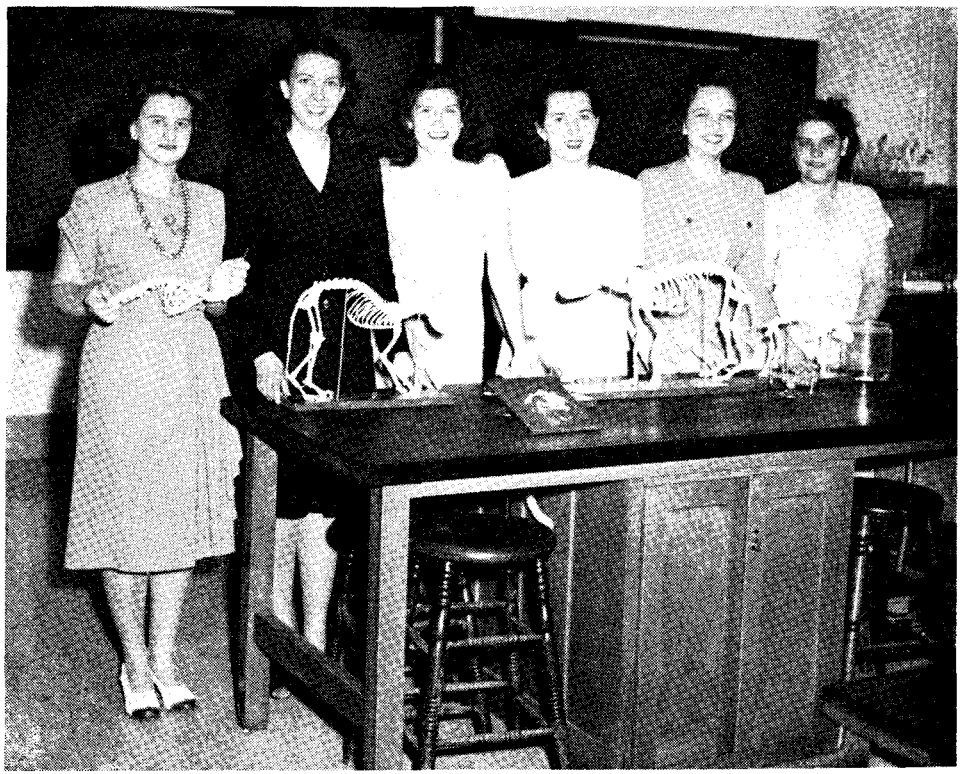
In order to see better how maps were used so effectively, consideration of some of the various types of projections is necessary. According to polar projections where the point of tangency is at the geographical north pole, Australia appears to be bana-shaped while Antartica completely surrounds the world. By use of the orthographic projection, any point can be made the center of the world. Symbols may be used on any type of projection for the purpose of expressing relationships.

For some basis that delusion by cartography can occur, it would be well to consider the Mercator projection. Greenland appears approximately the same size, if not larger, than South America, when in reality it has about one-tenth the area. Much use of this type of projection was made by Professor Halford Mackinder. The geopolitical pivot area formed the center of the map with parts of North and South forming outer areas surrounding the area. From that point of view, it was easy to see why the power controlling the heartland was in a position to regulate the world. The German people and the present day Russians have made much use of the heartland theory of space.

It must be remembered that maps are the product of human effort, and as such they are imperfect. They cannot indicate transition areas with much facility. To be representative, they must represent the actual situation. Maps have possibilities and limitations, but with the advent of the movies, their use has become more practical. Furthermore, mapmakers are liable to make mistakes, but the science of cartography is constantly trying to improve scientific making and interpretation.

It is only through the watchful and analytic interpretation of maps that their use as weapons of insidious propaganda can be eliminated. Through the methods of scientific research, cartographers will be able to produce more and better maps for the use of science and the people. It is the responsibility of the propagators of scientific progress and social endeavor to eliminate the use of maps as weapons of and the actual spread of destructive propaganda.

No Skin
Anatomy Students Mount Skeletons
Just Bones



ANATOMY STUDENTS MOUNT SKELETONS

Anatomy students, Sigma Zetans, displaying their mounted skeletons are left to right, Jean Tinney, Giovanna Richards, Dorothy Jo Murray, Julie Tiblier, Cecilia Wright, Marjorie Tarin, and Annie Loftin.

"If you hand me your skull, I'll be glad to clean it for you. Sure, you can have my foot, but only for a minute. I'll probably need it again."

Such a conversation would sound spectacular if it had taken place anywhere but in the science laboratory. Coming from members of the Comparative Anatomy Class, it sounds perfectly sane.

Whose foot and skull were the topics of the above conversation, is anyone's guess. It could be parts of the dog being prepared by Cecilia Wright, or the rabbit worked on by Marjorie Tarin, or the cat skeletons prepared by Giovanna Richards and Jean Tinney, or Dorothy Jo Murray's garden toad, or Kathryn Long's embryonic puppy, or Julie Tiblier's pigeon.

PIGEON CONFINED TO JAR

"Poochie, the pigeon," was the life of the class. That is remarkable since skeletons are rarely the life of anything. But "Poochie" had a history. Julie Tiblier needed a skeleton. She began to eye her boyfriend's dog with such

an interested gleam in her eye, that he, in desperation, finally went out and caught a pigeon for her to work on. The dog's name was "Poochie," so his stand-in was named that too.

All Julie's experiences with "Poochie" weren't smooth ones. She can tell you that, "My skeleton was supposed to be one of the best in the class. One day when Sister reminded me to put the skeleton in the degreasing solution, I went to the lab but couldn't find the large jar that I wanted, so I squeezed 'Poochie' into a smaller one. It was no longer the best looking skeleton in the class. The crushed ribs and broken bones I had to mend with household cement, thread, and wire, but 'Poochie' looks as good as new now!

CHICKEN HAS ACCIDENT

Dorothy Jo Murray started out with a chicken skeleton, and ended up with a garden toad. When the chicken skeleton was being put through its bleaching process, a solution of ammonia was accidentally used instead of hydrogen peroxide. Because of over-exposure to the weakened ammonia water, certain bacteria worked upon the ligaments and the chicken was no longer a chicken—just loose bones.

So, Dorothy decided to get something smaller to work on "in order to save time and worry." She did! The toad was finished in one-fourth the time without any accidents and required no mending.

ALLIGATOR COMES THROUGH

Annie Loftin prepared a cleared specimen of a small alligator. Her specimen, although preserved in solution, is also a skeleton, but unlike the others required no de-fleshing, de-greasing, or bleaching, but only clearing, staining, and mounting.

As Annie approached the crucial step in its preparation, namely that of clearing the tissues in potassium hydroxide before staining the skeleton, her imagination viewed a disrupted and ruined alligator. But much to her relief, she passed through this step with success and perfection.

Many other specimens in the laboratory have been similarly prepared for student use by Anatomy classes in past years. Comparative Anatomy is geared to fit the student along with other requirements to enter any medical school in the country. It is also a basic requirement for all biology majors.

(Reprint from the PHOENIX, Our Lady of the Lake College, School Paper)

NEWS FROM THE CHAPTERS

Alpha Chapter
Shurtleff College
Alton, Illinois

Dear Sister Mary:

This brief note will let you know that the Alpha Chapter, at Shurtleff College, is taking definite steps towards reactivation this semester. We expect to have the organization complete before Christmas this year, and plan to have a delegation at the National Meeting in the spring.

Very truly yours,
Norman O. Long, Sponsor
Head, Department of Chemistry

Beta Chapter
McKendree College
Lebanon, Illinois

Dear Editor:

The work of the Beta Chapter was opened this fall by the faculty members, as all active student members of the previous year had moved or graduated. However, since the opening of school seven new members have been pledged, as follows: Fred Fleming, head of the department of biology, and the following students: Harold Affsprung, Warren Beckemeyer, David Brink, Donald Cramer, Mason Holmes, and Samuel Simpson. The formal initiation will be held later in the semester, at which time officers will be elected for the present school year.

With the increased membership it is hoped that arrangements can be made either for program meetings or for an affiliated science club of some kind.

We can use about fifteen copies of the next issue when it comes out. With best wishes to all the Chapters.

Fraternally yours.
C. J. Stowell,
Recorder-Treasurer

—o—

Mu Chapter
Mankato State Teachers College
Mankato, Minnesota

Dear Editor:

The membership of the Mu Chapter at Mankato has increased very much from last year. The old members from last year number eleven active and three associate and this year including the old members the active membership numbers thirty and the associate membership seven, showing a definite upswing in membership.

We are planning several activities for the year, one is to conduct a science show and invite high school seniors from surrounding schools. Our main objective is to acquaint them with our science department which may indirectly persuade them to enroll in our college this coming fall. Also we are planning to hold a key contest for the best paper or demonstration by the applicants in the contest. The winner of the contest shall receive an award of a Sigma Zeta Key. At commencement time we give a recognition award to a senior who has attained the highest scholastic standing in the field of science during his or her college work. The award of the past years has been a "Handbook of Physics and Chemistry."

Sincerely,
Miss Marian Jensen
Historian-Editor

—o—

Xi Chapter
Ball State Teachers College
Muncie, Indiana

Dear Editor:

Xi Chapter started this year with nineteen actives, eleven associates, and seventeen faculty members. We are planning initiation at our next meeting.

Early this fall term splendid cooperation was shown by the group in their roles as helpers, when Ball State was host to the Indiana Academy of Science.

One of our aims this year is to have more student participation at our meetings. We are planning on student papers, talks, demonstrations, etc. Also, we would like to include some field trips.

We have begun planning for the National Conclave this year, to which our chapter is host. We hope that many Sigma Zeta members will find it profitable and convenient to come.

The officers for the year are: President, Edward Shreve; Vice-President, James Swinford; Secretary, Nell Young; Recorder-Treasurer, Robert Shelley.

We would like seventy-five copies of the Sigma Zetan.

Sincerely yours,
Nell Young
Secretary.

Tau Chapter
State Teachers College
East Stroudsburg, Pennsylvania

Dear Editor:

In reply to your letter of October 24th I wish to thank you for the prompt manner in which you have welcomed us into Sigma Zeta. I am sure our association will be a most pleasant and profitable one; both from the standpoint of future scholarship and social benefit.

The State Teachers College at East Stroudsburg was opened as a Normal School on September 4, 1893. Reverend Chandler A. Oakes was the leading spirit in the original development of this educational institution. On June 4, 1926, the normal school was raised to the status of a Teachers College, and on this same date the State Council of Education granted to the East Stroudsburg Normal School the right to confer two degrees:

(a) Bachelor of Science in Education.

(b) Bachelor in Health Education

On June 6, 1927, the name was legally changed to the State Teachers College at East Stroudsburg. The College is most favorably located in the foothills of the Pocono Mountains, near the end of the Delaware Valley, famed for its beauty, and widely known as one of the wonders of nature in this country. The campus consists of forty-three acres which command a spacious view of the Poconos.

We have two clubs on the campus at the present time which we intend to absorb eventually into Sigma Zeta. One is the Nature Club in the Biological Science field, and the other one is a mathematics club known as the Euclidean Club. This may require some time for accomplishment, and necessitate the weeding out of those students lacking the high academic standing necessary for membership in Sigma Zeta. However, we have already elected to membership several of the most promising candidates into Tau Chapter, with the promise of more to come in the following semester.

Physics Laboratory, Conducted by Dr. Paul J. Steele (Tau Chapter).

I have enclosed a photograph of our science laboratory, and also a shot of our faculty advisor, Dr. William Grady Moore. Hoping this information will be sufficient for your needs in the coming publication of The Sigma Zetan.

Fraternally yours,

Robert L. Gantert
President

Dr. William Grady Moore

Zeta Chapter
Central State Teachers College
Stevens Point, Wisconsin

Dear Editor:

This year we started with the following officers:

President, Patricia Thorpe
Vice President, Percy Voight
Historian, Fern Horn
Recorder-Treasurer, Dr. Roland Trytten

The Sigma Zeta award was presented to Bess Jones last spring for scholarship, service to the school and outstanding work in science.

Last evening we initiated four active members and ten associates bringing our membership to thirty-five.

We have had two interesting talks this fall, one given by Charles Evans, former head of the Biology Department on "Milk Sanitation", and the other by Raymond Rightsell, Physics Instructor, on "Newton and Universal Gravitation."

Plans are being made under the direction of Betta Maki for the Junior Academy of Science which will be sponsored here in April.

Sincerely,
Fern Horn
Press Representative

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Pi Chapter
James Millikin University
Decatur, Illinois

Dear Editor:

On November 14, Pi Chapter visited Caterpillar Tractor Company and the United States Department of Agriculture Regional Laboratory in Peoria, Illinois.

At Caterpillar, we were shown the methods used for carbonizing the surface of steel so that it could be used in cutting tools and in other places where a hard surface is desirable. We were taken through the foundry and the metallurgical laboratory where we saw castings being made and the method used for

analyzing the iron and its constituents. We were told that wet chemistry is on its way out and that other means of analysis, including spectographic analysis are coming into their own.

At the Regional Laboratory, we found that the chief problem at present is how to use alcohol as a motor fuel, either by itself or mixed with gasoline. They have their own distillery there so that the cost of the alcohol will not be as great. Also, they are doing work on soybean oil as a base for paints, and on various kind of synthetic fibers.

Sincerely yours,
James W. Curry
Secretary-Treasurer.

Sigma Chapter
Our Lady of the Lake College
San Antonio, Texas

Dear Editor:

Officers for the year are: President, Mary Lou Smith; Vice-President, Barbara Johnston; Secretary, Annie Loftin; Treasurer, Angie Howard; Historian, Jean Tinney; and Corresponding Secretary, Jeannette Mann.

Sigma Chapter opened its activities for the year with a meeting on October 2. An invitation received from Brother Edward Collignon, secretary of the San Antonio Section of the American Chemical Society, to attend their meeting on October 14, was read by Mary Lou Smith. Dr. W. Albert Noyes, president of the

Going into a huddle over plans for the coming year are Sigma Zetans Annie Loftin, Jean Tinney, Mary Lou Smith, and Barbara Johnston.

Society and now at the University of Rochester in New York, was guest speaker at that meeting. His subject for the evening was "Organic Photo-Chemistry." Sigma Zetans who attended were: Barbara Johnston, Mary Lou Smith, Helen Hoyo, and Eleanor Navarro.

On October 23, six members, Mary Lou Smith, Cecilia Wright, Jean Tinney, Annie Loftin, Virginia Rose Hargis, and Jeannette Mann, were initiated into active membership. Jo Barbara Baehr, Sara Jo Perry, and Eleanor Navarro were received into associate membership. After the initiation and installation of officers the group was honored with a Mexican Dinner at La Fonda.

The Curie Science Club and members of Sigma Zeta were hosts to the San Antonio section of the American Chemical Society on November 8, with Dr. Kenneth C. D. Hickman, vice-president of the Eastman Kodak Company Laboratory and director of research, addressing the members. Doctor Hickman's main topic was "High Vacuum Distillation" The speaker introduced the subject with a very simple definition and then outlined its principal role in industry. His talk was accompanied by displays of a large number of graphs and drawings of laboratory apparatus.

At our November meetings plans were made to attend the collegiate section of the Texas Academy of Science Meeting to be held in Austin December 12 and 13. A symposium on "Science and Health" is scheduled for Friday afternoon. Sigma Zetans and Curie Science Club members participating are Cecilia Wright, Annie Loftin, Jean Tinney, Giovanna Richards, and Marjorie Tarin. Two separate sections are scheduled for Saturday morning, one for the Biological sciences and the other for the physical. Mary Lou Smith will present a paper on the *Preparation and Mounting of the Vascular System of the Cat,* and Evangeline Patino will give an account of *A Feeding Experiment on Insects.* A paper on *Chemist Librarian* will be read by Barbara Johnston, in the Physical Science section. Other members attending the meeting will be Sara Jo Perry, Virginia Rose Hargis, Helen Hoyo, Adelle Ball, Jeanette Mann, Cecilia Goodwin, and Rosalie Keprta.

Sincerely yours,
Jeannette Mann
Corresponding Secretary

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Delta Chapter
State Teachers College
Kirksville, Missouri

Dear Editor:

Delta Chapter was reorganized late in the spring of 1947 with formal initiation of those eligible for full membership by Dr. Rieger and Dr. Bray.

The three science programs that have been presented to the chapter since it was reorganized were given by Dr. Bray, William A. Deskin and Herbert G. Webb. Mr. Deskin gave a very interesting talk on the preparation and properties of 2,4-D. He had prepared some 2,4-D as a project in organic chemistry. Dr. Bray gave a program of films on petroleum geology which were enjoyed by all. Herbert G. Webb gave a talk on the various autopilots used by the army telling of the basic differences between the various types with respect to the fundamental requirements of all autopilots. Unfortunately, neither of the two talks were written up in a manner to be published.

The officers of Delta chapter are:
Herbert G. Webb, President
Gerald N. McReynolds, Vice-Pres.
Helen Rieger, Secretary-Treasurer.

Sincerely,
Herbert G. Webb
President, Delta Chapter.

THE ALUMNI CORNER

Dear Editor:

Shortly before graduating from Our Lady of the Lake in 1944, I became interested in Medical Technology. On checking the requirements for registration with the American Society of Clinical Pathologists, I found that I lacked Quantitative Analysis. I took this course the summer after graduation.

The next question was where to go for training. Each school for technicians had its advantages and disadvantages. The Eight Service Command Laboratory, now The Army Area Laboratory, Fort Sam Houston, Texas ws decided upon.

Our training period began November 1, 1944, with the entire first day being used in filling out Civil Service papers and in listening to Colonel Livesay, the commanding officer, and Major Webb tell what was expected of us in the year to come.

My first assignment was to the food chemistry section of the Veterinary Laboratory. A friend from Our Lady of the Lake, who had received her training the previous year, was in charge of food chemistry. I found her an excellent teacher. The benefit of having had Quantitative Analysis was soon apparent. We used the analytical balance to weigh meat products, lard, powdered milk, and the like: there were Kjeldahls and titrations to be done. Other tests included free fatty acids, rancidity, Roese Gottliebs, and Soxhlets.

Veterinary was a busy place. The technicians also had to wash the chemistry dishes since dish washers were hired to wash all of the dishes except those that had to be chemically cleaned. The students in veterinary did their share of Babcocks for the fat content of milk, cream, and ice cream. We did some phosphatase tests and milk bacteriology.

In addition to having the practical work in the departments, we attended classes every afternoon. The officer at the head of each department was given one day each week on which to give lectures, tests, and demonstrations on his subjects. These classes included parasitology, hematology, bacteriology and media, blood chemistry, virus work and food chemistry, and medical entomology.

My second assignment was to water bacteriology which was simplified by the course I had in water bacteriology in college. This department was not so busy as veterinary; we were grateful for a little free time in which to study for the numerous quizzes given by the officers.

One of the most exciting things to the students seemed to be learning to do venipunctures. An enlisted man in the hematology laboratory was good enough to let me try on him first. The first patient from whom I had to draw blood entered the laboratory proclaiming that he did not want a woman sticking him. The head technician convinced him that I was to stick him, but his attitude didn't help me any. Venipunctures became the ordinary thing after doing about twenty in a morning for glucose tolerance and other blood chemistry tests.

The media department didn't offer much new from what was learned in bacteriology at college, except for the large quantities made at one time and the making of beef heart infusion broth which we found to be hard work.

The first big thing in bacteriology was autopsying the guinea pigs that had been inoculated for tuberculosis. This was done every Monday morning. There also were rabbits to be injected and autopsied every day for Friedman tests. There was nothing new to the culturing procedures except that we had to learn to inoculate sugar solutions by means of a pipette. It took practice to be able to control the pipette, inoculate the different sugars, and still have no contamination.

At first it was amazing to watch the technicians in serology pipette, but we found that with practice we soon could pipette several hundred Kahns in a short time. The daily average in this department was approximately one thousand Kahns besides the Kolmers, colloidal golds, and blood typings to be done.

During the fall months of 1945, the students studied hard for registration examinations. Eleven of us took the examinations for the American Medical Technologists, and five of us also took the examination by The American Society of Clinical Pathologists. When we received our registration certificates, we felt as though a goal had been reached.

At the end of our training period, eleven students were assigned to serology. We then had a chance to learn procedures other than the routine such as, sensitizing rabbits for amboceptor. We soon learned the Rh work in which Major Hettler, the serologist, was particularly interested. We found Rh a relatively new subject, also an interesting one.

A year's training and a year's experience has made me realize what a vast amount of material is included in Medical Technology. It is a field in which one can rate from a poor to an excellent worker according to the type training and previous education had and to the application of industry, skill, cooperation, accuracy, dependability, and initiative.

Fay Schuchart
Sigma Chapter Alumnae
San Antonio, Texas

Dear Editor:

At this time four years ago, I was absorbed in my studies at Our Lady of the Lake College. In July of the following summer I applied for work with the Humble Oil and Refining Company at Baytown, and have been in their employ ever since.

I started as a tester, along with about thirty other girls, in the laboratory of the Humble Butyl Plant here. Since the plant was not yet in production we had an excellent training period and even had the opportunity to set up most of the equipment in our brand new laboratory. In March, 1944 the plant went into full scale production and I learned the importance of fast but accurate analyses, for successful operation depended on results obtained in our laboratory. My work consisted of routine testing of light hydrocarbon samples and various inorganic analytical determinations coupled with the analyses of special samples submitted by the research chemists, who were working on problems specific to the production of synthetic rubber. Since the variety of samples submitted was great my work was extremely interesting until the last day I was in the Butyl Laboratory.

In June 1945, an opening in the Chemical Analytical Laboratory of the Refinery lead to my transfer from the Rubber Plant. Here I was given a technical classification, Junior Analyst, and became a member of a research section. For the first few months my time was devoted to chemical analyses which almost always called for a consultation with Scott's or some other good reference book.

During the last year I have been working on the Emission Spectograph, a physical instrument especially suited for rapid qualitative analysis of inorganic substances but with special applications for quantitative work. I am indeed fortunate to have the opportunity to work on this instrument since it is still in the developmental stage and as new analytical methods of analyses are required there are great opportunities for research.

Working in Chemistry has been for me, a very interesting and enjoyable experience.

Mary Carlson
Sigma Chapter Alumnae
Baytown, Texas