

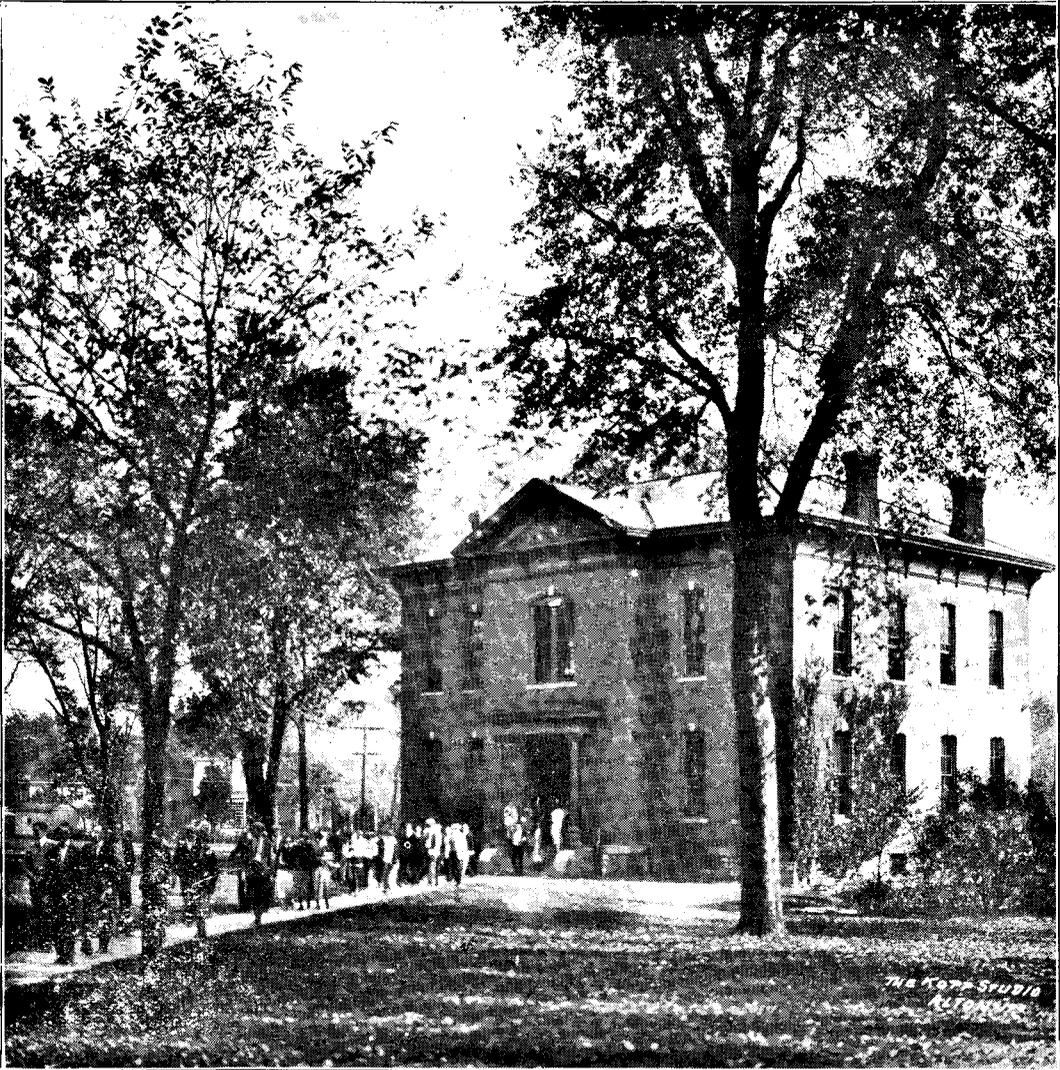


# The Sigma Zetan

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CHapel BUILDING  
SHURTLEFF COLLEGE  
Alton, Illinois

## THE SIGMA ZETAN

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## GRAND OFFICERS, 1934-35

Grand Master Scientist—H. W. Olson (Eta), Dean of Men, State Teachers College, Mansfield, Pa.

Vice Grand Master Scientist—E. E. List (Alpha), Professor of Biology and Geology, Shurtleff College, Alton, Ill.

Grand Recorder-Treasurer—T. A. Rogers (Zeta), Professor of Chemistry, Central Teachers College, Stevens Point, Wis.

Grand Historian—S. M. McClure (Beta), 610 S. Busey St., Urbana, Ill.

Grand Editor—Marvin C. Myer (Eta), Principal High School, Oran, Mo.

## EDITORIAL

Spring, with its innumerable changes, anticipated by all, does not all come at once. It comes creeping upon us like the whooping cough until the first thing you know it is here. It gradually comes and no calendar date is worth an iota to tell whether or not it is spring.

Out in the country, spring is evidenced by the return of the birds from their winter camping grounds. The frogs emerge from their winter nap down in the mud; the first warm night they come to the top, then set up a curfew to the end of day. Brown water snakes writhe among the aquatic flora and stones seeking unwary fish. Big snapping turtles thrust up periscope heads to view the changes winter has wrought. The water everywhere will be alive with fish—a hundred different kinds of fish, large and small, in unbelievable numbers, which is followed by a group of barefoot boys trudging along a country lane, each bringing home a string of fish.

In the city the marble grounds are converted into a garden where beds are spaded, raked and then planted into rows of potatoes, peas, radishes, onions and all. The ball parks show signs of life and the tennis courts have their lines of lime.

Around the college campus the signs are noticeable among the students who go walking about the campus or riding in some roadster and yelling at their friends they pass. The college folk are all strutting around in new duds and may be found, if not of the studious type, sitting on the corner curb or at the usual "hang out." They rather sort themselves according to pairs, too. It is just a little more noticeable, this time of the year, than at any other time.

To Sigma Zetans spring brings the National Conclave—the biggest event of the year. The first Conclave was held June, 1925, at Shurtleff College, at which time the Beta Chapter was granted McKendree College. This was really the beginning of the National organization, which was founded at Shurtleff College, October, 1924.

The society was begun a decade ago by students and faculty members with the hope that it would create further interests in the field of scientific pursuit. They felt that science needed to be elevated in the eyes and

interests of the other students of the college. The organization served this purpose so well that today there are chapters in seven states of the Union. Other chapters will, no doubt, be granted at this year's conclave, which fittingly is being held at Shurtleff College with the co-operation of McKendree College.

There will be among those present, members who started the organization and those who were present at the first conclave—in them, will be felt a degree of joy and satisfaction when they view the progress which has been made in a decade.

Let us all work this year to make this, the tenth annual Conclave, the best yet. In this way we can make April 12 and 13 days that will always be remembered as having furnished amusement and instructive entertainment to all.

We must realize that the society to continue in the future must be improved upon year by year and we must try to have not only a larger society but a better one as well.

In order that the potentialities of the society may be realized to the fullest extent, each member must: assume responsibility, take advantage of opportunities, be hopeful, have ambition and possess loyalty—other qualities are, of course, essential, but to me these are of supreme importance.

"Responsibility" has several different meanings, but its most frequent connotation is the state of being held accountable for satisfactory discharge of an obligation. The ability to take responsibility is probably possessed by all to some degree. Unfortunately the amount of responsibility some are able to handle is so limited as to be practically negligible. The difference in the degree to which men possess the ability to handle responsibility largely accounts for the difference between leaders and followers. It accounts largely for the difference in the "bigness" of individuals. Human capacities for responsibility are, no doubt, inherited, but there is little question that they can not be developed by experience—among the strong points in favor of Sigma Zeta is the development of responsibility through experience gained while serving on committees or as an officer in the organization.

"Opportunity", offered one in college and especially Sigma Zeta, if taken advantage of, will make those years the best of one's life. It offers above all things, a standard that one

should achieve in order to do his own work better and to understand thoroughly and appreciate the work done by one's fellow men. It gives one an opportunity to acquire knowledge that will make an individual feel the support of truth and facts in anything he undertakes. It grants an opportunity of making an unlimited number of friends who are to be the future leaders in all occupations and teaches one to co-operate with others interested in his own particular field so they may work toward a common end. It offers one an opportunity to learn to orient himself so that he may feel at home anywhere at any time.

"Hope" is the incentive which stimulates the good scholar to keep plugging to maintain his standing. Hope incites the unfortunate student who has not received due reward for his endeavors to keep on plugging away that the professor will some day become aware of his true worth; on the other hand, the student who has been receiving recognition for work not done hopes that his professors will never see through his bluff. There is something fine and courageous about the hopes students have in regard to their post-collegiate career. One appreciates how courageous they were when one realizes that in the fulfillment of these hopes lies the future—a future which not even the most far-sighted can prophesy. In conjunction with these hopes is a faith in one's ability to carve some niche in life which in the eyes of the world and in their own minds places them in the category of successful persons. One reason why people are successful is that they are extremely hopeful concerning the future, and such self-confidence and hope is hard to check this side of its goal.

"Ambition" is possessed by the student who starts laying a foundation upon which to build his career. We should set our goal in life and then let our thoughts be guided accordingly. After we have decided what we want to do, we should face the grim realities of life and let our thoughts be turned toward planning for the immediate future rather than dreaming of the enjoyment one will experience after having reached the goal.

"Loyalty" has been a priceless attribute ever since history began. It has become through the centuries one of the most valued and cherished qualities of mankind. Loyalty contains the essence of practically every good quality of character. It brings out the best that is in every person fortunate enough to possess it. Loyalty can find expression in a host of ways—three of which are: to ourselves, to our fellow members, and to our organization. Sigma Zeta is not an organization with an established tradition. On the contrary, this tradition is still in the making, and what is most important, you and I are making it. Nothing will count so much in the final check-up of our individual worth to Sigma Zeta as the amount of loyalty we have shown for it.

## CHAPTER LETTERS

ALPHA—1925  
Shurtleff College  
Alton, Illinois



Ruth Toomey,  
Master Scientist

We have issued bids this month to fifteen (15) eligible students for associate membership in this chapter.

Our chapter has also had some very interesting program meetings since the last issue of Sigma Zetan. Mr. Hugh Harris of the Alpha Chapter gave us a talk on "Photography" on February 12. At this same meeting we received seven new associate members. On January 15, Prof. Eugene Tavenner,

of Washington University, St. Louis, Missouri, gave us an illustrated lecture on the subject of "Archaeological Investigation of a Roman City in North Africa." This meeting was "open" and was well attended. On February 26, Mr. Lloyd Aldridge, Alpha Chapter, gave us a talk on the "Process of Inventing." On March 12, the Chapter had Dr. Sokolowski of the Alton State Hospital as our guest speaker. He gave a very interesting talk on "The Care of the Mentally Deranged Person."

### Membership

Officers: Ruth Toomey, Master Scientist; Margaret Marr, Recorder; Hugh Harris, Treasurer.

Active: Hugh Harris, Hugh Sargent, Ernest Silk, Lloyd Aldridge, Prof. L. P. Beifeld, Margaret Marr, Ruth Toomey, Louis Chwaley, Prof. Rwsusnick, Prof. E. E. List.

Associate: Boyd Beeve, Mrs. E. L. Gary, Donald Broman, Charles Nesbitt, Gladys Bistline, Stanley Beardshaw, Mark Tiernn.

—Ruth Toomey, M. S.

### GAMMA—1927

Medical College of Virginia  
Richmond, Virginia

We meet twice a month in the evening for about an hour and a half. Each new member is required to present a paper as a part of his initiation requirements. He may choose his own subject. Two members are appointed to discuss his paper after his presentation. This takes care of about one-third of the programs. The remainder of the programs are filled by outside speakers. We have attempted to obtain medical men not connected with the college but leaders in their particular field in the city of Richmond. Several of our own faculty men have given us excellent talks on subjects not included in the curriculum. Sigma Zeta here has also thrown its scientific meetings open to the members of the Junior and Senior classes in the School of Medicine. Papers

presented by the members include: "A survey of all Labor Cases over 24 hours at the Hospital Division of the Medical College of Virginia," "Review of the Physiology and Treatment of Asphyxia," "Hepatic Function as Related to Hepatic Pathology," "Lymph-Granuloma Inguinali," and "Nausea and Vomiting in Pregnancy."

Dr. Frederick W. Shaw, Professor of Bacteriology at the Medical College of Virginia, gave a most interesting talk on "Some Aspects of Immunity." Dr. Harry J. Warthen, Assistant Professor of Surgery at the Medical College of Virginia, at a recent meeting presented an illuminating paper on "Gas Bacillus Infections."

The meetings of the Gamma Chapter Sigma Zeta are held in the Founder's room of the new library building.

Ten men from the senior and junior classes were added this year as associate members.

In short, Sigma Zeta broadens our field of interest in the profession for which we are preparing.

#### Membership

Officers: W. H. Chapman, Master Scientist; R. R. Porter, Vice Master Scientist; J. P. Lynch, Recorder-Treasurer; H. U. Stephenson, Editor.

Active: C. A. Bland, W. H. Chapman, J. P. Lynch, R. R. Porter, H. U. Stephenson, W. C. Winn, Frederick W. Shaw, E. C. L. Miller, Sidney S. Negus, H. L. Osterud, J. C. Forbes, Robert F. McCracken, Harvey B. Haag, William B. Porter, E. W. Gray, William T. Sanger, Isaac A. Bigger, William R. Bond, Roland J. Main, Harry Walker, H. Hudnall Ward, Thomas W. Murrell.

Associate: Solomon Disick, G. A. Glass, F. Hernandez, E. W. Lacy, R. W. Sharp, L. Smith, L. L. Tylec, T. D. Watts, J. G. Welch, G. A. Welchons.

—J. P. Lynch, R. T.

#### ZETA—1929

Central State Teachers College  
Stevens Point, Wisconsin

The programs during the year were varied and have been presented by professional men as well as the students. Some of the programs consisted of demonstrations at the hospital while others have been illustrated lectures.

A "get together party" was held and the entertainment for the evening was furnished by Miss F. Glennon, who gave interesting sketches of her trip abroad. The standing committees for the ensuing year were appointed, consisting of: Membership Committee—Miss Helen Meston, Earl Hoefler, Robert Emery, and Sofia Nicolazzo. Program Committee—Mr. T. A. Rogers, Robert Neale, Frank Klement, and Carol Keen. Initiation Committee—Mr. C. C. Evans, Howard Kumath, Leo Flatley, and Marguerite Groves.

October 23, the chapter was privileged to witness a demonstration of a basometabolism test at St. Michael's Hospital.

At a special meeting held December 13, two candidates were invited into active mem-

bership in Zeta Chapter and five candidates were selected for associate membership. With the addition of these members the organization consists of thirty active members.

Important steps have been taken in regard to membership qualifications. The standard requirements now require a minimum scientific average of 88 and an academic average of at least 88. The membership of the organization was limited to 30 members.

At a special meeting held February 12, twelve new members were initiated in the organization, bringing the total membership up to 28 with an associate membership of 9.

At the regular February meeting tentative plans were made for a Science Exhibit to be sponsored by the Home Economics Department and Sigma Zeta. An invitation will be extended to all Seniors in high school from the surrounding territories. It is the desire of Sigma Zeta to draw attention to the well-organized Science Department in the college as well as to the organization itself.

#### Membership

Officers: Richard Schwahn, Master Scientist; Robert Neale, Vice-Master Scientist; Roberta Sparks, Secretary and Treasurer.

Active: Bessie May Allen, Charles C. Evans, Jessie Jones, Helen Meston, B. R. Pierce, R. M. Rightsell, T. A. Rogers, Fred J. Schmeeckle, Victor E. Thompson, C. F. Watson, Elmira Blecka, Yvonne Dallich, Robert Emery, Ann Farney, Leo Flatley, Harold Foss, Marguerite Groves, Magadeline Gogins, Earl Hoefler, Thyrsa Iverson, Carol Keen, Frank Klement, Sadie Klemick, Frank Menzel, Robert Neale, Ronald Neff, Alex Perroddin, Elmer Rueh, Elizabeth Sansum, Richard Schwahn, Charles Scribner, Dolores Skarweski, Roberta Sparks, Robert Steiner, Norma Truesdale, Eno Tutt.

—Roberta Sparks, S. T.

#### ETA—1929

State College  
Cape Girardeau, Mo.

Eta Chapter of Sigma Zeta held many interesting and most instructive meetings during the past year and feels that it can well call this a successful year which is now drawing to a close.

During the first part of the year several very interesting meetings were held. At one meeting the group was entertained by Dr. A. C. McGill with a talk entitled "Southeast Missouri—How It Got That Way." Another program consisted of a lecture and demonstrations by Mr. G. V. Emery on "Artificial Light." On December 12, the members heard a talk on "Einstein and Franklin," by Mr. Buckner of Central High School.

One very interesting program up to the present was the showing of a movie film on "The Smelting of Lead." It is hoped that a



Wayne Sarius  
Master Scientist

different film might be obtained each meeting night to serve as a part of the program.

The Eta Chapter has accomplished several things during the year which are worth mentioning. A new constitution has been adopted to be more compatible with the constitution of the Grand Chapter and to enable us to establish some rules in regard to compulsory attendance and payment of fees and dues. Very good results have been obtained. The office of Historian has been provided for with his major duty the preparation and maintenance of a permanent record containing certain information about past and present members of Eta Chapter. Sam Fine has had the job for the year.

At the present time plans are being made for the annual Sigma Zeta banquet to be held at the Colonial Tavern on May 8. Attempts are being made to secure some well-known man for the speaker. The banquet held last year was quite a success. The main speaker was Dr. O. B. Young, Prof. of Physics at the Southern Illinois Normal University at Carbondale, with Dr. Magill acting as toastmaster.

There has been a substantial increase in membership this year with the number now 36 active members, including 8 faculty members, and 11 associate members, for a total membership of 47, which is an increase of about 12 members over last year's total.

#### Membership

Officers: Wayne Sarius, Master Scientist; John Clay Magill, Vice-Master Scientist; Bill Moore, Recorder-Treasurer; Dr. Homer R. Bolen, Sponsor.

Active: Phil Asher, Clarence Dalton, Clarence Edwards, Sam Fine, Nina Harris, Vivian Kies, Wilson Langley, Melvin Leimer, J. C. Magill, Bill Moore, Bess Owenby, Dorothea Rott, Wayne Sarius, Robert Smith, W. L. Tomlinson, Elsie Vaughan, Opal Welker, Imogene Weston, L. C. Wilson, Duard Meyer, Fred Atchison, Margaret Bowman, William Hart, Dorothy Houle, Charles White, Eugene Wilkening, Philip Williams, C. F. Wilson, Dr. H. R. Bolen, Dr. A. C. Magill, Mr. G. V. Emery, Mr. Burwell Fox, Mr. B. F. Johnson, Miss Myrtle Knepper, Mr. C. J. Payne, Mr. G. H. Pritchard.

Associate: Willard Bennett, Thurston Hill, James Kinder, Edwina Riley, Jerome Stone, Frank Zillmer, Lorene Ackman, Roy Barber, Edna Bender, Gwendolyn Duncan, Beverly Koepfel.

—Wayne Sarius, M. S.

#### THETA—1932

Elizabethtown College  
Elizabethtown, Penn.

Theta Chapter is involved in the following activities: The club is sponsoring the bird-banding project which had been started two years ago. During the year of 1934, the club has banded over 275 birds, a variety of more than twenty species, caught more than 300 repeats, totaling more than 600 birds. We have banded more than 100 Slate Covered Juncos during the past winter. We have



Melvina Wagner  
Master Scientist

twenty-two traps in operation. Quite a number of our members are interested in going out to help care for the catching of the birds.

We are at present carrying on the project of building a telescope for the school, which we expect to finish in the spring. We are grinding our own lens and are going to silver mirror it. There are some of the members contributing different parts toward the building of the telescope.

We have put on the following programs: A general meeting for planning a program for the year. This meeting was held in October. I gave a discussion on the bird-banding project in relation to the study of migration and the localization of birds. Committees were appointed for membership and initiation.

In November—Initiation Committee reported that the new members put on a program for the club. It was decided that the program must be based on some scientific principle. Prof. Shortess, Prof. of Biology, demonstrated the grinding of lenses, its technique and curvature. Mr. Cassel discussed the theory of mirror silvering and gave a few demonstrations.

In December (Initiation Program—The new members consisting of Juniors and Seniors) gave a scientific play in which they portrayed the method of the early alchemists in searching for the "Elixir of Life" by the signs of the stars.

In January—Preston Moyers gave a discussion on the formation of fossils and their significance in the study of geology. Paul Herr discussed the Iron Lung.

February (Freshman Initiation Program) Twelve members of the Freshman Class were eligible for membership to the Sigma Zeta. They put on a program of discussions such as Chemistry in the Household, Ether and Its Uses, Sulfur, Cosmic Rays, Electric Eye, etc., and several demonstrations.

March—Planning a trip to Philadelphia to see the Franklin Institute and the Plane-

tarium. Also to several museums of scientific value.

April—Securing a movie film to show some relation of science to our daily life.

May—Illustrated discussion of insects and their relation to flowers. Election of officers for 1935-36 and also the social or picnic for the club.

We are planning several hiking trips to some points of interest to collect fossils, flowers and things of value for a museum. With the aid of our professor, the club will get real value out of these hiking trips.

#### Membership

Officers: Melvin E. Wagner, Master Scientist; Paul Herr, Vice-Master Scientist; Martha Groff, Recording Secretary-Treasurer; Prof. G. S. Shortess, Advisor.

Active: Harry Smith, Jacob Kohns, Stauffer Curry, Franklin Cassel, Katherine Cassel, Paul Lentz, Eby Espenshode, Preston Moyers, Helen Ott.

Associate: Ruth Ulrich, Leoh Musser, Mary Hess, Ruth Longnecker, Pauline Hamilton, Helen Shertzer, Lawrence Hooper, Harry Hamme, Paul Hertzog, Clair Trout, Alex Glasmire, Luke Buffenmyer, Isaac Wareheim, Woodrow Schlosser, Harry Gring, Dorothy Grayhill, Roy Pflotzguoff, Donald Martin, Lucille Brown, William Schoffer, Grace, Reber, L. Heisey, Dorothy Hollinger, Samuel Longnecker, John Gloss.

—Melvin E. Wagner, M. S.

#### BETA—1926 McKendree College Lebanon, Illinois

The Beta Chapter of Sigma Zeta at McKendree College has had a most successful and busy year.

On December 11, six new members were initiated, bringing the active chapter roll to fourteen. There are no associate members. The initiates were: Dr. G. A. Scherer, professor of chemistry; Prof. Webster Schmidt, instructor in physics; and four students—all junior biology majors—Iva Lou Cralle, Mary Knapp, William Eaton, and Carl Koch. Four

more students are prospective pledges before the end of the semester.

The society has had three main objectives in its program for 1934-35: 1. To increase the influence and helpfulness of the organization on the local campus. With this in mind, the chapter equipped a 35mm. projector for the showing of science films at its meetings. One such program of films was held in March and others are planned for April and May. 2. To again conduct a freshman science essay contest, inaugurated two years ago. The response this year has been



Harold Gieseke  
Master Scientist

gratifying and we believe the project is most worthwhile. 3. To co-operate with Alpha Chapter at Shurtleff College in entertaining this year's national conclave. Relations between the two chapters have been very cordial since the first joint meeting of committees last November, and it is hoped that all of their plans will culminate in a successful meeting in April.

Beta Chapter is especially interested in making the acquaintance of other Sigma Zetans; in corresponding with the various chapters; and in greeting you at Alton-Lebanon, April 12-13.

#### Essay Contest

The Beta Chapter is sponsoring this year, as it has in previous years, an Essay Contest which is open to all members of the freshmen class. The contest calls for an essay of not less than 1500 words on some interesting scientific subject.

For the best essay, a silver cup engraved with the winner's name will be awarded and, in addition, he will receive his choice of any scientific book. An engraved bronze medal will be given for the second best essay.

The purpose of the contest is to arouse an interest in science and mathematics among first-year students; to either broaden their knowledge in their chosen field, or point out the possibilities of these subjects, if they are still undecided about their major course.

#### Membership

Officers: Harold Gieseke, Master Scientist; Clayton Fawkes, Vice-Master Scientist; Dr. C. J. Stowell, Recorder-Treasurer

Active: Oscar B. Wild, Edwin F. Meyer, Gaylon Whiteside, Louis Fortner, Claude Lang, Clayton A. Fawkes, Harold W. Gieseke, Clifford J. Hertenstein, Stanley Schubkegel, Clarence Walton, Ruth M. Schmalenberger, Carl F. Kock, William Eaton, Mary T. Knapp, Iva Lou Cralle, Prof. Webster Schmidt, Dr. Geo A. Scherer, Dr. C. J. Stowell, Prof. S. M. McClure.

—Harold Gieseke, M. S.

An inquisitive lady was always asking her minister questions. One day the persistent one asked: "Mr. —, can you please tell me the difference between cherubim and seraphim?"

The minister thought deeply for a minute or two and then quietly replied: "Well, they had a difference, madam, but they have made it up."

Selected.

He had just graduated from college, and was surprised that he did not have a number of offers of employment.

He decided he would have to look for a POSITION. He looked and looked.

Then he said he would look for a SITUATION. He looked and looked.

Now he is looking for a "job"!

—Milvay.

# The Value of Sigma Zeta

As seen through the eyes of—

THE COLLEGE PRESIDENT

THE FACULTY

THE STUDENTS

**DR. W. W. PARKER**  
President, State College,  
Cape Girardeau, Mo.

Sigma Zeta, the Eta Chapter of which is operative at the Southeast Missouri State Teachers College, provides, it seems to me a needed opportunity for persons of like interest to be associated in a profitable manner. An honorary society of the type of Sigma Zeta doesn't have to have a brass band and stage a lot of rah, rah stuff to be of worth to institutions and to individuals. Our institution is glad to have a chapter of your society on the campus and will foster its interests in any reasonable way.

I wish to congratulate you as Grand Editor of the "Sigma Zetan" upon the manner in which you are carrying on your work. May I express the hope that additional chapters of the society may be installed soon. A few more chapters would, I believe, add interest to the work of your national organization. Sigma Zeta is like every other organization: individuals and chapters profit to a degree commensurate with the effort expended on it.

**DR. WALTER G. CLIPPINGER,**  
President, Otterbein College  
Westerville, Ohio

Departmental organizations have been an important factor in the advancement of scholarship on the part of individual students and also in stimulating interests in departmental activities, as well as making a fine contribution toward the broadening of student's interests through the discussion of topics often only remotely related to the student's major activities. Such organizations, when they take on the national character, become even potent stimuli; hence, Sigma Zeta, being of this character and carrying with it honors which normally belong to such an organization, wields a fine influence within the student body.

**PROF. E. E. LIST**  
Shurtleff College  
Dept. Biology and Geology  
Alton, Illinois

In the fall of 1924, three members of the faculty of Shurtleff College met to revive an old Science Club that had ceased to function. At that meeting the idea of organizing a science society was conceived. A few days later another meeting was held with representative science students of the college and that was the beginning of Sigma Zeta.

The next year the first conclave was held in the old chemical laboratory at Shurtleff

with students from Shurtleff and McKendree representing the Alpha and Beta chapters of the society.

Since then other schools have become interested and additional chapters have been formed. This year, 1935, the conclave will again be held at Shurtleff College in co-operation with McKendree College.

It is fitting to have McKendree join with Shurtleff in this meeting since the Beta and Alpha Chapters represented Sigma Zeta at the first conclave ten years ago. So we welcome that society back to the place of its beginning and hope that the next ten years will see even greater and more substantial expansion.

At Shurtleff we have enjoyed Sigma Zeta very much. It is true that we have had our "ups and downs" and the society has never been large, but many of the members have been considerably stimulated. Out of the membership of the past years many have become active in industry, teaching and business administration. Many have gone into graduate study and a few have made remarkable records.

We are sure that the organization has been valuable to the college and especially to the science department.

The members of Sigma Zeta Science Society do not confine themselves to serious activities altogether but at frequent intervals they repair to the woods and fields for relaxation and entertainment.

**CLARENCE H. WALTON**  
McKendree College  
Lebanon, Illinois

Probably no two students would entirely agree on what constitutes the chief value of Sigma Zeta, but I think all would agree that the value should be measured by the most permanently beneficial results. This general evaluation, it seems to me, is not consistent with the present attitude of some of our members. It is safe to say that almost without exception, the first thought entering the mind of a prospective Sigma Zetan is that of the honor or prestige involved. Sigma Zeta does occupy a unique position with regards to the recognition of outstanding work by undergraduate science students, and the importance of this aspect of its value should not be minimized. In fact, one of our goals should be to constantly increase the prestige and extent of recognition of Sigma Zeta.

However, I wonder if the real value lies in the bare fact of the recognition thus secured, or the realization of definite achievement and the ambition that should follow the feeling of pride in the attainment of the honor? Every Sigma Zetan should feel that in him or her are certain talents and poten-

tialities, of which election to Sigma Zeta is mute testimony. And in the opportunity afforded by Sigma Zeta to develop these talents or at least to crystalize in our minds the facts of their existence and their potential worth, lies one of its greatest values.

The specific means to be employed toward this end are of course many and varied, with differences of opinion existing as to the most valuable activities. Student programs, student papers and projects, and general discussions or forums on related branches of science, are extremely valuable. One of the effects that should be incidental to a valuable program of activities is the broadening of one's viewpoint with regard to science in general. Specialization as practiced in our colleges today, when a four-year course in any science is only a fair start or at best a good introduction and survey of the field, can produce unfortunate results unless steps are taken to broaden the students' general scientific outlook as well as knowledge. The frequent attitude of undergraduate students that their particular specialty, or even science in general, is self-sufficient, regardless of other fields of science, or the arts, can be largely dispelled by an efficient program such as Sigma Zeta might sponsor.

The pleasure derived from affiliation with the society includes the fellowship of comrades in science with more or less common interests in particular phases of scientific work not completely covered by the regular curriculum. The meetings provide means of social intercourse among a group often more or less excluded from social organizations of a less serious nature. The fellowship of student and professor promoted by Sigma Zeta activities is a valuable aid to a truly liberal education.

Many more specific values of Sigma Zeta could be enumerated, but in my opinion the most valuable of all is the spirit of sincere achievement and ambition to search yet further for the elusive Truth. And, with apologies for a bit of didacticism, I would like to conclude these somewhat rambling remarks with the venture that if more of us seriously considered what Sigma Zeta should mean to us, and what it often does mean, we should see increased progress toward making our society still more worthy of the name, "Sigma Zeta, National Honorary Science Society."

**MELVIN WAGNER**  
 Elizabethtown College  
 Elizabethtown, Penn.

I have been a member of the Sigma Zeta for the past three years. During these years the value of the society has meant much to me. Often we go about our work not thinking of the relation of things as they are true to life but only as an existing thing.

In my estimation, to enumerate the values of the society would be a difficult task. The outstanding value is the relationship between the human world and nature itself by the

society. The relation of how the insects carry on their work in regarding the beautiful flowers of the seasons. How they haunt the honeysuckle in the spring, suck the nectar from the bosom of the flower and manufacture the honey with its sweetness. How the hornet builds its home by the busy hours of the day, etc. Even though the society has not been able to establish such reports that have been made known by other outstanding societies, may the Sigma Zeta within the near future develop and carry on the great work of observing and understanding nature in its realm of humanity.

It is through the society that I am taking an interest in the work or project that is sponsored by the club. In carrying on a bird-banding project, it has developed such an interest and desire that I have kept the traps open the entire season regardless of the weather. How one's heart throbs with joy on a spring day to find a catch of 10 or 12 birds, some that have returned from the previous year or two; some of a new species. Again when the postman delivers a card from the Department of Agriculture stating that one of our birds was caught in North Carolina. This comes through the society.

Many subjects are discussed that call one's attention to facts that were not made clear before and by a little discussion on the question may bring forth the desire for new thoughts to bring about new projects.

May the small societies get together and work out projects that will mean a high degree of sincerity and friendship. May we all take an active part in the welfare of social relations to the scientific realm to be very efficient to our Sigma Zeta.

**EARL DAVID HOFFLER**  
 Central State College  
 Stevens Point, Wisconsin

The value of any organization is dependent largely upon the cooperation and the interest of its members. Sigma Zeta may, in all fairness, claim both cooperation and interest. The aim of the organization is to encourage high scholarship in scientific studies, and to develop an appreciation of the depths of scientific knowledge. To those who are not members, it is a goal towards which to strive. To those who are members, it is a standard to uphold. As a standard, the society enriches the life of a student member in several ways, each of which serves a definite purpose in school life.

In the first place, Sigma Zeta provides for an exchange of ideas. Students of science and mathematics have an opportunity to broaden their knowledge, not only in their own field of development, but in all other sciences. Each can contribute the best in his special branch of study.

In the second place, Sigma Zeta embraces a certain comradeship among its members. This would seem natural when a congenial group, with similar interests are joined into one society. In the busy life of a college student, comradeship always involves a sense

of satisfaction and of well-being, and at times of distress is a source of comfort. There can be no more sacred treasure in any person's treasure chest.

Furthermore, Sigma Zeta is a source of definite social life, which is often, in a student's existence as the sun after a week of fog. The organization in this school sponsors several purely social events during the year, including a banquet, several dances, a series of lectures, and moving pictures. Each of these has an important value in rounding out a student's education, or more expressly, his "preparation for life."

And now, it would be worth-while to consider Sigma Zeta's value to those of us who are soon to enter a business or profession. Since ours is a teachers' college, the students are anxious to build up the most desirable record possible. For a teacher to be able to say that he is a member of Sigma Zeta, is often considered a guarantee of his industry and ambition. Much the same situation exists in other fields of work. Certainly a member of Sigma Zeta has, by his membership, attained a certain enviable standing among those who are acquainted with the organization.

As has already become apparent, the summary of such an intangible subject as "value", is unlikely to be complete or inclusive. In my mind, there are certain definite values derived from Sigma Zeta. I have classified them roughly as intellectual, fraternal, social, and professional. These are only the mountains, and there remain many hills sometimes obscured, but always adding to the majesty of their larger brothers.

**HUGH SARGENT**  
Shurtleff College  
Alton, Ill.

Sigma Zeta, it seems to me, should be primarily an honor society to recognize achievement in the science of methemathic courses of a college. Membership in the society should carry with it a certain distinction. As an honorary society it should give incentive to students of science to accomplish something worth-while in this field by carrying on a profitable program.

Secondarily, I feel that Sigma Zeta might be a service to the college by giving the whole campus an insight into scientific progress through lectures, movies, slides and demonstrations of a nature not too technical.

Sigma Zeta can do a great deal of promotional work for the college by keeping its activities before the community and inviting the community to their "open meetings."

Sigma Zeta should be a society in which the students and faculty members meet on a common ground and for a common purpose—a desire to extend the frontiers of science beyond their present limits.

And finally, because of the very nature of the organization and its national scope, Sigma Zeta should promote stronger bands of fel-

lowship between the colleges where its several chapters are located.

For all of these reasons, Sigma Zeta should be a vital organization in the school.

### RHODE ISLAND STATE COLLEGE

Kingston, R. I.

March 26, 1935.

Grand Editor,

Sigma Zeta Science Society:

In accordance with the suggestion contained in your recent communication, I am very happy indeed on the tenth anniversary of the founding of the society, to comment briefly upon its development and growth during the past decade.

The organization was founded to meet a need which then existed and still continues. Had it not been true I am certain there would not have been the steady expansion that has taken place during that time. Had it not been for the excellent cooperative effort on the part of the students and faculty of Shurtleff College it is doubtful if the society could have continued. The subsequent cooperation that has existed between the various chapters has served well as a firm foundation upon which the structure of Sigma Zeta has been built.

One marvels at the fact that, despite the inroads which the depressing period since 1929 has made upon the membership of every organized group, Sigma Zeta is forging ahead. According to latest reports none of the chapters is inactive, but moreover each bids fair to find the year 1935 the most successful yet enjoyed.

Ten years is not a very long time in the life of such a group as Sigma Zeta and possibly it may be that the "first ten years are the hardest," but for one, I feel that much has been accomplished of which every member of the society may feel justly proud. I have no doubt in my mind that the passage of another decade will see the installation of many more chapters and a far greater expansion of the influence of the organization.

I cannot but wonder if it might not be worth-while to consider the possibility of having a history of Sigma Zeta published in the not too distant future. True enough, the organization isn't very old, but I feel quite certain that many interesting stories and items of personal interest might be gotten together in a booklet for which every member of the society would be willing to pay a nominal sum. Perhaps such plans are already under way and if so they have my heartiest support. Even though I am now located up here in New England, I shall be only too glad to aid in any way possible the furtherance of such a project.

With every good wish for the continued success of Sigma Zeta Society and the assurance that many good things lie in store for the organization in the future, I am,

Fraternally,

R. K. Carleton.

Division of Inorganic Chemistry.

## EARLY HISTORY OF SIGMA ZETA



LOOMIS HALL

The organization was founded October, 1925 in Loomis Hall, Chemistry building of Shurtleff College, Alton, Illinois with the following as Charter members:

Prof. E. E. List, Prof. R. K. Carlton, Prof. E. J. Powell, Homer Duffey, Frank White, Evelyn Dixon, A. S. Scott, Helen Dawson, Mary Walton Smith, Marjorie Fish White, Harry Welch, Lester Meyer, and Alice Scorell.

The first officers were: President—Homer R. Duffey, Vice-President—Frank S. White, Secretary-Treasurer—Evelyn Dixon. At the beginning of the second semester, the following served as officers: President—Helen Dawson, Vice-President—Harry Welch, Secretary-Treasurer—Margerie Fish.

The first annual banquet of the society was held at the Stratford Hotel, Alton, Illinois, June, 1926, with Dr. H. L. Davis, a Shurtleff Alumnus, as the principal speaker. It was at this banquet that the Beta Chapter was granted McKendree College. Since that time the titles Grand Master Scientist, etc., have been used. The first Grand Master Scientist being Lester Meyer, a senior at Shurtleff.

In 1927 the Conclave was again held at Shurtleff College. At this conclave the Gamma Chapter was granted the Medical College of Virginia and the Delta Chapter, State College, Kirksville, Missouri.

According to Professor Carlton, no conclave was held in 1928.

In 1929 the Conclave was held at State College, Kirksville, Mo. At the national meeting the following chapters were granted: Epsilon, Otterbein College, Westerville, O., Zeta, State College, Stevens Point, Wisconsin, and the Eta Chapter, State College, Cape Girardeau, Missouri. The following were elected as national officers: Master Scientists—Prof. Willis J. Bray. (Delta), Vice Grand Master Scientist—Prof. E. W. E. Schear (Epsilon.) Grand Recorder Treasurer—Prof. R. K. Carlton, (Alpha), Grand Editor—Prof. E. E. List and Prof. R. K. Carleton (Alpha), Grand Historian—Prof. S. M. McClure, (Beta.)

Otterbein College was host to the 1930 conclave. The following officers were elected: G.

M. S.—Prof. E. W. E. Schear (Epsilon), V. G. M. S.—Prof. F. W. Shaw (Gamma), G. R. T.—Prof. R. K. Carleton, (Alpha), G. E.—H. R. Duffey (Alpha), G. H.—Prof. S. M. McClure (Beta).

The 1931 Conclave was held at Central College, Stevens Point, Wisconsin. The following being elected as officers: G. M. S.—Prof. T. A. Rogers, (Zeta), V. G. M. S.—Dr. H. W. Olson (Eta), G. R. T.—Prof. R. K. Carleton (Alpha), G. E.—Prof. F. A. Hanawalt (Epsilon), G. H.—Prof. S. M. McClure (Beta).

The Eta Chapter, Cape Girardeau, Missouri was host to the 1932 Conclave. Those being elected as Grand officers at that meeting were: G. M. S.—Dr. H. W. Olson, (Eta) V. G. M. S.—Prof. E. E. List (Alpha), G. R. T.—Prof. T. A. Rogers (Zeta), G. E.—Marvin C. Meyer (Eta) and G. H.—Prof. S. M. McClure (Beta). At this Conclave the Theta Chapter was granted Elizabethtown College, Elizabethtown, Pennsylvania.

No conclave was held in 1933. The 1934 Conclave was held at Otterbein College, Westerville, Ohio. At the business meeting of this conclave it was decided to retain the present officers—those elected in 1932.—Grand Editor.

## WITH SIGMA ZETA ALUMNAE

Jane Wright—Zeta—is a graduate student University of Wisconsin, Madison, Wisconsin.

R. P. McFarlane—Alpha—Chemist, 1129 Long Avenue, Alton, Illinois.

Margaret Allard—Eta—Nurse at St. Lukes Hospital, St. Louis, Missouri.

D. T. Butterbough—Theta—Physician, Elizabethtown, Pennsylvania.

Elza Cralley '28 (Ph. D Wisconsin)—Beta—instructor in plant pathology at the University of Arkansas at Fayetteville.

Mary Van Hecke—Zeta—a dietician, Milwaukee, Wisconsin.

Evelyn Dixon — Alpha — Bacteriologist, Washington University, St. Louis, Missouri.

Harry Cole—Eta — Chemist, Marquette Cement Company, Cape Girardeau, Missouri.

Kenneth Senior—Theta—Professor of Osteopathy, Steelton, Pennsylvania.

Vernal Hardy '28 (Ph. D. Illinois)—Beta—employee of the du Pont in New Jersey. Mrs. Hardy will be remembered as Zella Malandrone, '29 (Ph. D. Illinois).

Allen McVey — Zeta — Superintendent of Forestry Camp, Withee, Wisconsin.

Helen Dawson—Alpha—Anatomy teacher, Iowa University, Iowa City, Iowa.

Bruce Bissell—Eta—Cadet, United States Military Academy, West Point, New York.

Ray Kurtz—Theta—Professor of Chemistry.

Charles S. Sharp, '32 and Clyde Berry, '33 —Beta—are doing graduate work at the University of Illinois, Urbana, Illinois.

Donald Vlood and Robert Krembs—Zeta—employees of Hardware Mutual Insurance Company, Stevens Point, Wisconsin.

Homer Duffey — Alpha — Chemical Engineer, Wilmington, Delaware.

Margaret Lamb—Eta—Technician, Chicago, Illinois.

Vere Bishop—Theta—Professor of Chemistry.

William Lory '32—Beta—and Louis Fortner, '34—Beta—are all employees of the Aluminum Ore Company plant in East St. Louis, Illinois.

Frank White — Alpha — Physician, New York City, New York.

W. A. Owenby—Eta—Graduate Student, University of Missouri.

Evott Scott—Alpha, Physician, Pacific, Mo.

Harold M. Reisenbichler—Eta—Commercial Artist, Sandusky, Ohio.

Harry Nilch—Alpha—Petroleum Engineer, Alton, Illinois.

Raymond Sheets —Eta— Superintendent, Schools, Patterson, Missouri.

Elbert Ruhle — Alpha — Bacteriologist, Peoria, Illinois.

Fred Lewellen — Eta — Superintendent, Schools, Anniston, Missouri.

Raymond Largent—Alpha—Y. M. C. A., Alton, Illinois.

Charles Hunze — Eta—Student, Missouri School of Mines, Rolla, Missouri.

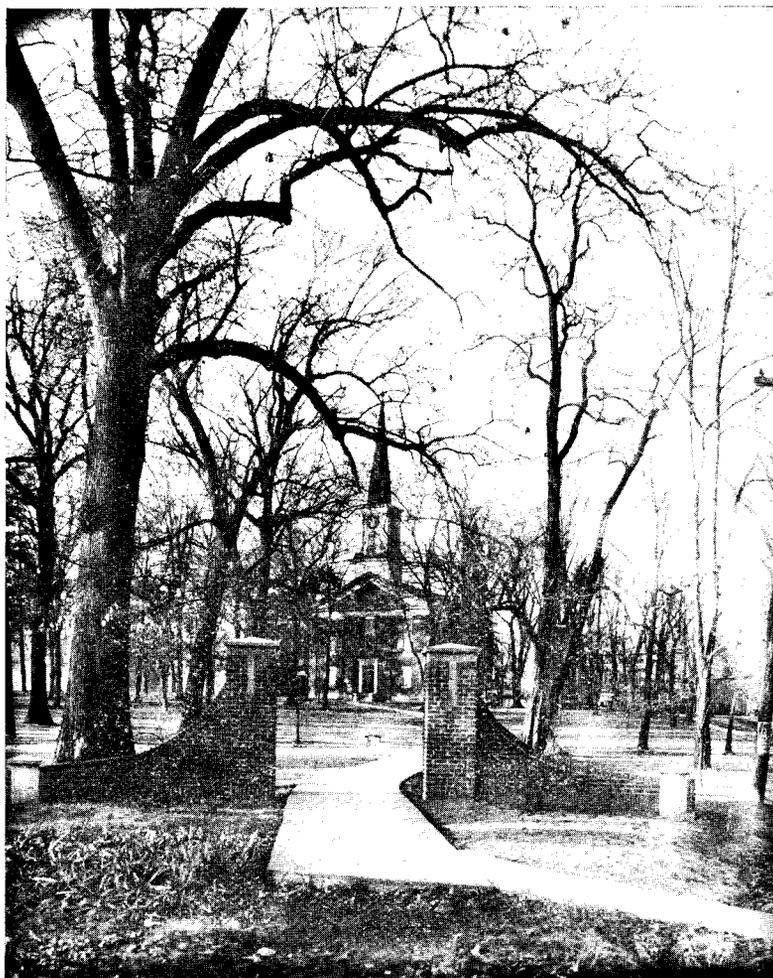
Eloise Sevoiw—Alpha—Graduate student of Illinois University, Urbana, Illinois.

Virginia Noble—Alpha—Graduate student of Illinois University, Urbana, Illinois.

Oscar Wild '34—Beta—Graduate of School of Commerce at Washington University, St. Louis, Missouri.

Edwin Meyer '34—Beta—Employee of the Aluminum Ore Company Plant, East St. Louis, Illinois.

—GRAND EDITOR



THE CENTENNIAL GATEWAY ENTRANCE TO CAMPUS OF  
McKENDREE COLLEGE, LEBANON, ILL.

#### ACKNOWLEDGEMENT

The editor wishes to thank Prof. R. K. Carlton and Clayton Faukes for the information obtained from them relative to the history of the organization. Especially do I wish to thank Miss Dale Watkins and students who so generously assisted in typing the manuscript.



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