would appreciate information on other international congresses to be held in 1930. We wish to have the date of the meeting and the address of the executive officer, preferably the American representative.

The committee can not undertake to make arrangements for obtaining passage on steamers nor for other details concerning travel. Those proposing to attend any of these congresses would do well to obtain reservations for passage at an early date, as the meetings are mostly held during the peak of the summer ocean travel. Prospective travelers may procure reservations from the steamship companies or their agents or they may procure them through one of the many travel agencies.

The committee hopes to issue a more detailed statement next autumn.

A. S. HITCHCOCK

SMITHSONIAN INSTITUTION, WASHINGTON, D. C.

## SYMPOSIUM ON PHYSIOLOGY AND BIOCHEMISTRY

TAKING advantage of the meeting in Boston of the International Physiological Congress, the University of Minnesota, through its medical school and the Mayo Foundation, will conduct a program in physiology and biochemistry between July 15 and August 15, 1929. The following foreign scholars will be present:

Professor M. von Frey, professor of physiology and director of the Physiological Institute, Würzburg, Germany. His work on the physiology of the special senses is internationally recognized.

Professor Otto Meyerhof, of the Kaiser-Wilhelm Institute for Biology, Berlin, Germany. Dr. Meyerhof is noted in the field of general physiology and received (in company with Hill, of London) the Nobel Prize for his work on muscle.

Professor T. Thunberg, of the University of Lund, Sweden, investigator of vital oxidation phenomena, artificial respiration and metabolism.

Professor G. Anrep, lecturer in physiology, Cambridge, England. Dr. Anrep was associated with Professor Pavlov in Petrograd for several years and will lecture on conditioned reflexes.

Professor E. Laquer, director of the pharmaco-therapeutic laboratory of the University of Amsterdam, Holland. His researches have been on sex hormones and related problems.

Professor Waldschmidt-Leitz, German Technical High School, Prague, Czecho-Slovakia. Until recently he was an associate of Professor Willstätter, in Munich, and his field is enzyme chemistry.

Each guest scientist will deliver several lectures in English on subjects of his choice and in the field of his special research. Each will conduct one or more weekly seminars and have an office where he will be available for consultation. The detailed program will be issued later. No fees will be charged. Credit for attendance by graduate students of this or other universities will be in the discretion of their advisers. Staff members and students of medical schools, physicians, psychologists, biologists, chemists and all others are invited. Board and lodging at moderate rates will be available. Recreational facilities are abundant in Minneapolis and vicinity. Correspondence should be addressed to The Dean, Medical School. University of Minnesota, Minneapolis, Minn.

## ELECTIONS TO THE AMERICAN ACADEMY OF ARTS AND SCIENCES

At the meeting of the American Academy of Arts and Sciences held in Boston, May 8, the annual election of fellows and of foreign honorary members was announced.

The fellows elected in class I, mathematics, the physical sciences and engineering are:

J. A. Beattie, assistant professor of physico-chemical research, Massachusetts Institute of Technology.

C. J. Davisson, the Bell Telephone Laboratories, New York.

A. C. Hardy, associate professor of optics and photography, Massachusetts Institute of Technology.

Marston Morse, associate professor of mathematics, Harvard University.

W. S. Sims, Rear-Admiral U. S. N. (retired). In command of U. S. naval forces in European waters during the World War.

J. L. Walsh, assistant professor of mathematics, Harvard University.

A. E. Wells, professor of metallurgy, Harvard University.

Fellows in class II, the geological and biological sciences and medicine:

J. B. Ayer, clinical professor of neurology, Harvard University.

Kirk Bryan, assistant professor of physiography, Harvard University.

L. R. Cleveland, assistant professor of protozoology (tropical medicine), Harvard University.

Hallowell Davis, assistant professor of physiology and chairman of the board of tutors in the division of biology, Harvard University.

J. H. Faull, professor of forest pathology, Harvard University.

Joseph Grinnell, professor of zoology and director of the museum of vertebrate zoology, University of California.

Leigh Hoadley, assistant professor of zoology, Harvard University.

E. A. Locke, clinical professor of medicine, Harvard University.

E. H. Wilson, keeper of the Arnold Arboretum, Harvard University.

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, medi-