

and an extensive exhibit of bows and arrows of both modern and ancient design. Dr. Klopsteg described the researches which he and others have made upon the scientific investigation of the physics of archery, which led to an explanation of the "paradox of archery" and the design of bows of incomparably better performance than those formerly used.

A panel discussion on the topic "How Shall the Physicist Get a Job?" was conducted by Dr. M. N. States, with Dr. W. P. Davey, of the Pennsylvania State College, and Dr. William E. Forsythe, of the Nela Park Research Laboratories, as principal speakers. At the Perkins Observatory of the Ohio State and Ohio Wesleyan Universities, the director, Dr. N. T. Bobrovnikoff, gave an illustrated address on "Astrophysics, a Borderland Science."

The convention authorized the expansion of the services of the placement board of the society and its establishment upon a permanent basis. This board will serve as an agency to bring to the attention of prospective employers of physicists the availability of certain members of the society and will function as a general clearing house for information regarding the placement of graduates in physics.

The report of the executive secretary to the convention indicated that the society has a total membership of 2,435 and an active chapter membership of 650. There are thirty-two active chapters. The convention authorized the establishment of a classification of "sustaining membership" among the alumni members of the society. The contributions of these members are to be kept in a separate fund and administered by a fellowship board to assist graduate-student members of the society to pursue further graduate work and research.

The executive secretary also reported that the society had just installed its thirty-second active chapter on April 4 at the Fort Hays Kansas State College, Hays, Kansas. The installing officers were Dr. Malcolm C. Hylan, of the University of Colorado, and Dr. R. A. Rogers, of Park College. At a general college assembly preceding the installation, Dr. Hylan gave an illustrated address on "A Dream Come True," in which he discussed some of the contemporary developments in the field of induced radioactivity. The charter group included thirty-one students and alumni. Dr. Harvey A. Zinszer is the head of the department of physics at Hays.

Officers elected at the close of the convention were: *President*, Dr. F. C. Blake, Ohio State University; *Vice-president*, Dr. Joyce C. Stearns, University of Denver; *Executive Secretary*, Dr. Marsh W. White, the Pennsylvania State College. Members of the Executive Council elected were: Dr. R. C. Colwell, West Virginia University; Dr. D. W. Cornelius, University of Chattanooga; Dr. W. P. Davey, Pennsylvania State

College, and Dr. R. I. Allen, John B. Stetson University.

MARSH W. WHITE,
Executive Secretary

THE KANSAS ACADEMY OF SCIENCE

THE seventy-first annual meeting of the Kansas Academy of Science was held at the University of Kansas, on March 30, 31 and April 1, 1939, under the leadership of Dr. Walter H. Schoewe as president. The opening lecture was given by Dr. Charles A. Shull, of the University of Chicago, who spoke on Thursday evening on the subject, "The Plant in Relationship to the Water System of Its Environment." This lecture was sponsored by the Kansas chapters of Phi Sigma, Sigma Xi and the Kansas Academy of Science.

Sectional programs opened on Friday morning and continued until 11 o'clock, when the first general business session was held. An interesting innovation in the program of the first business session was one-minute reports of the recipients of the 1938 research awards. These were followed by reports of officers, delegates to meetings and a lantern slide demonstration lecture on color photography by Oren Bingham. The slides were truly remarkable in their beauty, range of subjects and color values.

The second business and general session was held on Saturday at 8 A.M. President Schoewe gave the annual presidential address on the subject, "The Conservation of our Natural Areas." This is a subject in which Dr. Schoewe is greatly interested and is unusually well fitted to discuss. He stressed the difficulties which have arisen to making areas into national parks or national monuments and maintaining them as such.

Mrs. Otilla Reagan, who so graciously established the Albert B. Reagan Endowment in the Academy in memory of her distinguished husband, attended the academy sessions and spoke following the business meeting on "Reminiscences of our Indian Service." She recounted many interesting experiences and observations during their long period of work on Indian Reservations.

The Committee on Research Awards made the following grants for 1939-1940: To F. L. Carter, of Wilson, Kansas, award no. 3 of \$32.50 from the Albert B. Reagan Memorial, for "A Study of the History of the Changes in the Mammal Population in Western Kansas"; to Claude W. Hibbard, of the University of Kansas, \$25.00 for "Completion of a Study of the Upper Pliocene Fauna of Kansas, and Relation to the Blanco Fauna of Texas"; to Andrew Riegel, graduate student of Fort Hays Kansas State College, \$25.00 for "A Study of the Variations in Growth of Blue Grama Grass"; to Charles Wolfson, graduate

student at the University of Kansas, \$32.50 for "Investigations of Existence and Origin of Electrical Potential Differences in Single Cells"; and to A. P. Friesen, of Bethel College, Newton, Kansas, \$35.00 for his study of the "Determination of Optical Properties of Liquid Metals and Alloys." The total awarded was \$150.00, consisting of \$75.00 from the American Association for the Advancement of Science, \$42.50 from the academy treasury and \$32.50 from the Reagan endowment.

The Kansas Weather-crops Seminar, Dr. J. H. Parker, president, and Dr. H. H. Laude, secretary, affiliated with the academy.

A series of lantern slides on the monument rock area in Gove County, Kansas, were shown as a part of the report of the committee on natural areas. George M. Robertson reported on the geology, F. W. Albertson on the flora, and L. D. Wooster reported on the fauna of this area, which it is hoped to have designated some day as a state park.

The reports of the sections are presented in Table 1.

TABLE 1

Name of section	Chairman, 1939	Attendance	Number of papers	Chairman for 1940
1. Botany	C. C. McDonald	75	33	M. W. Mayberry
2. Chemistry	F. T. Owen	60	12	Harold P. Brown
3. Geology	D. C. Schaffner	50	19	A. C. Carpenter
4. Medical Science	Parke Woodard	60	12	none
5. Physics	P. S. Albright	80	15	A. B. Cardwell
6. Psychology	Jos. W. Nagge	63	15	W. H. Mikesell
7. Biology Teachers	Gladys Beck	40	7	John Breukelman
8. Zoology	E. H. Herrick	60	37	A. B. Leonard
9. Kans. Entomological Society	L. C. Woodruff	55	28	R. T. Cotton
10. Junior Academy of Science	Bob Akey, President Dorothy Brownlee, Secretary	250	12	Gabe Sellers, Jr., President Kenneth Hunt, Secretary

The Junior Academy Committee, consisting of Miss Edith Beach, chairman, J. R. Wells and J. A. Brownlee, had an unusually successful year. Twenty-nine Junior Academy groups are now affiliated with the academy, of which 12 are new members and were specially inducted into the association with appropriate ceremony. Eleven clubs participated in the program. The Manhattan High School group was awarded first place because of their demonstrations and exhibit and were given possession of the Junior Academy cup for the year. Lawrence Junior High School was awarded second place. Jane Miller, of Lawrence, and Bob Hull, of Wichita, were awarded the honorary Junior memberships in the American Association for the Advancement of Science for the year.

The Kansas and Nebraska chapters of the American Association of University Professors again met in cooperation with the academy, under the chairmanship of Dr. D. A. Worcester. The attendance was 65, and there were four main addresses given. Professor Robert Conover was elected chairman for 1940.

On Friday evening, the regular banquet was held, with Dr. H. H. Hall, president-elect, as toastmaster. Chancellor E. H. Lindley gave an appropriate short address of welcome, emphasizing that science and scientists are less presumptuous now than formerly and that they now have their logical, but important, place in institutions of higher learning along with arts, literature and the humanities. Following the banquet occurred the unusually instructive and interesting illustrated lecture by Dr. Laurence McKinley Gould on "Explorations in the Antarctic."

The newly elected officers for 1939-1940 are: *President*, Dr. H. H. Hall, Kansas State Teachers College, Pittsburg; *President-Elect*, Dean E. O. Deere, Bethany College, Lindsborg; *Vice-President*, Dr. F. C. Gates, Kansas State College, Manhattan; *Secretary*, Dr. Roger C. Smith, Kansas State College; *Treasurer*, Dr. H. A. Zinszer, Ft. Hays Kansas State College, Hays; *Executive Council*—Dr. W. H. Schoewe, the retiring president, Lawrence; Dr. L. D. Bushnell, Kansas State College, Manhattan, and Dr. R. H. Wheeler, University of Kansas, Lawrence. *Associate Editors*: Dr. R. E. Mohler, McPherson College, and Dr. A. B. Cardwell, Kansas State College, Manhattan, both serving until 1942.

Three hundred and thirty-five persons registered for the meeting, which is the largest registration ever recorded for an annual meeting. One hundred twenty-five new members joined the academy during the year. The present membership totals 686. The academy lost 10 members by death during the year.

The following chairmen of committees were appointed by President-Elect Hall for 1939-40: The Committee on Conservation and Ecology, W. H. Schoewe; Research, L. D. Wooster; Coordination of Science Groups, W. J. Baumgartner; Handbooks, R. J. Barnett; Membership, Roger C. Smith; Necrology, Roy Rankin; New Sections, F. C. Gates; Junior Academy, J. A. Brownlee; Editorial Trends, J. A. Glaze; Science Teaching, J. A. Trent; Coordinating Finance, H. A. Zinszer; Publication Fund, F. W. Albertson; Endowments and Investments, H. A. Zinszer; State Aid, W. J. Baumgartner, and Nominating, W. H. Matthews.

The academy will meet at Wichita in 1940, and at Manhattan in 1941.

ROGER C. SMITH,
Secretary

KANSAS STATE COLLEGE,
MANHATTAN