

gram Committee, there have been arranged three addresses: on Friday on "Mathematical Aspects of the Boundary Layer Theory," by Professor K. O. Friedrichs, of New York University; on Saturday at 11:00 A.M. on "The Structure of Normed Abelian Rings," by Professor E. R. Lorch, of Columbia University, and at 2:00 P.M. on "Modern Algebra and the Riemann Hypothesis," by Professor André Weil, of Lehigh University. Sessions for research papers have been arranged for Saturday afternoon.

At Chicago, at 2:00 P.M. on Friday, two invitation addresses were planned—one by Professor J. L. Synge on "The Problem of Saint Venant for a Cylinder with Free Sides," and one by Professor I. S. Sokolnikoff on "Torsion and Flexure of Compound Prisms."

At the University of California, on Saturday, there will be addresses by Professor D. H. Hyers, of the University of Southern California and the California Institute of Technology, on "Linear Topological Spaces," and by Professor R. M. Robinson, of the University of California, on "Hadamard's Three Circles Theorem." A symposium on applied mathematics will be held in the afternoon. The program will consist of two addresses: "Hydrodynamical Stability," by Dr. C. C. Lin, and "The Intrinsic Theory of Elastic Plates and Shells," by Dr. Wei-Zang Chien, both of the California Institute of Technology.

#### THE CHARLES L. MAYER AWARDS

THE National Science Fund of the National Academy of Sciences announces two Charles L. Mayer Awards for contributions on the nature of light submitted before January 1, 1946.

A prize of \$2,000 will be awarded for "an outstanding contribution to our basic understanding of the nature of light and other electromagnetic phenomena which provides in terms intelligible to the community of scientists at large a unified understanding of the two aspects of these phenomena which are at present jointly described by wave and by corpuscular theories."

The second prize of \$2,000 will be awarded for an outstanding comprehensive contribution to "a logical, consistent theory of the interaction of charged particles with an electromagnetic field including the interaction of particles moving with relative high speeds."

The first award is intended to encourage for the benefit of the non-specialist the interpretation of facts already known to the specialist. It is hoped that the second award will stimulate attack on one of the most fundamental unsolved problems in physics.

In making these awards the National Science Fund will have the assistance of a special advisory committee, consisting of Dr. E. U. Condon, associate director of the Research Laboratories, Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa.; Dr. Karl K. Darrow, a member of the technical staff of the Bell Telephone Laboratories and secretary of the American Physical Society; Dr. Robert A. Millikan, chairman of the executive council of the California Institute of Technology, and Dr. I. I. Rabi, professor of physics at Columbia University.

Contributions may be submitted to the National Science Fund of the National Academy of Sciences, 2101 Constitution Avenue, Washington 25, D. C.

#### GRANTS OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES

THE Permanent Science Fund is administered by a committee of the American Academy of Arts and Sciences. At a meeting of the council on April 12, the grants listed below were approved.

To Theodor von Brand and W. Gardner Lynn, Catholic University of America, Washington, D. C., for special equipment for use in the investigation of metabolic rates in turtle embryos, \$80.

To Curtis L. Newcombe, associate professor of biology, College of William and Mary, Williamsburg, Va., for assistance in a further study of the larval stages of *Vol-sellia demissus*, the ribbed mussel, a source of food, \$600.

To Frances A. Schofield, adjunct professor of chemistry, Randolph-Macon Women's College, Lynchburg, Va. To provide assistance and expendable materials in a further study of glycogen forming activity of alanine isomers, \$500.

To Abraham M. Shanes, instructor in physiology, College of Dentistry of New York University, for assistance in extending a study of bioelectric potentials, \$450.

Communications in respect of the fund should be addressed to Professor John W. M. Bunker, Massachusetts Institute of Technology, Cambridge, Massachusetts.

### SCIENTIFIC NOTES AND NEWS

DR. ALBERT G. HOGAN, professor of animal husbandry at the University of Missouri and chairman of the department, has been awarded the Mead Johnson and Company Vitamin B Complex Award for

1944 by the American Institute of Nutrition. The award is "in recognition of his pioneer work on certain aspects of the vitamin B complex, work which has progressed successfully for many years and which

has contributed materially to the modern knowledge of vitamin B."

THE Herty Medal of the department of chemistry of the Georgia State College for Women will be presented on May 6 to Dr. James Edward Mills, chief chemist of the Sonoco Products Company, Hartsville, S. C. The medal, named after the late Charles H. Herty, known for his work on the production of paper from southern pine, is awarded annually for an "outstanding scientific contribution to the South."

THE Gold Medal for 1944 of the American Institute of Chemists has been awarded to Dr. Willard H. Dow, president of the Dow Chemical Company, in recognition of his work in making available supplies of magnesium for airplane construction and styrene for synthetic rubber.

DR. ARTHUR STOLL has been awarded the Flückiger Gold Medal in recognition of his scientific achievements in the field of pharmacy. This medal is the highest Swiss award for research work in pharmaceutical science and is bestowed every five years. The Marcel Benoist Prize for 1942 of the Marcel Benoist Foundation for the Furthering of Scientific Research has also been awarded to Dr. Stoll in recognition of his "outstanding contributions to pharmaceutical chemistry, particularly the isolation and synthesis of pure active principles of drugs." This prize is given for a scientific achievement or study which is of importance to human life. It is awarded every five years to a citizen of Switzerland or to an investigator having resided for at least five years in that country. Dr. Stoll has donated the sum of 20,000 francs accompanying the award to a foundation for the furthering of science.

THE Hinchley Medal of the British Association of Chemists has been awarded to Herbert W. Rowell, in recognition of "his long service to the association and his distinguished career in applied chemistry."

DR. E. V. MCCOLLUM, professor of biochemistry at the School of Hygiene and Public Health of the Johns Hopkins University, has been elected a foreign member of the Swedish Academy of Sciences.

DR. WARREN B. MACK, head of the department of horticulture of the Pennsylvania State College, vice-president of the American Society for Horticultural Science, in recognition of work in the graphic arts, has been made an associate of the National Academy of Design.

THE Ohio State University will confer at its spring convocation the doctorate of science on Dr. Thomas

Midgley, Jr., of Worthington, Ohio, this year president of the American Chemical Society.

DR. STEPHEN J. ZAND, director of the Vose Memorial Laboratory of the Sperry Gyroscope Company at Great Neck, L. I., has been elected a fellow of the Royal Aeronautical Society, London.

DR. HUGH S. CUMMING, U. S. Surgeon General, retired, director of the sanitary bureau of the Pan American Union, was elected president of the fifth Pan American Conference of National Directors of Health at the Washington meeting, which opened on April 22.

SIDNEY D. KIRKPATRICK, editor of *Chemical and Metallurgical Engineering*, a director of the McGraw-Hill Book Company, has been elected president of the Electrochemical Society.

THE election as president of the Society of Chemical Industry, London, is announced of Dr. Eric Keightley Rideal, F.R.S., since 1930 professor of colloid science at the University of Cambridge. He will take office in July.

THE ninety-first chapter of the Society of the Sigma Xi was established on April 14 at Emory University, with Dr. G. A. Baitzell, national executive secretary, as the installing officer. The ceremonies were attended by some thirty-four official delegates and representatives from other universities. The installation address was given by Dr. E. Carroll Faust, of Tulane University, who spoke on "Some Biological Interrelationships." The following officers were elected: *President*, O. R. Quayle; *Vice-president*, E. L. Jackson; *Treasurer*, Miss E. Papageorge; *Custodian*, W. B. Redmond; *Secretary*, R. T. Lagemann.

DR. CLEMENT C. WILLIAMS, since 1935 president of Lehigh University, will retire on June 30.

DR. HERBERT JOHN FLEURE, professor of geography at the University of Manchester, has been appointed under the Rallman Foundation visiting professor of geography at Bowdoin College for the year 1944-45. He expects to arrive during the latter part of September and will begin his work at the college on October 5 at the beginning of the fall trimester.

DR. JOHN T. TATE, dean of the College of Science, Literature and the Arts of the University of Minnesota, who has been on leave since 1941, has asked to be relieved of administrative responsibilities. On completing his work with the National Defense Research Committee he will return to the university as research professor of physics. He is succeeded as

dean by Dr. T. R. McConnell, professor of educational psychology, who has been acting dean since 1941.

DR. ARNOLD DEMERRITT WELCH, director of the Division of Medical Research of Sharp and Dohme, Philadelphia, has been appointed professor of pharmacology at the Medical School of Western Reserve University.

DR. WILLIAM H. ADOLPH, for the past ten years chairman of the department of chemistry at Yenching University, Peking, has been made acting professor of biochemistry and nutrition in the School of Nutrition of Cornell University.

DR. GEORGE S. AVERY, professor of botany at the Connecticut College, New London, has been appointed, effective in July, director of the Brooklyn Botanic Garden to fill the vacancy caused by the death on August 9, 1943, of Dr. C. Stuart Gager.

DR. LAWRENCE C. CURTIS, geneticist at the Connecticut Agricultural Experiment Station, a member of the staff for fourteen years, will serve as assistant to Stanley L. Morse, agricultural consultant, who is at the head of a food mission to North Africa with the Division of Relief and Rehabilitation of the Foreign Economic Administration. The mission, composed of a group of agricultural experts chosen from various fields, will study the production of food crops in North Africa and the distribution of these crops to the Allies and to liberated countries.

DR. VERN O. KNUDSEN, dean of the Graduate Division of the University of California at Los Angeles, has returned to the university, following a leave of absence of nearly three years to enable him to undertake scientific war work for the Government. He has been active in devising new instruments and techniques of warfare in two of the divisions of the National Defense Research Committee. He will continue his work for the committee in an administrative capacity.

DR. EDGAR DOUGLAS ADRIAN, professor of physiology at the University of Cambridge, gave the second Pilgrim Trust Lecture before the National Academy of Sciences on April 24. He spoke on "Brain Mechanism."

PROFESSOR EDWARD KASNER, of Columbia University, recently gave at St. John's College, Annapolis, lectures entitled "The Golden Section in Mathematics and Art" and "Cartography, Old and New."

THE H. B. Shmookler Memorial Lecture of the

Mount Sinai Hospital, Philadelphia, will be given on May 1, at 9 P.M., by Dr. John P. Peters, professor of medicine at Yale University. The lecture will be entitled "Planning for Post-War Medicine."

At a meeting of the Council of the American Association of Pathologists and Bacteriologists held on April 8, it was voted that, unless unforeseen circumstances arise, the next annual scientific sessions of the association will be held at the University of Chicago on May 4 and 5, 1945. The symposium selected for the meeting is "Infectious Granulomas, exclusive of Tuberculosis and Syphilis." Dr. Wiley D. Forbus, professor of pathology at Duke University, will be the referee.

THE National Science Fund of the National Academy of Sciences announces that the offices of the fund are being moved to the National Academy of Sciences, 2101 Constitution Avenue, Washington 25, D. C., from 515 Madison Avenue, New York City. Headquarters will be established in Washington as of May 1.

THE National Foundation for Infantile Paralysis has made a two-year grant amounting to \$34,080 to the School of Health of Stanford University to be used for the support of a school for technicians in physical therapy and for preparing materials for the use of instructors and students. Under this program selected women students will be provided with specialized training.

ACCORDING to the *Journal* of the American Medical Association, on January 12 the Bolivian branch of the International College of Surgeons was founded in La Paz in the presence of the former United States ambassador to Bolivia, Pierre de Boale, and Dr. Ernesto Navarro, vice-president of the University of La Paz. The chairman of this new institution, Dr. Enrique St. Loup, in his inaugural address stated that the Bolivian branch of the institution was founded in response to an invitation received a year ago from the headquarters of the college in Washington, D. C. The program of this first meeting included the exhibition of a La Paz film showing the different phases of a subtotal thyroidectomy.

THE special correspondent of *The New York Times* at Lima, Peru, reports that under an agreement signed by Dr. Constantino Carvallo, Peruvian Minister of Public Health and Social Welfare, and Major General George C. Dunham, assistant coordinator and director of basic economy in the Inter-American Affairs Coordination Office in Washington, D. C., the Inter-American Cooperative Public Health Service will be

continued for three years from July 1, 1944, when the pact signed in 1942 expires. Of the \$1,000,000 to be spent on health and sanitation during the period of the new agreement, half is to be provided by Peru and half by the Institute of Inter-American Affairs.

By the will of Henry E. Sever, the Chicago publisher, St. Louis University will receive the sum of \$3,318,000. According to the daily press, Judge Joseph A. Graber, of the Cook County Superior Court, was directed to select a university or college in Missouri and award to it \$100,000, plus whatever remained in the estate after other bequests had been made. Four institutions were surveyed by a committee of three members—Kansas City University; Washington University, St. Louis; the University of Missouri, and St. Louis University. It was directed that the bequest be used for the founding of a technological institute to bear the name of the donor. St. Louis University plans to establish the Sever Institute of Geophysical Technology.

AN Institute of Textile Technology has been established in Charlottesville, Va., by trustees representing twenty-eight textile mills in the East. Its purpose is to maintain an educational institution and to promote scientific research and processes related to the textile industry. The charter provides that none of its profits shall go to any member or individual and expressly prohibits its use of propaganda designed to influence legislation. Ward Delaney, of Charlottesville, has been named president. Arthur M. Allen, of Providence, is secretary.

A SCHOOL OF TECHNIQUES will be held this summer at Wellesley College. Its general aim is to enable the men and women who enroll to increase their proficiency in the techniques used in some special field or fields. In science there will be classes in chemistry, biology, geology, physics and mathematics. In addition students will have an opportunity of studying writing and the use of bibliographic material. Courses will be offered in conversation and the translation of foreign languages.

THE first issue has appeared of *Tropical Medicine News*, to be published bi-monthly as the official organ of the American Society of Tropical Medicine under the editorship of Dr. Joseph S. D'Antoni, secretary of the society. The *News* will be issued on about the twentieth of the month in February, April, June, August, October and December, the months in which *The Journal*, also a bi-monthly publication, does not appear.

EFFORTS are being made to produce varieties of potato resistant to disease and suited to conditions in various parts of the British Empire. It has been shown that the diverse qualities desired must be sought among potatoes indigenous to Central and South America, and a large collection of such types, wild and cultivated, has been formed at the School of Agriculture, Cambridge. Lord Nuffield and the trustees of the Nuffield Foundation have now authorized grants of about £9,000 for capital expenditure on this research. The money will be devoted to the housing of the collection and the work connected with it.

*Nature* writes that "in 1940 the Medical Research Council, the Ministry of Information and the editorial department of the British Medical Association decided to send abroad abstracts of important articles in British medical journals, and Dr. Howard Jones was appointed to do this work under the direction of the editor of *The British Medical Journal*. By the end of 1941 a British Medical Information Service had been formed, and the British Council, which had supported the work from its inception, took it over as a permanent part of its work. *The British Medical Bulletin* is published in English, Turkish, Portuguese and Spanish, and Dr. Howard Jones, who is now a whole-time officer of the British Council, has made it a valuable addition to medical literature."

IN the course of an address given on March 2 before the London University Conservative Association, Oliver Lyttleton, British Minister of Production, is reported in *The Times*, London, to have said: "In endeavoring to regain its great trading position after the war, to improve the standards of life and to make its contribution towards balanced international trade, we should promote first research and development. The world is not the same world in 1944 as it was in 1939, and it would be different again in 1946. The primary producing countries would become industrialized to some extent. We shall be required to supply a new world with new goods, to fill a new demand with a new product. To do this we must devote our national ingenuity and resources towards research and development. If our scientists and research workers applied to our post-war problems, in a new field of production, the ingenuity they had shown in the war we might well regain the same position that we occupied when we were the first country to apply coal to the generation of power and when we led the world in the development of the railway. The question whether we were to be a poor nation or a rich nation depended entirely upon whether we used our brains or not."