The foreign honorary members elected in class I are:

V. F. K. Bjerknes, professor of mechanics and mathematical physics, Oslo.

J. N. Brönsted, professor of chemistry, Copenhagen. James Franck, professor of physics and director of the second physical institute. Göttingen.

A. F. Joffé, director of the Röntgen Institute and the Physical-Technical Institute, Leningrad.

Ludwig Prandtl, professor of applied mechanics, Göttingen.

Emil Probst, professor and director of the Concrete Laboratory, Karlsruhe.

Willem de Sitter, professor of astronomy and assistant director of the Observatory, Leyden.

Aurel Stodola, professor of machine construction, Technische Hochschule, Zürich.

Hermann Weyl, professor of mathematics, Technische Hochschule. Zürich.

Heinrich Wieland, professor of chemistry, Munich.

Foreign honorary members in class II:

L. W. Collet, professor of geology and dean of the faculty of sciences, Geneva.

Sir Robert Jones, Bart., F.R.C.S., director of orthopedic surgery, St. Thomas's Hospital, Liverpool, president of the Association of Surgeons of Great Britain.

Otto Renner, professor of botany and director of the Botanical Institute and Garden, Jena.

Sir Arnold Theiler, K.C.M.G., distinguished for his work on protozoan parasites of domestic animals in South Africa.

## SCIENTIFIC NOTES AND NEWS

A BILL has been introduced in the congress which proposes to authorize Dr. William S. Thayer and Dr. William H. Welch to accept such decorations, orders and medals as have been tendered them by foreign governments "in appreciation of services rendered."

DR. IRVING LANGMUIR, president of the American Chemical Society and associate director of the Research Laboratory of the General Electric Company, has been notified by the rector and senate of the Technische Hochschule at Berlin-Charlottenburg that he has been awarded the diploma and honorary degree of "Doktor Ingenieur Ehrenhalber."

JOHN R. FREEMAN, consulting hydraulic engineer of Providence, R. I., has been awarded the title of honorary fellow of the Polytechnic Institute of Karlsruhe, Germany.

PROFESSOR WILDER D. BANCROFT, of Cornell University, has been elected an honorary member of the Polish Chemical Society. This honor was conferred during the recent tenth anniversary meeting of the society held in Warsaw.

DR. J. J. SEDERHOLM, director of the Geological Survey of Finland, received the honorary degree of doctor of laws at Queen's University, Kingston, Canada, at the spring convocation. Dr. Sederholm delivered the Miller Memorial Lectures at Queen's University during January and February.

At the medal meeting of the Franklin Institute in Philadelphia on May 15, John F. Peters, consulting engineer of the Westinghouse Electric and Manufacturing Company, was awarded the Longstreth medal for the invention of the "klydonograph"—a device for recording the effect of lightning as it strikes a transmission line.

DR. AMÉDÉE GRANGER, head of the department of radiology of the graduate school of medicine of Tulane University of Louisiana and director of the Röntgen ray department of Charity Hospital, New Orleans, has been awarded the gold Palmes Universitaires by the French government for his work in radiology. The decoration was presented on April 25 by the French consul general in New Orleans, Maurice de Simonin. France awarded the silver Palmes Universitaires to Dr. Granger in 1921. He was awarded the gold medal of the Radiological Society of North America in 1926.

A LUNCHEON marking the eightieth birthday of Dr. Charles E. Munroe, chief explosives chemist of the U. S. Bureau of Mines, was given by his fellow members of the bureau and a few close friends at the Cosmos Club, Washington, D. C., on May 23. A feature was the presentation to Dr. Munroe of a bronze medal bearing his portrait, the outlines of which were literally blown into the metal by means of the "Munroe effect." This is a phenomenon discovered by Dr. Munroe, which permits the reproduction of drawings and designs upon metal through the detonation against the metal of an explosive upon the surface of which the design has been impressed as from a zinc etching. O. P. Hood, acting director of the Bureau of Mines, presided and presented the medal. Other speakers were Dr. Henry S. Washington, of the Geophysical Laboratory; N. S. Greensfelder, editor of The Explosives Engineer; Dr. Charles L. Parsons, secretary of the American Chemical Society, and G. St. J. Perrott, supervising engineer of the Pittsburgh Experiment Station of the Bureau of Mines.

THE eighteenth annual Willard Gibbs gold medal of the Chicago section of the American Chemical Society was presented to Dr. Claude Silbert Hudson, chief of the division of chemistry of the hygienic laboratory of the U. S. Public Health Service, for his researches in the chemistry of sugars, which have resulted in findings of importance to pure science, medicine and industry, at a reception and dinner given at the Palmer House on May 24. Professor William Lloyd Evans, of the Ohio State University, made the formal presentation. Three months ago, in New York, Dr. Hudson presented the Nichols medal of the New York section to Professor Evans for his studies of the sugar molecule. Dr. B. B. Freud, of the Armour Institute, chairman of the Chicago section of the American Chemical Society, presided. The speakers included Dr. Evans, Dr. Hudson, Dr. Walter D. Scott, president of Northwestern University; Dr. Gordon J. Laing, dean of the graduate school of the University of Chicago; Professor Joseph H. Mathews, head of the department of chemistry of the University of Wisconsin, and H. Bundesen, coroner, City of Chicago.

PROFESSOR A. P. CARMAN retires this year as head of the department of physics of the University of Illinois, after thirty-three years of service. On May 18 he was honored by a banquet given by his associates in physics. Professor Henry Crew delivered an address on "Some Recollections, 1879–1929." President Kinley spoke on "Recognition." A testimonial booklet, signed by one hundred and sixty past and present students and members of the faculty, was presented to Professor Carman.

DR. EDWARD WILLIAM NELSON, principal biologist of the Bureau of Biological Survey, naturalist and author, was retired at his own request on May 8 from the Bureau of Biological Survey with which he had been connected for nearly forty years and of which he was chief in the period 1916–1927. Dr. Nelson began service in the federal government more than fifty years ago.

ACCORDING to a note in *Nature*, Mr. Frederick Chapman, paleontologist to the National Museum, Melbourne, has retired from the state service, and the National Museum Committee has passed a resolution recording appreciation of the services rendered by him since his appointment in 1902.

THE officers of the Society of Chemical Industry elected for the coming year at the May 3 meeting are as follows: chairman, Charles A. Lunn; secretary, Foster Dee Snell; treasurer, F. C. R. Hemingway; new members of the executive committee: James G. Vail, Allen Rogers, Donald Cable, L. C. Dreyfahl and G. Edwin White.

GRANTS made by the Committee on Scientific Research of the American Medical Association, of which Dr. Ludvig Hektoen is chairman, include grants for \$500 for a study of the rôle of the toxin of *B. welchii* in the toxemia of intestinal obstruction, the work to be carried on by Dr. Herbert F. Thurston in the Indiana University School of Medicine, and Dr. H. Jensen, of the department of pharmacology of the Johns Hopkins Medical School, to continue the chemical and pharmacological study of toad poisons.

PROFESSOR S. C. LIND, of the University of Minnesota, has been elected to succeed Professor G. N. Lewis as a member of the board of editors of the "Scientific Monographs" of the American Chemical Society.

ELBRIDGE C. JACOBS, professor of geology at the University of Vermont, has been appointed geologist to the U. S. Engineer Corps' flood control investigation in western Vermont.

G. A. MECKSTROTH, who has been employed during the past three years as pathologist for the Illinois State Department of Agriculture, has accepted the position of assistant state pathologist with the South Carolina State Crop Pest Commission at Clemson College, South Carolina. Mr. John W. Miller succeeds Mr. Meckstroth and is in charge of the watermelon wilt investigations being carried on by the Illinois State Department of Agriculture.

C. A. ROBERT LUNDIN, for many years with Alvan Clark and Sons, telescope makers, has severed his connections with that firm. Mr. Lundin will continue the making of astronomical telescopes.

PROFESSOR MAX MEYER, who has leave of absence from the University of Missouri, will spend the year in research at the Central Institute for the Deaf at St. Louis.

PROFESSOR E. C. FRANKLIN, accompanied by Mrs. Franklin, has sailed to attend the meeting of the British Association for the Advancement of Science to be held in South Africa in July.

DR. CURTIS F. MARBUT, chief of the soil survey of the Bureau of Chemistry and Soils, U. S. Department of Agriculture, sailed from New York on May 9 for Danzig, where as chairman of the International Commission on Genesis, Classification, Morphology and Mapping of Soils he will preside at the sessions of soil scientists from all parts of Europe. The commission met from May 20 to 25 to receive reports of progress in the mapping and classification of soils and to prepare the program for the triennial meeting of the International Soil Congress to be held in Leningrad, Russia, in the summer of 1930.

Dr. J. M. ALDRICH, associate curator of the division of insects of the U. S. National Museum, left New York on May 15 for London, where he will spend some weeks in the study of muscoid types in the British Museum. At the conclusion of this work he will proceed to northern Norway and Sweden on a collecting expedition, the object being to obtain Northern European insects, especially Diptera, for comparison with similar forms occurring in the northern part of North America. While in Europe, Dr. Aldrich will also visit museums for the purpose of examining types of muscoid Diptera. He expects to return about August 20.

VERNON BAILEY, field naturalist of the Bureau of Biological Survey, left Washington in April for Arizona to make studies of the wild life in the region of the Grand Canyon of the Colorado, in cooperation with the National Park Service, the Carnegie Institution of Washington and the United States Forest Service. On the way there he examined a number of caves in Kentucky, with special reference to the use of them by bats as hibernating places. This is the initial step in a survey of the animal life of Mammoth Cave and other caves of the region, undertaken at the request of and in cooperation with the Kentucky Geological Survey. Mr. Bailey also stopped at the Carlsbad Caverns, New Mexico, to study the rate of deposition of guano since his last visit.

F. FERNANDEZ-GARCIA, director of the Insular Experiment Station of Porto Rico, has sailed for Java to attend the meeting of the International Association of Sugar Cane Technologists. Dr. Melville T. Cook, vice-director, will be in charge of the station during his absence.

DR. ROBERT CUNNINGHAM MILLER, of the department of zoology of the University of Washington, has been granted a leave of absence to accept appointment as visiting professor of biology in Lingnan University, Canton, China, for a two year term. He will sail from Seattle about August 1.

COMMANDER N. H. HECK, of the U. S. Coast and Geodetic Survey, addressed a meeting of the Sigma Xi Alumni Association of the University of Pittsburgh on May 20, on "The Scientific Attack on the Earthquake Problem."

THE Herbert Spencer lecture was delivered at the University of Oxford on May 15 by Dr. Charles S. Myers, under the title of "Psychological Conceptions in other Sciences."

THE Bakerian Lecture of the Royal Society will be given by Professor E. A. Milne, Rouse Ball professor of mathematics in the University of Oxford, on June 6, the title being "The Structure and Opacity of a Stellar Atmosphere."

THE first Pedler Lecture of the British Chemical Society will be given by Professor W. H. Perkin, Waynflete professor of chemistry in the University of Oxford, on May 30 on "The Early History of the Synthesis of Closed Carbon Chains."

CAREY V. HODGSON, assistant chief of the division of geodesy of the U. S. Coast and Geodetic Survey, was drowned with his son on May 19 when a sudden storm descended on Chesapeake Bay where they were in a canoe. Dr. Hodgson was in his fiftieth year.

DR. GARRETT P. SERVISS, author of popular scientific articles and books, died on May 24 at the age of seventy-eight years.

WE learn from *Nature* that Sir George Syme, president of the College of Surgeons of Australasia, has died at the age of sixty-nine years. Dr. F. C. Madden, dean of the faculty of medicine of Egyptian University, Cairo, an authority on bilharziosis and schistosomiasis, died on April 27, aged fifty-six years.

DR. LUDWIG WITTMACK, honorary professor of botany in the University of Berlin, has died at the age of eighty-nine years.

DR. AUGUST VON SCHMIDT, formerly director of the meteorological-geophysical section of the Württemberg State Statistical Bureau at Stuttgart, died on March 21, aged eighty-nine years.

By the will of the late George Augustus Peabody, the sum of \$100,000 is left to the Peabody Museum, at Salem, Massachusetts, to be added to the permanent fund.

MESSES. PARKE, DAVIS AND COMPANY have contributed \$1,500 to pay for an assistant to work for a year in the laboratory of the department of pharmacology at Dalhousie University on the influence of the separated pituitary bodies on the renal function of the fowl.

WITH the addition of the \$100,000 gift by the Society of Naval Architects and Marine Engineers to the proposed endowment fund of \$5,000,000 which the Engineering Foundation is attempting to raise, the total has been brought to \$720,000, according to a statement made by Alfred D. Flinn, director of the foundation. The sum of \$50,000 has been received from James H. McGraw, chairman of the McGraw-Hill Publishing Company, toward the \$2,000,000 needed for the Engineering Societies Library. The amount raised for the library stands at \$200,000.

THE Berlin correspondent of the London *Times* reports that the municipality of Berlin has been very unfortunate in the handling of the city's proposed gift of a house or a building site to Professor Einstein on the occasion of his fiftieth birthday. After presenting him with the life tenancy of a house at Kladow, which, it turned out, was not vacant for another five years, the municipality offered him a building plot at Caputh, south of Potsdam, with which he declared himself satisfied. The motion for the appropriation of the 20,000 Marks required for the purchase of the land was placed before the Municipal

Council, but its passage was obstructed by the Nationalist group, apparently for no other reason than racial prejudice. It is stated in the press that, owing to the repeated hitches, especially the latest, such pleasure as the gift might have given Professor Einstein has evaporated, and that he has written to the chief burgomaster asking him to take no more trouble over the matter. In this letter Professor Einstein is said to have remarked that life was too short and the affair of his birthday gift had lasted too long for him to feel able to accept it. The municipality has expressed the hope that as a result of recent conversations there is some chance of a satisfactory settlement.

IN honor of Thomas A. Edison and in commemoration of the fiftieth anniversary of his incandescent lamp, the General Electric Company has announced that an Edison Fellowship for Research in the General Electric Research Laboratory has been established. Its object is to help to determine the fitness of the person for industrial or scientific research by arranging for a year's research in that laboratory. The fellowship carries a grant of \$3.000. The selection from applicants will be made by a committee of National Research Council with the advice of the director of research of the General Electric Company. The committee includes Dr. George K. Burgess, director of the U.S. Bureau of Standards and chairman of the National Research Council, chairman of the committee; Dayton C. Miller, professor of physics of the Case School of Applied Science and chairman of the division of physical sciences of the National Research Council; James E. Mills, chief of the research division of Edgewood Arsenal and chairman of the division of chemistry of the National Research Council, and A. E. Kennelly, professor of electrical engineering at Harvard University. Dr. Willis R. Whitney, vice-president and director of the research laboratory of the General Electric Company, represents that company.

THE New York State Geological Association held its fifth annual field meet on May 17 and 18, at Gouverneur, N. Y. A total of 150 geologists from ten universities and colleges and the New York State Museum were present. The field work the first day was devoted to problems of the Precambrian and included visits to marble quarries, and hematite and pyrite deposits. On Saturday field work was continued. Inspection was made of the subsurface workings of tale and zine mines. At the dinner on Friday evening, Mr. Chris A. Hartnagel, president of the association, presided. The Gouverneur quarry and mining operators were among the guests. Mr. Brown, of the New Jersey Zine Company, spoke about the Edwards District. Mr. D. H. Newland, Dr. H. Ries, Dr. N. C. Dale, Dr. A. F. Buddington, Dr. O. D. von Englen and others reviewed the geology of the Gouverneur region. Professor Edward S. C. Smith, of Union College, was elected president. It was decided to meet next spring at Union College, Schenectady, N. Y.

THE seventh annual meeting of the Virginia Academy of Science was held with Staunton Military Academy, Virginia, on May 10 and 11. Sixty-five papers were presented, distributed among the different sections as follows: Section of astronomy, mathematics and physics, 18: section of biology, 13; section of geology, 9; section of psychology and education. 8: section of chemistry. 10; section of bacteriology. 7. The following resolutions were adopted: (1) That the Virginia Academy of Science protests against a higher duty on scientific apparatus and urges the restoration of the former privilege of duty-free importation on scientific supplies for educational and research institutions. (2) The calling of an international conference, to be participated in by the United States, to consider the calendar question without being committed to any special principle of revision. The annual research prize of \$50 was awarded to Mr. J. C. Street, a graduate student in physics at the University of Virginia, whose topic was "The Time Lag of the Spark Discharge," The following officers were elected for the coming year: President, Dr. Garnett Ryland, professor of chemistry, University of Richmond, Richmond, Va.; secretary, Dr. E. C. L. Miller, Medical College of Virginia, Richmond, Va.; councilor, Dr. L. R. Geissler, professor of psychology, Randolph-Macon Woman's College, Lynchburg, Va. The next meeting will be held with Randolph-Macon Woman's College, Lynchburg, Va., May, 1930.

THE twenty-third annual convention of the Illuminating Engineering Society is to be held at the Bellevue-Stratford Hotel, Philadelphia, from September 24 to 27, inclusive, according to an announcement from the headquarters of the society, 29 West 39th Street, New York City. Papers to be presented at the convention will constitute a summary of the progress made in the art and science of lighting during the past year. One entire session of the Philadelphia meeting will be devoted to the observance of Light's Golden Jubilee, commemorating the fiftieth anniversarv celebration of the invention of the incandescent lamp by Thomas A. Edison. Appropriate exercises and papers by well-known speakers will be featured. Other business sessions of particular interest to illuminating engineers will be held, including a session for central-station lighting service engineers, another devoted to natural lighting and others featuring laboratory, lighting practice and technical subjects. The entertainment program will include a visit to the Longwood estate of Mr. Pierre S. duPont and a display of the electric fountain, which is said to be the most beautiful illuminated water display in the world.

THE second meeting of the International Society for the Investigation of Sex will be held in the House of the British Medical Association, Tavistock Square, London, from August 3 to 9, 1930. It may be assumed that, as was the case in Berlin, the papers presented for discussion will fall into the following groups: biology; physiology, pathology and therapeutics; psychology, pedagogy, ethics, esthetics, religion; demography, statistics, social and racial hygiene; sociology, ethnology and folk-lore. All the arrangements are in the hands of Professor F. A. E. Crew, The University, West Mains Road, Edinburgh, to whom all those who are interested are requested to write.

THE ninth summer session of the American School of Prehistoric Research will open in London on July 1, under the direction of Dr. George Grant MacCurdy, of Yale University. The greater part of the summer will be spent on the continent, especially in France, where excavation will be carried on. Professor and Mrs. MacCurdy will sail from New York on June 15.

THE centenary celebration meeting of the Zoological Society of London was held on April 9 in University College, and was attended by representatives of scientific bodies from Great Britain, America and Europe. According to the London Times the Duke of Bedford, the president, gave an outline of the history of the society since it came into existence in 1826, three years before it received its charter. The first piece of ground rented was about five acres in extent, where the clock tower now stands. That had now grown to 35 acres and the society had acquired an estate of 500 acres in Bedfordshire, where a larger and freer zoological park could be developed. In 1831 King William IV, having given the society all the animals in the menagerie at Windsor, became patron of the society. In the first year after the war the number of visitors to the zoo was a million and a half; last year the number was nearly two and a quarter millions, and the society had over 8,000 fellows. Dr. Chalmers Mitchell, the secretary, pointed out that the society was a scientific body founded by scientific men for defined scientific objects, and said the centenary congratulations received from learned bodies all over the world would not have come to them if they were merely exhibitors of living animals, however attractive and educational their exhibition might be.

THE Pacific Division of the American Association for the Advancement of Science, which is to hold its thirteenth annual meeting at the University of California in Berkeley, June 19 to 22, will offer a prize

of \$100 for the most important scientific contribution reported by a resident of the Pacific Division territory at that time. The committee on award which will judge the contributions reported has been appointed. The members are: Dr. Robert Aitken, associate director of Lick Observatory, for mathematics and astronomy: Dr. I. S. Bowen, of the California Institute of Technology, for physics: Dr. Joel H. Hildebrand, of the University of California, for chemistry: Dr. Herman A. Spoehr, of Carnegie Institution, for botany, and Dr. Charles A. Kofoid, of the University of California, for zoology. The reports submitted need not be the work of members of the Association for the Advancement of Science. They should represent noteworthy contributions to science, founded upon work already accomplished. They may be in part summaries of investigations, the results of which have been recently published.

## UNIVERSITY AND EDUCATIONAL NOTES

THE new laboratory of chemistry at Colgate University, which will be built at a cost of \$400,000 with funds provided by the will of the late Mary Evelyn Colgate will be named for Dr. Joseph F. McGregory, who was for forty-four years head of the department.

By the will of the late Emily C. Butler, of Scarsdale, N. Y., New York University and Union Theological Seminary share the residuary estate, each receiving \$233,109. In addition, the university receives legacies amounting to \$500,000, and the seminary a \$150,000 legacy.

PROFESSOR PARKER HAYWARD DAGGETT, head of the department of electrical engineering at the University of North Carolina, has been appointed dean of the engineering school of Rutgers University. Professor Daggett will succeed Professor Edward H. Rockwell, resigned.

PROFESSOR RICHARD G. DUKES, head of the department of applied mechanics, has been appointed dean of the newly established graduate school of Purdue University.

At a recent meeting of the board of regents of the University of Nebraska action was taken establishing a department of geography as a coordinate unit in the college of arts and sciences, and Dr. Nels A. Bengtson was made chairman of the newly created department. The department also gives courses which are included in the college of business administration, teachers college and the agricultural college.

THE department of physics of the University of California announces the following changes in its staff for the year 1929-30: Dr. Frederick S. Brackett has