first aerial exploration of the Pole. Admiral Byrd, with Floyd Bennett, flew over it in 1926, Roald Amundsen, Lincoln Ellsworth and Umberti Nobile crossed it in the dirigible *Norge* in the same year and in 1928 Nobile returned in the dirigible *Italia,* crossed the Pole a third time, was wrecked on his return trip and saved in the epic of rescue performed by the Soviet icebreaker *Krassin.*

The importance of the flight and landing of Professor Otto Schmidt and A. V. Vodopyanoff, one of the most famous of Russian aviators, and their companions consists rather in their having been the first to follow up a flight to the Pole with the attempt to establish the first permanent polar station, equipped with scientists, wireless and a landing field for planes. The latter is most necessary, for the Soviet believes apparently in "mass" tactics even in polar expeditions —four more planes are prepared to reinforce the first arrivals.

Dramatic as it undeniably is, this feat actually is only another step in the detailed and ambitious program for subduing the Arctic and sub-Arctic regions which the Soviet Government has been steadily and boldly carrying forward for years. With so much of its own territory lying in the far north, the U.S.S.R. seeks to work an economic transformation in this great area, opening up new regions and establishing new shipping services. The world has heard of the remarkable exploits of the *Krassin* and *Cheliuskin,* but the Arctic voyages of the icebreakers *Sedov, Litke, Malygin* and *Sibirakov* have been, perhaps, not less important. In 1934, for example, some thirty Russian expeditions with some forty ships and planes were active in the far northern regions and thirty-eight stations, many with large staffs, were set up on Arctic coasts and islands. And behind the large corps of scientists and sailors and airmen which it has trained for this work, has moved the government, founding new towns, breaking new paths. It is all part of the plan for unlocking the vast resources of the Soviet Union, creating new trade routes and perhaps even providing new strategic lines.

In its turn the work of the Russians logically folllows and extends the explorations of such men as Ellsworth and Byrd in the Arctic and Antarctic, by developing further the use of the airplane and laying firm foundations for scientific observation. Whether the hope that the Russians entertain for using the Pole as a base for a commercial air line from Moscow across the North Sea to San Francisco will materialize must wait upon these studies and a number of other experiments calling for courage and skill in high degree. It appears to be the belief of Professor Schmidt, who is the director of the Soviet Arctic Institute and Northern Sea Route Administration, and, it seems, the intellectual mainspring of Russia's bold pioneering ventures, that such a line will be practicable two years after the completion of surveys. In any event, a brave and auspicious beginning has been made and the world can take pleasure in laying aside all political considerations to applaud the courage and success of those who by employing the new tools of science and aviation have written this latest bright chapter into the history of man's conquest of nature.—*The Baltimore Sun.*

SOCIETIES AND MEETINGS

THE KANSAS ACADEMY OF SCIENCE

THE sixty-ninth meeting of the Kansas Academy of Science was held at the Kansas State College of Agriculture and Applied Science at Manhattan, Kansas, on April 1, 2 and 3, with Lawrence Oncley, professor of chemistry at Southwestern College, Winfield, Kansas, presiding. The committee on arrangements for this meeting consisted of E. C. Miller, chairman, Martha Kramer, E. C. Chapin and M. J. Harbaugh, all of Manhattan.

The meeting opened before an audience of about 800 with a demonstration of some new sound films which are suitable for teaching aids. This demonstration was followed by a showing of his original film on "How Things Grow" by W. J. Baumgartner, of the University of Kansas.

The first general session of the academy was held on Friday morning, April 2, at which time nine papers of general interest and eight papers on geology were presented. Thirty-five geologists and guests under the leadership of A. B. Sperry went on a field trip on Friday afternoon to examine some igneous outcrops near Riley, Kansas. At the same time the following sections met for hearing papers:

Botany, 19 papers, J. H. Doell, Bethel College, presiding.
Chemistry, 15 papers, L. E. Blackman, Kansas State Teachers College, Emporia, presiding.
Physics, 15 papers, Louis R. Weber, Friends University, Wichita, presiding.
Psychology, 13 papers, Edwina A. Cowan, Friends University, presiding.
Zoology, 33 papers, John Breukelman, Kansas State Teachers College, Emporia, Kansas, presiding.
Junior Academy, five clubs on program with Hazel Branch, University of Wichita, in charge and an attendance of 100.

On Friday evening, the annual banquet was held at the college cafeteria, with George A. Dean, the first vice-president, as toastmaster and 125 persons in atten-

dance. Public announcement was first made at the banquet of the establishment of the Albert B. Reagan endowment by a gift of $1,000 by Mrs. Otilla Reagan, wife of the late Dr. Albert B. Reagan, of Provo, Utah. Dr. Reagan, who has published more than 500 papers, chiefly in the fields of archeology and anthropology, particularly of North American Indians, died last May. After his retirement from his work in the Department of the Interior, Division of Indian Affairs, he was made special professor of anthropology at Brigham Young University. The income from the endowment which has been established by Mrs. Reagan is to be granted annually by the committee on awards to one or more members of the academy who apply for it for the purpose of completing and publishing scientific papers. Articles governing the administration of this fund were adopted at the business meeting. Mrs. Otilla Reagan was introduced at the banquet, following which Professor Roy Rankin told of the life and work of Dr. Reagan.

Mrs. Eusebia Irish, daughter of Benjamin Mudge, a founder and the first president of the Kansas Academy of Science, was likewise introduced. She spoke briefly of her distinguished father, who was so influential in early scientific work in Kansas.

President Lawrence Oncley gave the annual presidential address at the banquet on the subject, "Some Reflections upon the Teaching of General Chemistry." Following the banquet, the annual invitation address was given in the college auditorium by Charles F. Hottes, head of the department of botany at the University of Illinois, on "The History of the Bald Cypress and Redwood." This interesting address, which was illustrated by colored slides, had an attendance of approximately 750.

On Saturday morning, two general interest papers were given, followed by a symposium by the Committee on Conservation and Ecology upon the small area of unusual rock concretions near Minneapolis, Kansas, which the academy wishes made into a national park for preservation. Over 100 spherical sandstone concretions 16 to 24 feet in diameter, many of which are almost perfect spheres, lie more or less fully exposed. Walter H. Schoewe has sponsored the work of this committee and led the symposium, followed by W. H. Horr, Charles E. Burt and L. D. Wooster.

The symposium was followed by the business meeting. Several amendments to the constitution were adopted. The secretary reported the total membership to be 541, consisting of 10 honorary, 49 life members and 465 annual members; 105 persons joined the academy since the last meeting. The 1936 volume of the *Transactions* was in galley proof at the time of the meeting. The treasurer reported a balance of $546 and $2,452 in the academy endowment fund. The committee on awards, consisting of L. C. Wooster, *chairman,* J. C. Peterson and R. Q. Brewster, reported having made research grants of $50 to J. P. Puffinbarger, of the University of Kansas, and $50 to S. L. Loewen, of Sterling College. The academy contributed $25 to the fund of $75 supplied by the American Association for the Advancement of Science to make $100 for grants.

The nominating committee reported the following nominations to office for 1937–38:

George A. Dean, *president,* Kansas State College, Manhattan.

W. H. Schoewe, *president-elect,* University of Kansas, Lawrence.

H. H. Hall, *vice-president,* Kansas State Teachers College, Pittsburg.

Roger C. Smith, *secretary,* Kansas State College, Manhattan.

H. A. Zinszer, *treasurer,* Fort Hays Kansas State College, Hays.

Three additional members to the executive council: Lawrence Oncley, Southwestern College; J. H. Doell, Bethel College; and R. H. Wheeler, University of Kansas.

Editorial Board: W. J. Baumgartner, *managing editor* (reelected), University of Kansas; Frank C. Gates continues an unexpired term as editor-in-chief of the *Transactions.*

Associate editors: Louis R. Weber, Friends University, to fill unexpired term of W. W. Floyd; G. A. Kelly, Fort Hays Kansas State College.

Following the business meeting, the Kansas Entomological Society, which is affiliated with the academy as the section on entomology, held its thirteenth annual meeting, with D. A. Wilbur as chairman and R. L. Parker as secretary. Twenty-four papers were presented, with an attendance of seventy-five.

The Kansas and Nebraska chapters of the American Association of University Professors also met following the academy business meeting in cooperation with the academy this year, with an attendance of 90. D. A. Worcester, of the University of Nebraska, was regional chairman, while R. W. Conover, C. M. Correll and Kingsley Given served as meeting chairmen.

The Entomological banquet was held at the Manhattan Country Club on Saturday evening, with George B. Wagner as master of ceremonies. After words of greeting by Professor Dean to the group of 75, the local entomologists provided entertainment.

The following sectional chairmen were elected for 1937–38:

Botany, Miss Margaret Newcomb, Kansas State College, Manhattan.

Chemistry, Lloyd McKinley, University of Wichita, Wichita.

Entomology, Warren Knaus, McPherson, Kansas.
Physics, C. V. Kent, University of Kansas, Lawrence.
Psychology, O. W. Alm, Kansas State College, Manhattan.
Zoology, Claude Hibbard, University of Kansas, Lawrence.
Junior Academy, Oscar Klingman, Junction City.

Among the new committees appointed by President George Dean was a new Junior Academy Committee, consisting of J. R. Wells, Pittsburg, John M. Michener, Wichita, and Edith Beach, Lawrence, and a new committee to study the issuance of a series of natural history hand-books by academy members, consisting of Frank C. Gates, *chairman,* E. J. Wimmer and W. H. Schoewe.

A total of 307 members registered for the academy meetings, 52 for the university professors meeting and 72 for the entomological meetings.

The next annual meeting of the academy will be held during the spring of 1938 at the Kansas State Teachers College, Pittsburg. It was also agreed that the seventy-first meeting will be held at the University of Kansas, Lawrence, during the spring of 1939.

ROGER C. SMITH,
Secretary

REPORTS

THE UNION OF AMERICAN BIOLOGICAL SOCIETIES AND BIOLOGICAL ABSTRACTS

AT a meeting of the Council of the Union held in Atlantic City on December 28, 1936, E. V. Cowdry was elected president; G. W. Hunter, III, secretary; Ivey F. Lewis, treasurer; and W. C. Curtis, E. B. Krumbhaar and E. D. Merrill additional members of the executive committee.

The members of the Union are:

American Association for the Advancement of Science
  Section F, Zoological Sciences
  Section G, Botanical Sciences
  Section N, Medical Sciences
  Section O, Agriculture
American Association of Anatomists
American Association of Economic Entomologists
American Association of Immunologists
American Dairy Science Association
American Genetic Association
American Ornithologists' Union
American Physiological Society
American Phytopathological Society
American Society of Agronomy
American Society of Biological Chemists
American Society of Clinical Pathologists
American Society for Experimental Pathology
American Society for Horticultural Science
American Society of Ichthyologists and Herpetologists
American Society of Mammalogists
American Society of Naturalists
American Society of Parasitologists
American Society for Pharmacology and Experimental Therapeutics
American Society of Plant Physiologists
American Society of Zoologists
Botanical Society of America
Ecological Society of America
Entomological Society of America
Genetics Society of America
National Research Council
  Division, Biology and Agriculture
Poultry Science Association
Society of American Bacteriologists
Society of American Foresters
Society for Experimental Biology and Medicine

According to its constitution, the objects of the Union are ". . . to stimulate investigation in the field of biology, to organize and promote the interests of bibliography and publication, to deal with questions of general interest in the field of biology and in general to promote the solution of those broad problems which the specialized societies are not in a position to support effectively, and to do anything else which may serve these ends."

Under the presidency of W. C. Curtis, the Union sponsored *Biological Abstracts* and it is proposed to continue giving all possible assistance to this important project. A very encouraging feature of the Atlantic City meeting of the American Association for the Advancement of Science was wide-spread approval of the editorial management of *Biological Abstracts* and of the service which it renders. The biological sciences include many divergent specialties. To have them integrated in this way is highly desirable and one of our greatest needs if civilization is to profit by the so-called "life-sciences." That biologists generally are eager not only to give time and energy to the arduous task of careful abstracting but, in addition, to actually contribute financial support for necessary expenses was abundantly demonstrated. Of the societies meeting during the Christmas holidays, the American Society of Zoologists, the Botanical Society of America, the American Society of Parasitologists, the Genetics Society of America and the Ecological Society of America all voted an assessment on their members, in some cases mandatory, in others not mandatory. The American Genetic Association issued an informal request for aid. Moreover the Society of American Bacteriologists, the American Society of Naturalists, the American Limnological Society, the