

THE SIGMA ZETAN



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NUMBER 1

OUR LADY OF THE LAKE COLLEGE

THE SIGMA ZETAN

Official Organ of SIGMA ZETA

NATIONAL OFFICERS

National President.....	JOHN BOWER, <i>Nu Chapter</i>
National Vice-President.....	JAMES MCCLOY, <i>Epsilon Chapter</i>
National Recorder-Treasurer.....	GILBERT FAUST, <i>Zeta Chapter</i>
National Historian.....	WALTER ELLER, <i>Kappa Chapter</i>
National Editor.....	SISTER MARY CLARENCE, <i>Sigma Chapter</i>
Past National President.....	FLOY HURLBUT, <i>Xi Chapter</i>

A MESSAGE FROM THE NATIONAL PRESIDENT

Dear Sigma Zetans:

While memories of our most enjoyable and stimulating convention as guests of Kappa Chapter are fresh in our minds, it becomes time to begin planning for our National Meeting this year at Otterbein College. Our attendance and support the last few years has been commendable—let's keep up the good work. Every chapter should *plan now* to be represented by a delegation (not by just one or two) and should *plan now* to participate in the presentation of student papers. I believe it would be a fine project for each local chapter to finance the trip for certain members—perhaps the president of those presenting the papers.



John E. Bower

I think also that it might be well this year for each chapter to emphasize the idea that our Society is primarily interested in being of *service* to our schools. Try to add to your program this year one new project which can be carried on annually—one which will benefit the school, the student body, the science department, or perhaps the secondary schools of your area. I have in mind such activities as fairs, exhibits, Science night, speakers, tours for high school students, etc.

In this connection may I emphasize that cooperation with our National Editor, by submitting full and complete chapter reports on

time, will give us all a source of ideas for programs and projects, and will work for the betterment of the whole Society.

Finally, please give some thought to the Development Fund. We hope to make a start on this project this year. Details will reach you later from our Secretary.

Best wishes for a year of real service to your schools and your fellow students. Let's make this year's convention the best yet!

John E. Bower

PROCEEDINGS OF THE NATIONAL COUNCIL OF SIGMA ZETA

The National Council of Sigma Zeta met on Thursday evening, May 13, 1954, in the Home Management House at Western Illinois State College, Macomb, Illinois.

After the minutes of the previous council meeting and the 1953 convention were reviewed, and the financial report was studied, the Council considered the suggestion for the establishment of a "reserve trust fund." Such a fund was proposed in a letter from R. K. Carleton, who is one of the founders of Sigma Zeta, and who pledged a donation of \$100 to such a fund if it is established. After considerable discussion of the proposal, it was agreed that a committee should be appointed to further study the matter and report a recommendation to the convention. The committee selected included Mr. F. A. Hanawalt, chairman; Mr. Robert Shelley; James Duffy, KAPPA Chapter; and LeRoy Purchatzke, ZETA Chapter.

The matter of reimbursing chapters in part for the expense involved in attending the national conventions was reviewed. Mr. Gould moved that the most distant chapters in attendance at the convention receive the appropriation on the basis of the number of miles traveled to the convention and on the number of student delegates in attendance. Mr. Hanawalt seconded the motion; it carried.

The following committees were named to serve during the convention: Auditing, Nominating, Resolutions, and Founders' Cup Award. (For the personnel of these committees, see the minutes of the convention.)

In view of the fact that the supply of Charter Application blanks is almost exhausted, Mr. Eller moved that a committee be appointed to consider the charter application form, and report to the Recorder-Treasurer any suggestions for revision. Mr. McClure seconded the motion; it carried. Members of the committee are Mr. Bower, Mr. Eller, and Mr. Miller.

Mr. Hanawalt informed the Council that Epsilon Chapter would extend an invitation for the convention to be held at Westerville, Ohio, in 1955.

MINUTES OF THE TWENTY FIFTH ANNUAL CONVENTION OF SIGMA ZETA

The twenty-fifth annual convention of Sigma Zeta was called to order at 9:00 A.M., May 14, 1954. The meeting was held at Western Illinois State College in Macomb, Illinois, with KAPPA Chapter as host. James Duffy, president of KAPPA Chapter opened the meeting and presented President F. A. Beu of Western, who welcomed the convention. He pointed out the necessity of making the scientific approach "functional" in teaching, and called attention to the fact that many superstitions still persist among teachers. Mr. John Bower, Vice President of Sigma Zeta responded on behalf of the organization.

The business session was called to order by Miss Floy Hurlbut, National President of Sigma Zeta.

Roll call of the Chapters indicated that thirteen chapters were represented. The list of registrants is included in these minutes.

Brief oral reports were given by several of the National Officers: Mr. F. A. Hanawalt, Past National President, and Mr. W. H. Eller, National Historian. Greetings were read from Sister Mary Clarence, National Editor. The Recorder-Treasurer read the minutes of the previous Council meeting and Convention, and distributed copies of the financial report, a copy of which is included in these minutes.

Miss Hurlbut asked Mr. Hanawalt to describe the construction and significance of the gavel, and was presented with an orchid from her colleagues at Muncie, Indiana.

The following committees were announced to serve during the convention: AUDITING—James H. McCloy, Epsilon; Marvin Hayes, Xi; Helen Nachtbauer, Nu; Bill Tregaskis, Tau. NOMINATING—G. M. Wis-sink, Mu; D. E. Miller, Xi; Charles Eversole, Epsilon; Robert Doty, Phi. RESOLUTIONS—H. W. Gould, Nu; S. M. McClure, Phi; Rheba Taylor, Upsilon; Robert Boyne, Mu. FOUNDERS' CUP AWARD—Floy Hurlbut, Xi; G. W. Faust, Zeta; Jane Deason, Sigma.

The remainder of the Friday morning session was devoted to the presentation of student papers. Following a luncheon in the school cafeteria at noon, a field trip was scheduled to the historic Mormon city of Nauvoo and the Keokuk Dam and Power station on the Mississippi.

The evening program included a banquet in the college cafeteria, at which Prof. S. S. Cairns, Head of the Mathematics Department at the University of Illinois, spoke on "The Mathematics of Bridges, Networks, and Ham Sandwiches."

The Saturday morning session opened with the presentation of the remaining student papers. This was followed by a lecture, "Antibiotics," presented by Dr. M. J. Caldwell, Moorman Manufacturing Company,

Quincy, Illinois.

At the resumption of the business session, Charles Eversole of Epsilon Chapter invited Sigma Zeta to hold its 1955 convention on the campus of Otterbein College at Westerville, Ohio. Mr. Gould moved that the invitation be accepted. Miss Deason seconded the motion; it carried.

The Auditing Committee reported that the Recorder-Treasurer's books were in order.

The Committee appointed to study the matter of a trust fund presented the following report:

"The committee recommends that the 1954 National Convention of Sigma Zeta establish a *Fund for the Growth and Development of the Society of Sigma Zeta* under the following conditions:

1. The name of this fund shall be "The Sigma Zeta Development Fund."
2. The purpose of this fund shall be to foster and promote the growth and development of the society.
3. The fund may receive contributions, gifts, and behests from any source.
4. The Trustees of this fund shall be the National Officers of Sigma Zeta.
5. The fund shall be administered in accordance with the following policies:
 - a. Only the income from the fund is to be expended, not the principal.
 - b. Income from the fund shall not be used until the principal shall amount to one thousand dollars or more.
6. Policies of administering the fund may be altered by the parallel action of two successive annual national conventions of the society.

"It is our belief that this fund will (1) contribute to the future welfare of the society, (2) provide an opportunity for loyal and appreciative alumni to help the society and honor students of the present and future, and (3) provide a similar opportunity for chapters and present members.

"For these reasons we urge that the individual chapters be invited to contact their alumni and make them aware that such a fund has been established; that it presents opportunities for showing their appreciation for the benefits they derived as former students, and for helping to provide similar benefits for many more future honor students. We believe that such effort will be a worthwhile and stimulating project for the individual chapters. Therefore, we move that the individual chapters be invited to contact their alumni to make them aware of the establishment of this fund and of the opportunities that it presents, and that the National Council be instructed to provide to the chapters suitable promotional

literature announcing the fund and its opportunities."

The motion was seconded and carried.

The Founders' Cup Award committee reported that the cup this year had been awarded to TAU Chapter of East Stroudsburg, Pennsylvania. TAU Chapter was established in 1947, and since that time has had consistently good relations with the National Office. In spite of its position at the edge of Sigma Zeta territory, it has been represented at the last two conventions, and has presented student papers at them. The presentation was made by Jane Deason of SIGMA Chapter, which held the cup last year.

Dr. Miller moved that an additional \$25.00 be allowed this year for the local chapter to help meet the cost of the convention. Dr. Shelley seconded; motion carried.

The following report of the Resolutions Committee was accepted:

"The Society of Sigma Zeta, at its 1954 National Convention, wishes to express sincere appreciation.

(1) to the Macomb Chamber of Commerce for its packet of information about this community and the State of Illinois, and for the cordial way in which places of business have made the delegates feel welcome and at home;

(2) to the host, KAPPA Chapter, for the efficient and courteous manner in which it has housed, fed, and entertained the delegates.

Thanks go especially to President F. A. Beu, to the co-sponsors H. W. Crall, C. W. Bennett, and W. H. Eller, and to the officers and working committees of KAPPA Chapter."

The Nominating Committee reported the following nominations for National Officers for the coming year:

National President—John Bower, NU Chapter

National Vice-President—James McCloy, Epsilon Chapter

National Recorder-Treasurer—Gilbert Faust, Zeta Chapter

National Historian—Walter Eller, Kappa Chapter

National Editor—Sister Mary Clarence, Sigma Chapter

Past National President—Floy Hurlbut, XI Chapter

Miss Deason moved that the recommendation of the Nominating Committee be approved and the officers declared elected. Mr. Cramm seconded the motion; it was carried.

Miss Hurlbut presented the gavel to Mr. Bower, who declared the convention adjourned at 11:40 A.M., Saturday, May 15, 1954.

**SIGMA ZETA HONORARY SCIENCE SOCIETY
FINANCIAL REPORT**

May 1, 1954

RECEIPTS

Balance on hand, April 10, 1953..... \$ 349.22

Fees from chapters:

Alpha	9 at \$2.00		\$ 18.00
Beta	2 at 3.00	\$ 6.00	
	8 at 2.00	<u>16.00</u>	22.00
Gamma	26 at 3.00		78.00
Delta	1 at 2.00		2.00
Epsilon	23 at 2.00	46.00	
	5 at 3.00	<u>15.00</u>	61.00
Zeta	8 at 3.00		24.00
Kappa	13 at 2.00	26.00	
	21 at 3.00	<u>63.00</u>	81.00
	<i>(8.00 previously overpaid)</i>		
Lamba	14 at 2.00	28.00	
	7 at 3.00	<u>21.00</u>	49.00
Mu	2 at 2.00	4.00	
	11 at 3.00	<u>33.00</u>	37.00
Nu	10 at 2.00		21.00
	<i>(1.00 overpaid and refunded)</i>		
Xi	21 at 3.00		63.00
Pi	5 at 2.00		10.00
Rho	1 at 2.00	2.00	
	2 at 3.00	<u>6.00</u>	8.00
Sigma	2 at 3.00		6.00
Tau	3 at 3.00		9.00
Upsilon	4 at 2.00		8.00
Phi	4 at 2.00		12.00
	<i>(4.00 overpaid and refunded)</i>		

509.00

Jewelry Sales:

Alpha	13.00
Beta	79.61
Gamma	189.80
Delta	5.85
Zeta	6.51
Kappa	6.45
Nu	35.88
Xi	40.10
Pi	29.80
Rho	13.94
Tau	14.00
Phi	<u>29.20</u>

464.14

Stationery Sales:

Zeta 2.00

Cash Sales at Convention 1953 5.40

TOTAL RECEIPTS..... \$1329.76

EXPENDITURES

Jewelry (College Shop Contract)..... \$500.00

1953 Convention Expenses:

Alpha Chapter — Travel	25.00
Delta Chapter — Travel	25.00
Sigma Chapter — Travel	25.00
Tau Chapter — Travel	25.00
G. W. Faust	18.26
F. A. Hanawalt	14.65
Floy Hurlbut	9.72
G. M. Wissink	13.79
Nu Chapter for Convention expense	<u>50.00</u>

\$ 206.42

Office Expenses:

G. W. Faust — Salary 1953-54	50.00	
F. A. Hanawalt — President's Office	17.42	
Postage	10.08	
Supplies	6.55	
Corporate report	1.00	
		85.05

Refunds:

Nu Chapter	1.00	
Phi Chapter	4.00	
		5.00

Sigma Zetans 197.35

TOTAL EXPENDITURES \$ 993.82

BALANCE ON HAND, May 1, 1954 335.49
\$1329.76

LAST YEAR:

Balance on hand, April 21, 1952	363.22	
Fees from chapters	372.00	
Jewelry sales	585.03	
Stationery and supplies	5.20	
		\$1325.45

Jewelry	\$500.00	
1952 Conclave expense	134.66	
Office expense	78.92	
Sigma Zetans	262.65	
		976.23

Balance on hand, April 10, 1953 \$ 349.22

An appropriation of \$100.00 was made to be distributed among the four chapters travelling the farthest distance to attend the 1954 convention. The distribution was based on the distance travelled and on the number of student delegates.

— DISTANCE STUDENTS —

Sigma	925 miles	1	925/4330	\$ 21.40
Tau	830	1	830/4330	19.20
Epsilon	425	3	1275/4330	29.40
Mu	325	4	1300/4330	30.00
			4330/4330	\$100.00

Distances were estimated on a crow-flite basis, using a Rand-McNally road map of the United States.

REGISTRANTS AT THE 1954 NATIONAL CONVENTION OF SIGMA ZETA

ALPHA (2)	23. Sarah E. Miner
1. Loren K. Freeman	24. Nancy Neeley
2. Arlen Lober	25. Joseph Stepanowich
BETA	26. James P. Duffy
<i>Beta was represented by</i>	27. Russell H. Cramm
S. M. McClure (PHI) and	28. Glen E. Gordon
H. W. Gould (NU)	29. Marilyn Anderson
EPSILON (5)	30. Lawrence Blunt
3. Fred A. Hanawalt	31. Lawrence Hufendick
4. James H. McCloy	32. Marilyn Anderson
5. Charles Eversole	33. Rheta Robeson
6. Joan Yohn	34. Howard Hagerman
7. Sally Bodze	35. Marland Marshall
ZETA (6)	36. Howard Utter
8. Gilbert W. Faust	37. David Breeze
9. Mildred Swendrzynski	38. John T. Brother
10. Doyne Parmelee	39. Carole Harrison
11. John Mrochek	40. James Peek
12. Leroy Purchatzke	41. James Conlee
13. Kathleen Hable (guest)	MU (5)
KAPPA (28)	42. G. M. Wissink
14. H. W. Crall	43. Robert Boyne
15. C. W. Bennett	44. Paul Amundson
16. W. H. Eller	45. Carl Evers
17. R. M. Morrow	46. Ronald Medrud
18. A. G. Tillmer	NU (5)
19. R. M. Myers	47. H. W. Gould
20. K. H. Goode	48. John E. Bowers
21. Jean Morrow	49. Helen Nachbauer
22. Vivian Myers	50. Ruth Jones
	51. Yvonne Smith

XI (6)

- 52. Floy Hurlbut
- 53. Donald E. Miller
- 54. Robert Shelley
- 55. Gordon Carter
- 56. John Shepherd
- 57. Marvin Hayes

PI (5)

- 58. Carl Eatherbee
- 59. Curtis Berrey
- 60. Carl Johner
- 61. James Burdick
- 62. Lawrence Firkhart

SIGMA (2)

- 63. Janes Deason
- 64. Mrs. Deason (guest)

TAU (1)

- 65. Wm. J. Tregaskis

UPSILON (4)

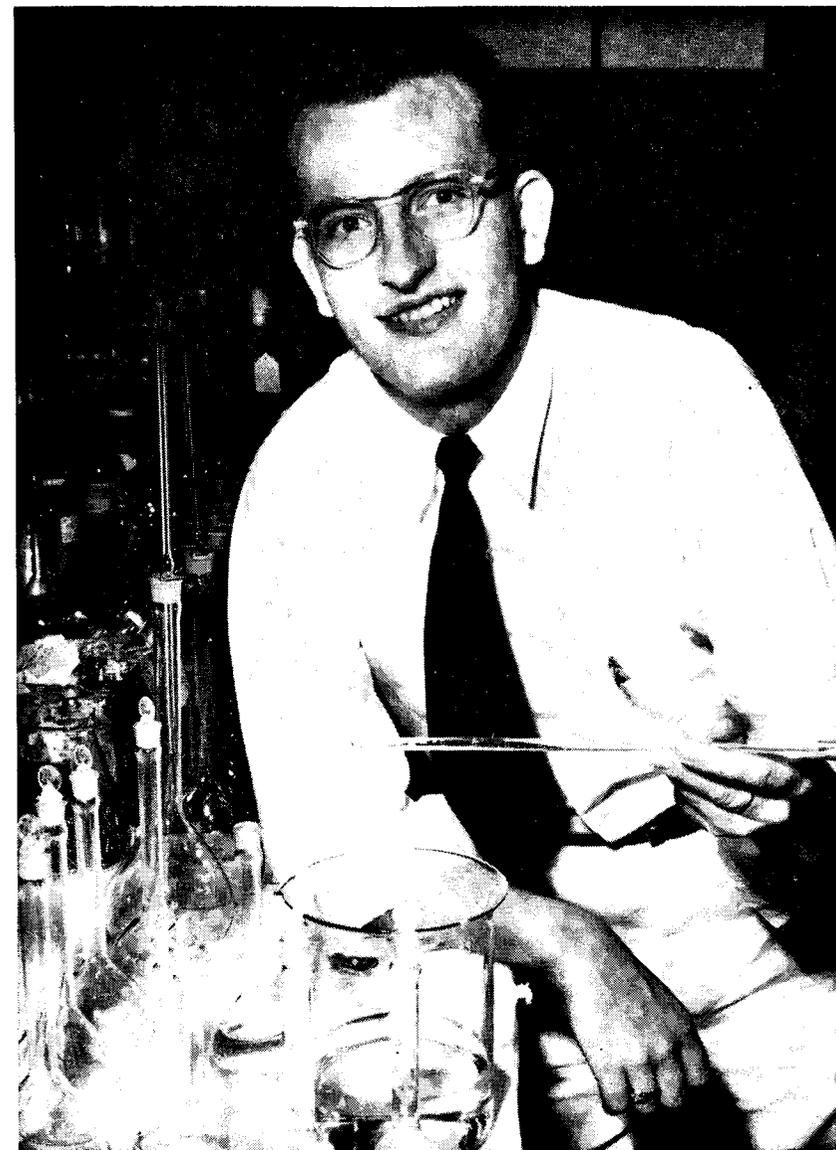
- 66. Gilbert Fritzler
- 67. John Robertson
- 68. Janet Gooch
- 69. Rheba Taylor

PHI (3)

- 70. S. M. McClure
- 71. Robert Doty
- 72. Lee Reesman

NEWS FROM SIGMA ZETA ALUMNI

John L. Shepherd is a new member of the biological control department of Eli Lilly and Company, Indianapolis. He is employed as an associate bacteriologist in the microbiological and antibiotic testing section.



John L. Shepherd

Shepherd is a native of Anderson, Indiana, where he was graduated from high school in 1946. After three years of military service with the Army Medical Corps, he attended Indiana University and Ball State Teachers' College. His Bachelor of Science degree in chemistry and general science was received this year from Ball State.

Shepherd is a member of Xi Chapter Sigma Zeta, scientific recognition society, and Kappa Delta Pi, education recognition society.

A former Sigma Zetan, I graduated from Our Lady of the Lake College, San Antonio in 1953. In August of that year I completed my



Mary Ann Dashiell

internship as a medical technician at the Nix Clinical Laboratory. Prior to my present position, I was employed at Fourth Army Area Medical Laboratory, Ft. Sam Houston, Texas. There I worked as a research assistant. The problem under study was the formation of a protective ointment against Schistosomiasis, a parasitic disease prevalent in the far and middle East.

At present I am employed at South-West Blood Banks, Inc., of San Antonio, a non-profit Arizona Corporation. Serving Southeast California, Southern Nevada, Central and Northern Arizona, and part of South and West Texas, SouthWest Blood Banks is designed to provide whole blood, plasma, and bone. The banks are under the supervision of a doctor of medicine, as well as a board of trustees selected from the medical profession. In the banks, registered nurses and technicians

procure donors by careful and detailed screening, and draw the blood under aseptic conditions. In the laboratories, the blood undergoes processing including A-B-O and Rh typing and serology check. From the bank, blood is delivered to surrounding hospitals where many times it has life saving benefits.

As for my future plans, they are indefinite except to increase my knowledge of blood banking whenever possible.

BLOOD: ECONOMY AND TECHNOLOGY

Jane Deason, Sigma Chapter

Our Lady of the Lake College, San Antonio, Texas

Blood contains everything necessary for life and health, i.e., hormones,

chemical regulators, vitamins, enzymes. The formed elements consist of three kinds of cells—red cells, white cells, and platelets. The red corpuscles carry oxygen to the body cells and remove carbon dioxide. White corpuscles combat the invasion of bacteria and other foreign substances in the body. Platelets, aid in coagulation of blood after injury.

Plasma, the fluid part of the blood is a straw-colored liquid, about 92% water, contains small amounts of sugar, salt and other minerals, proteins and lipids.

A number of proteins can be separated from the plasma, and each has its own purpose. Albumin, more than half of all protein in plasma, maintains a total blood volume and is used therapeutically in shock, in hypoproteinemia, and in patients with edema. Globulin is composed of at least three fractions, alpha, beta, and gamma. Various antibodies, useful in protection of the individual against bacterial, viral and protozoal invaders, are found unevenly distributed in the various globulin fractions. It appears that the gamma globulin is usually the richest in concentration of most antibodies. A third protein, fibrinogen, is required for the formation of clots. It can be used in treating a rare blood disease in which persons have too little fibrinogen in their blood.

Laboratories which process human blood are among the few industries that use products of the human body as raw material. The finished products are whole blood, blood plasma and protein fractions.

When blood is collected, it is immediately placed into chilled bottles containing an acid-citrate-dextrose mixture as an anti-coagulant. The bottles are then centrifuged, and the plasma drawn off into tanks holding the plasma of from 50 to 300 donors. The plasma is then recentrifuged and placed in individual bottles and stored for at least six months before use.

Inactivation of viruses by chemical or physical methods capable of universal application to blood, would offer the means of preventing transmission of disease and thus eliminating it. The most effective virucides have been found to belong to the following classes of compounds; 1) mustards; 2) imines; 3) conjugated unsaturated ketones; 4) alkyl oxides; 5) acetophenons; 6) alkyl sulfates and 7) lactones. To date, beta-propiolactone shows the most promise from the standpoint of virucidal activity, biochemic properties and toxicity.

Sub-fractioning plasma is one way to help meet the demand for plasma proteins, since then only one fraction can be used, rather than using whole plasma to combat the deficiency of a single component. In one system of separation, reactions of plasma proteins with each other and with added ions are made use of. Hemoproteins and the newly isolated copper proteins are weakly associated with alkaline earth metals, calcium and magnesium. Passage of blood over exchange resins removes these metals. Sequestrene (ethylenediamine-tetra-acetic acid) has an affinity for calcium and solutions of sequestrene in saline can satisfactorily be used as an anticoagulant.

When zinc ions are added to human serum, complexes are formed and

one-third of the proteins precipitate. This precipitate is rich in globulins and contains the components of plasma such as involved in blood coagulation, immune globulin and beta-lipoproteins.

AN ANALYSIS OF THE WEATHER IN EASTERN INDIANA FROM DECEMBER 1953 TO MARCH 1954

Ball State Teachers College, Muncie, Indiana

John Shepherd, Xi Chapter

In presenting this paper I have attempted to give a satisfactory explanation for the weather bureau's inaccurate predictions this winter, and secondly to discuss some of the factors which may have contributed to Indiana's sparse precipitation during the period of this analysis.

From our study of the relationship of barometric pressure to temperature, and precipitation, we concluded that high pressure areas bring us our cool, fair weather, and "lows" are responsible for our storms. It was also noted that low pressure areas were affecting our weather this winter on the average of one every three and one-half days.

The majority of our lows or storm centers, during the first few months of this year, have moved eastward along the St. Lawrence River Valley and the Gulf of Mexico instead of across Indiana which is the usual path that low pressure areas select.

Furthermore our "highs" have not come from the northwest as we would have expected but, instead, have come from the southwest bringing mild, warm weather to this area.

Since most of our precipitation has been received on three occasions, I believe that the Bermuda High, which has been stationary off the southern Atlantic states has influenced our weather. This high pressure area has probably produced a blocking effect causing two out of three lows to follow the St. Lawrence River Valley.

Because the paths of the lows and highs were so unusual this winter, we can easily see why the weather bureau missed many of its predictions, and finally the factors responsible for our limited precipitation in Indiana.

NEWS FROM THE CHAPTERS

Rho Chapter
Indiana Central College
Indianapolis, Indiana

Dear Editor:

Rho Chapter of Sigma Zeta held its first meeting of the year on October 26, 1954. At this meeting four new members were initiated into the society. These were: Carlotta Martinez, Frederick W. Clemenz, Earl T. Potts, and Donald A. Frink. We also initiated six new associate members who are: Charles H. Denbo, Marvin L. Knoop, William L. Gsell, Mary C. Milhouse, William Raspberry, and Edwin L. Wilson.

Dr. Robert Brooker, chairman of the program committee, presented a tentative program for the year which included several local plant tours and three joint meetings with Butler University and Marian College science departments, both of Indianapolis. So, we are anticipating a highly successful year.

Officers presiding over Rho chapter for the year 1954-1955 are: Betty L. Burch, president, Frederick W. Clemenz, vice-president, and Donald A. Frink, secretary. Dr. William P. Morgan serves as our faculty sponsor.

Miss Burch is a senior pre-medical student and has applied for entrance to Indiana University School of Medicine. Last year she was selected as the outstanding junior in Chemistry. Mr. Clemenz and Mr. Frink are juniors and are also pre-medical students.

Sincerely,
Donald A. Frink
Secretary

Zeta Chapter
Central State College
Stevens Point, Wisconsin
November 26, 1954

Dear Editor:

Zeta Chapter started this year's work with five active members, nine associate members, and three active faculty members. On October 6, 1954, we had our first initiation, and we pledged seven active members. We are now pledging fourteen actives and seven associates; the formal initiation taking place on December 1, 1954.

Zeta Chapter was host to the Junior Academy of Science on April 10, 1954. Roger Wood, president of Zeta Chapter, introduced the students who took part. At the close of the demonstrations and talks Kathleen Hable, Duane Jaecks, and Ralph Hagen were selected as the winners. The judges were Dr. R. Trytten, Dr. A. Epple, and Gilbert Faust, all members of Zeta Chapter.

On May 26, 1954, Zeta Chapter held its annual picnic at Mr. Faust's cottage. After the lunch, we held our meeting and elected Lerory Purchatzke, president; John Mrochek, vice-president; and Mildred Swendrzynski, historian; to serve as officers for the year 1954-1955.

Sincerely yours,
Mildred Swendrzynski
Historian

PHI Chapter
Eureka College
Eureka, Illinois

Dear Editor:

The graduation exercises last year robbed our chapter of five members, however, our chances for picking up several new Active and Associate members seems to be assured.

A special feature of our regular meetings is the unique way of serving refreshments. Coffee is served in beakers, and watch glasses are substituted for plates. This method of serving has brought some favorable comments.

Our membership drive is on and we feel confident that it will be a success.

Sincerely,
Lee Reesman
President

NU Chapter
Northern Illinois State Teachers College
DeKalb, Illinois

Dear Editor:

NU Chapter started the current year with thirteen Active and seven Associate members. The election of officers is scheduled for December 7. The initiation of new members is to be held December 8.

For homecoming NU Chapter with Chemistry, Biology, Physics and Mathematics clubs sponsored an Alumni tea. We had a large crowd and hope to make this an annual affair.

Plans are now being made for a Christmas party, the Jenks Memorial lecture, and the Junior

Academy of Science meeting. We are looking forward to a very active year with an increasing membership.

Sincerely yours,
Yvonne Smith

Sigma Chapter
Our Lady of the Lake College
San Antonio 7, Texas

Dear Editor:

The first activity of Sigma Zeta members, after its first organizational meeting, was the initiation of four active and five associate members, on October 18. Active members are Thelma Miller, Katherine Miller, Lorrain Jennings and Anne Reinarz. Associate members are Guillermina Butcher, Beatrice Fernandi, Emily Jimenez, Marcia Mason and Mary Jane Zotz. The initiation ceremony was followed by a banquet at Green Pastures, the following evening. Officers for the year are: Catherine Daly, President; Katherine Miller, Vice President; and Anne Reinarz, Secretary-Treasurer.

During the month of October, students from St. Mary's University joined us in a field trip to the fish hatchery here in San Antonio. There we saw a large number of ponds of different sizes and each contained a different species of fish. One special attraction was a very large pond containing several thousand of gold fishes.

On November 9, Dr. Milton Burton, from the University of Notre Dame, spoke at Our Lady of the Lake College on personal qualifications necessary in the field of research. Dr. Burton is engaged in Radiation Chemistry Research

at Notre Dame. Science students from St. Mary's University, Incarnate Word College, and San Antonio College also attended the lecture.

The Collegiate Academy of the Texas Academy of Science had its annual meeting in conjunction with the Senior Academy at the San Antonio College on December 9 and 10. Sigma Zetans and other Science and Math students attended the meeting. Evelyn Trevino, a Biology major, presented a paper entitled "Developmental Relations in the Plant Kingdom as Revealed by the Structure of Pollen Grains." The paper centered on an explanation of the pollen grain, its typical structure, methods of collecting and staining process, and a comparative study of representative types revealing family relationships as well as transitional forms between families. Slides made from pollen grains collected in

Bexar County and the campus herbarium were shown.

Sincerely,
Anne Reinarz
Secretary-Treasurer

Epsilon Chapter
Otterbein College
Westerville, Ohio

Dear Editor:

I am sorry we are late in responding to your notice, but due to vacation I did not receive your card until today, Dec. 1.

If it is not too late we would very much like to tell everyone in the Sigma Zetan that we, here at Otterbein, will be looking forward to seeing them in the spring at the National Convention.

Sincerely,
Clara Johnson
Secretary

