agreements marks the termination of negotiations which have been going on for several years to secure enlarged facilities for chemical activities in Chicago. The rapidly growing attendance at meetings of the Chicago Section, which reached six hundred at a special petroleum meeting in January, was making imperative a change in meeting place. The new agreements run for five years and are renewable at the end of that time. In addition to providing accommodations for all meetings of the two organizations, the plan involves the cooperation of the chemical groups in securing tenants from the chemical industry. If this plan is successful and the building secures a considerable number of tenants who are connected with the chemical activities, the name of the building will be changed to indicate its position as a center of chemistry in Chicago.

The Midland Building is said to be one of the newest and finest of the large club buildings in Chicago and is situated in the heart of the business district. It is fully adequate to accommodate the chemical organizations of Chicago. Negotiations were carried out under the leadership of a building committee headed by Dr. Paul Van Cleef. The chairman of the Chicago Section is Dr. Bernard E. Schaar, and the president of the Chicago Chemists Club is Dr. Ernest H. Volwiler.

THE ALLEGANY SCHOOL OF NATURAL HISTORY

THE sixth season of the Allegany School of Natural History in Allegany State Park opens on July 5 and closes on August 24. This "Summer School in the Forest" is conducted by the Buffalo Society of Natural Sciences in cooperation with the New York State Museum and is affiliated with the University of Buffalo from which its students receive college credit. Registration should be made with Mr. Harold T. Clement, Curator of Education at the Buffalo Museum of Science, or with Dr. R. E. Coker, director of the Allegany School of Natural History, Box 950, Chapel Hill, North Carolina.

Courses will be given in field zoology by Robert E. Coker (Johns Hopkins), professor of zoology, University of North Carolina; in field geology by Mr. Frederick T. Thwaites, lecturer in geology at the University of Wisconsin; in field botany by Mr. Robert B. Gordon, Ph.D. (Ohio State), instructor in botany at the Ohio State University; in the natural history of birds by Aretas A. Saunders, Ph.B. (Yale), teacher of biology, Central High School, Bridgeport, Connecticut, and in nature study by Mr. William P. Alexander, B.Sc. (Cornell), field naturalist and assistant curator of education at the Buffalo Museum of Science.

The Allegany School of Natural History is nine miles from Quaker Bridge, New York, and well above it, being located on a hillside bordering Quaker Run in its upper part at an altitude of about 1,900 feet. It is a feature of the setting of the School in Allegany State Park that within an area of some 65,000 acres under the care of the state much of the wild life is protected, and so one may occasionally see bear and deer, besides observing daily the abundant smaller mammals, chipmunks, field mice and, less frequently, jumping mice, shrews, weasels, mink and others.

Teachers in public schools and colleges, particularly those who have had little opportunity for field studies, university and college students, scout and camp leaders of various kinds, young and amateur naturalists, and those interested in the nature work of museums, public forests and parks, are invited to attend the Allegany School.

APPROPRIATIONS FOR GRANTS-IN-AID BY THE NATIONAL RESEARCH COUNCIL

AT its meeting in February the National Research Council's Committee on Grants-in-Aid made twenty-four grants for the support of research as follows:

Carl E. Howe, associate professor of physics, Oberlin College, for the measurement of wave-lengths of x-rays; Jakob Kunz, professor of theoretical physics, and J. T. Tykociner, research professor of electrical engineering, University of Illinois, for studies of the photoelectric effects of alkali vapor and films and a velocity selector for molecular rays.

W. C. Austin, professor of physiological chemistry, Loyola University School of Medicine, Chicago, for investigations on the transformation of aribose to ribose; Walter L. Badger, professor of chemical engineering, University of Michigan, for investigations on the effect of viscosity on the heat transfer coefficients between metals and boiling liquids; Harold Hibbert, professor of industrial and cellulose chemistry, McGill University, Montreal, for research on plant synthesis and immunology; I. M. Kolthoff, professor of analytical chemistry, University of Minnesota, for investigations on the internal structural changes taking place in a freshly prepared crystalline precipitate on standing; Charles P. Smyth, associate professor of chemistry, Princeton University, for research on the dielectric constants of gases.

Ernst Cloos, department of geology, the Johns Hopkins University, for a survey of the Sierra Nevada batholith; Robert S. Platt, associate professor of geography, University of Chicago, for part of the expense of a study of types of rural land occupancy in South America; H. B. Stenzel, assistant professor of geology, Agricultural and Mechanical College of Texas, for field work on the paleontology and stratigraphy of the lower Claiborne formations.

Alfred Chanutin, professor of biochemistry, University of Virginia, for research on the effect of diet in the

partially nephrectomized rat; David M. Greenberg, associate professor of biochemistry, University of California, for research on the biochemistry of magnesium; H. Keffer Hartline, fellow in medical physics, Johnson Foundation, University of Pennsylvania, for a study of visual phenomena as indicated in the impulses in single optic nerve fibers; Carl C. Speidel, professor of anatomy, University of Virginia, for investigations on the fundamental activities of nerves in the living animal.

E. A. Andrews, professor emeritus of zoology, the Johns Hopkins University, for field observations on the variation of snails (*Neritina*) in salt-water ponds in Jamaica; Walter F. Loehwing, professor of botany, State University of Iowa, for a study of the effects of inorganic nutrients on the vegetative and reproductive cycle of plants; William Patten, professor emeritus of zoology, Dartmouth College, for field expenses in collecting material for research on the origin of vertebrates; George Harrison Shull, professor of botany and genetics, Princeton University, for part of the expense of investigations on the genetics of the evening primrose.

Edward F. Castetter, professor of biology, University of New Mexico, for a study of the ethno-biology of the Indians of the southwestern United States; Walter B. Jones, director, Alabama Museum of Natural History, for investigations on the Moundville culture of Alabama; Arthur Randolph Kelly, assistant professor of anthropology, University of Illinois, for a study of the physical anthropology of the Bronze Age people of Greece.

Harold C. Bingham, Sanbornton, New Hampshire, for a comparative study of the psychobiology of gorillas and other anthropoid apes; G. LaVerne Freeman, instructor and research associate in psychology, Northwestern University, for use in a study of diurnal rhythm, including both sleep and waking activity; Donald McLean Purdy, associate professor of psychology, University of Kansas, for the study of an unusual case of defective vision.

GEORGE K. BURGESS,
Chairman

THE WASHINGTON AWARD

THE Washington Award for 1932, "in recognition of devoted, unselfish, and preeminent service in advancing human progress," was presented to Dr. William David Coolidge, associate director of research in the laboratory of the General Electric Company at Schenectady, following a dinner and reception on February 24 at the Hotel Sherman, Chicago. Dr. Coolidge is the eleventh to be so honored by the Washington Award Commission, the first presentation being to President Hoover, in 1919. Dr. Harry Woodburn Chase, president of the University of Illinois, delivered the principal address of the evening, evaluating the importance of research in the present social order.

Among the best-known contributions of Dr. Coolidge are ductile tungsten for lamp filaments, wrought tungsten for contacts and x-ray targets, the hot cathode x-ray tube, various types of x-ray generating equipment, the "C" tube for submarine detection and signalling, and the cathode ray tube.

His achievement of drawn tungsten filaments made the incandescent lamp cheap and reliable, and his improvements in the x-ray tube augmented and made less dangerous to operate that modern laboratory instrument. The beam of Dr. Coolidge's cathode-ray tube, having the power of a ton of radium, has unknown possibilities in the realm of science and medicine. An exhibit of the achievements for which the award was given to Dr. Coolidge was on display at the hotel.

Dr. Coolidge graduated from the Massachusetts Institute of Technology in 1896, afterwards receiving his Ph.D. from the University of Leipzig. Returning to the United States, he joined the teaching staff of the institute, serving as assistant in physics, instructor in physical chemistry, and as assistant professor of physico-chemical research. In 1905 he became a member of the staff of the General Electric Research Laboratory, under Dr. Willis R. Whitney, and in 1908 was made assistant director of that organization, a position he occupied until 1928, when he was made associate director.

The Washington Award, presented to Dr. Coolidge, was founded sixteen years ago by John Watson Alvord, and it is administered by the Western Society of Engineers. Presentation was made by Mr. Frank D. Chase, president of the society.

AWARD OF THE POPULAR SCIENCE MONTHLY

DR. IRVING LANGMUIR, associate director of the research laboratory of the General Electric Company, at Schenectady, N. Y., has received the *Popular Science Monthly* annual award of $10,000 for notable scientific achievement. The award, together with a gold medal commemorating it, was presented to Dr. Langmuir on February 29 at the Engineers Club in New York City.

This award was established two years ago for the double purpose of honoring Americans who have done notable scientific work and of stimulating the public mind to a greater appreciation of the values of scientific investigation. The first winners were Dr. George H. Whipple, of the University of Rochester, and Dr. George R. Minot, of Harvard University, who received the award jointly last year for their discovery and development of a cure for pernicious anemia.

The committee of award consisted of twenty-two leading men of science, and nearly 1,800 organizations were requested to present nominations.

Dr. Langmuir is known for his contributions to the knowledge of atomic structure; the theory of the single molecular layer; the heat of atomic hydrogen