has been directing research in aluminum ever since he was appointed to his present post in 1918.

Born in Minneapolis, he studied at the University of Minnesota, where the degree of analytical chemist was conferred on him in 1905; a year later he received a master's degree. After studying at the University of Berlin, he joined the teaching staff of the University of Minnesota. His postgraduate work resulted in a doctor's degree, received in 1912.

In 1915 Dr. Frary joined the staff of the Oldbury Electrochemical Company, Niagara Falls, N. Y., as research chemist. There he acquired a special experience in the production of phosgene, which led during the war to his selection, with Professor D. J. Demorest, to build and operate a phosgene plant at Edgewood Arsenal. At the close of the war, Dr. Frary was a major in the Chemical Warfare Service.

In December, 1918, he took up his work as director of research of the Aluminum Company of America. Starting at New Kensington with a small group of men, he gradually built up the Aluminum Research Laboratories to their present position. In the past nineteen years, Dr. Frary made important contributions to the chemistry and metallurgy of aluminum. Among the many achievements which have been credited to him may be mentioned the production, for the first time, of very pure aluminum (99.98 + per cent.) by an electrochemical process, and the production of pure aluminum oxide by an electrothermal process.

## THE AMERICAN ACADEMY OF TROPICAL MEDICINE

THE fourth annual meeting of the American Academy of Tropical Medicine convened in New Orleans on December 3. At the dinner Dr. George C. Shattuck, department of tropical medicine, Harvard University, Boston, Mass., presided as toastmaster. presidential address, entitled "The Importance of Environment in the Study of Tropical Diseases," was delivered by Dr. Wilbur A. Sawyer, director of the International Health Division of the Rockefeller Foundation, New York City. The first award of the Theobald Smith Medal of Washington University was made by Colonel Charles F. Craig, past president of the academy, to Dr. Marshall A. Barber, staff member of the International Health Division of the Rockefeller Foundation, for his many significant laboratory and field contributions to tropical medicine. In announcing the award of this medal in the issue of Science for December 3, an error was made through which the names of Colonel Craig and Dr. Barber were reversed.

Colonel R. A. Kelser, the U. S. Army Medical Research Board, Ancon, Canal Zone; Dr. J. C. Bequaert, department of tropical medicine, Harvard Medical School, and Dr. Norman R. Stoll, Rockefeller Institute

for Medical Research, Princton, were elected members, and Sir S. Rickard Christophers, London School of Tropical Medicine and Hygiene, London; Professor Jerome Rodhain, Institut de Médecine Tropicale Prince Léopold, Anvers, Belgium, and Dr. Henrique do Rocha Lima, Instituto Biologico, São Paulo, Brazil, were elected honorary members. Newly elected officers and councillors were as follows: President, Colonel Joseph F. Siler, Army Medical School, Washington, D. C.; Vice-president, Professor W. W. Cort, School of Hygiene, the Johns Hopkins University; Secretary, Professor Ernest Carroll Faust, department of tropical medicine, Tulane University of Louisiana; Treasurer, Dr. Thomas T. Mackie, Cornell Medical Center, New York City; Councillors, Professor Malcolm H. Soule, Hygienic Laboratory, University of Michigan (1 year); Professor Alfred C. Reed, Pacific Institute of Tropical Medicine, University of California (5 years); academy representative on the council of the American Association for the Advancement of Science, Dr. Malcolm H. Soule; academy representative on the council of the American Foundation for Tropical Medicine, Dean Earl B. McKinley, George Washington University.

ERNEST CARROLL FAUST,
Secretary

## THE THIRD INTERNATIONAL CONGRESS FOR MICROBIOLOGY

THE third International Congress for Microbiology will be held at the Waldorf-Astoria Hotel, New York City, from September 2 to 9, 1939, under the auspices of the International Association of Microbiologists.

Dr. T. M. Rivers, of the Rockefeller Institute for Medical Research, is president of the congress; Dr. M. H. Dawson, of the College of Physicians and Surgeons, Columbia University, is general secretary, and Dr. Kenneth Goodner, of the Rockefeller Institute for Medical Research, is general treasurer.

The congress will be composed of the following nine sections:

General Biology: Variation and Taxonomy: convener, C.-E. A. Winslow.

General Biology: Microbiological Chemistry and Physiology: convener, Stuart Mudd.

Viruses and Viral Diseases: convener, W. A. Sawyer.

Rickettsiae and Rickettsial Diseases: convener, Hans Zinsser.

Protozoology and Parasitology: convener, H. W. Stunk-

Fungi and Fungous Diseases: convener, B. O. Dodge. Medical and Veterinary Bacteriology: convener, F. P. Gav.

Agricultural and Industrial Microbiology: convener, S. A. Waksman.

Immunology: convener, M. Heidelberger.

The registration fee will be \$5.00, which will not include the cost of a banquet ticket or a copy of the *Proceedings* of the congress.

A World's Fair will be held in New York City dur-

ing the summer of 1939. Consequently, those who wish to attend the Congress for Microbiology should make plans promptly. The American Express Company, the official travel agency for the congress, will be glad to assist in such plans.

## SCIENTIFIC NOTES AND NEWS

AT the annual meeting of the trustees of the Carnegie Institution of Washington, Dr. John C. Merriam, for the past sixteen years president of the institution, presented his resignation, to take effect at the end of next year. The trustees voted to make Dr. Merriam president emeritus "with a grant sufficient to insure the effective continuation of his research work under the auspices of the institution." The board elected two trustees: Elihu Root, Jr., of New York, to succeed his father, and Henry R. Shepley, of Boston, architect. Trustees who attended the meeting were: Dr. Thomas Barbour, Cambridge, Mass.; James F. Bell, Minneapolis; Robert Woods Bliss, Washington, D. C.; Frederic A. Delano, Washington; W. Cameron Forbes, Boston; Walter S. Gifford, New York; Frank B. Jewett, Charles A. Lindbergh, Boswell Miller, Henry S. Morgan and Stewart Paton, of New York; John J. Pershing, Washington; William Benson Storey, Chicago; Richard P. Strong, Boston; Charles P. Taft, Cincinnati; Frederic C. Walcott, Hartford, Conn., and Dr. Lewis H. Weed, Baltimore.

The following grants-in-aid have been made by the National Advisory Cancer Council: to Dr. Louis F. Fieser, of Harvard University, \$20,550 toward work for a three-year period on the synthesis of carcinogenic compounds; Edward W. Wallace, University of Cincinnati, \$4,350, for work over a period of two years on the relation of the anterior pituitary to carcinogenesis; E. O. Lawrence, University of California, \$30,000, toward the establishment of a cyclotron laboratory for biological and clinical work with special reference to the treatment of cancer.

Medals of the American Society of Mechanical Engineers have been awarded as follows: The medal of the society for 1937 to Edward P. Bullard, president of the Bullard Company, Bridgeport, Conn., for "preeminent leadership in the development of station-type machine tools"; the Holley Medal to Dr. Frederick Gardner Cottrell, of the Research Corporation, Washington, D. C., for his "preeminent service in the invention of electric precipitation, the advancement of the science of gas liquefaction and for his gifts for engineering research"; the Worcester Reed Warner Medal to Clarence F. Hirshfeld, chief of research of the Detroit Edison Company, for "research and contributions to the theory and practice of heat power

engineering"; the Melville Medal to Alfred J. Buchi, of Winterthur, Switzerland, for his paper, "Supercharging of Internal Combustion Engines with Blowers Driven by Exhaust-Gas Turbines," and the Charles T. Main Award to Allan P. Stern, of the Colonial Iron Works, Cleveland, for his paper on "The Influence of the Introduction of Labor-Saving Machinery upon Employment in the United States." Lorenzo Allievi, of Rome, who is now eighty-one years old, was elected an honorary member in recognition of his work in hydraulics.

THE Leidy Medal, presented every third year by the Academy of Natural Sciences of Philadelphia, was awarded on December 7 at a meeting of the council of the academy to Dr. Edwin Linton, research fellow in zoology at the University of Pennsylvania, in recognition of his work on the worm parasites of American marine fishes. The award, a bronze medal and an honorarium, was founded in 1923 in memory of the late Dr. Joseph Leidy, president of the academy from 1882 until his death in 1891. Previous winners of the medal include Professor H. S. Jennings, director of the Biological Laboratories of the Johns Hopkins University; Dr. Henry A. Pilsbry, curator of mollusks at the academy; the late Dr. William Morton Wheeler, and Gerrit Smith Miller, Jr., curator of mammals in the U.S. National Museum at Washington. The committee making the award included Dr. William K. Gregory, of the American Museum of Natural History, chairman; Dr. George H. Parker, emeritus professor of zoology, Harvard University; Dr. Alexander G. Ruthven, president of the University of Michigan; Dr. Francis W. Pennell, curator of botany at the academy, and Dr. Philip P. Calvert, professor of zoology at the University of Pennsylvania and research associate of the academy.

THE Gold Scheele Medal of the Swedish Chemical Society, awarded for "outstanding biochemical research," was presented at a meeting held in Stockholm on November 5 to Dr. James B. Sumner, professor of biochemistry at Cornell University, in recognition of his research on enzymes.

ROBERT LINTON, consulting engineer of Los Angeles, Calif., received the degree of doctor of science from Washington and Jefferson College at ceremonies con-