

THE WASHINGTON MEETING OF THE AMERICAN GEOPHYSICAL UNION

At the twenty-second annual meeting of the American Geophysical Union held in Washington, D. C., on April 30, May 1, 2 and 3, officers were elected for a term of three years beginning on July 1, as follows:

OFFICERS OF THE UNION: Dr. W. C. Lowdermilk, president; L. H. Adams, vice-president; J. A. Fleming, general secretary continuing in office until June 30, 1943.

OFFICERS OF THE SECTIONS: *Geodesy*, R. M. Wilson, president; C. R. Longwell, vice-president; W. D. Sutcliffe, secretary, continuing in office until June 30, 1943. *Seismology*, H. E. McComb, president; V. C. Stechschulte, vice-president; F. Neumann, secretary, continuing in office until June 30, 1943. *Meteorology*, C. W. Thornthwaite, president; C.-G. Rossby, vice-president; H. D. Harradon, secretary. *Terrestrial Magnetism and Electricity*, E. A. Eck-

hardt, president; H. F. Johnston, vice-president; J. W. Joyce, secretary. *Oceanography*, P. C. Whitney, president; H. U. Sverdrup, vice-president; Waldo E. Smith, secretary. *Volcanology*, A. F. Buddington, president; J. F. Schairer, vice-president; J. S. Vhay, secretary. In the sections of Hydrology and Tectonophysics there were no elections, the present officers remaining in office until June 30, 1943, as follows: *Hydrology*, N. C. Grover, president; M. P. O'Brien, vice-president; K. H. Beij, secretary. *Tectonophysics*, L. H. Adams, president; R. A. Daly, vice-president; D. T. Griggs, secretary.

On the evening of April 30, the third award of the William Bowie Medal of the American Geophysical Union "for distinguished attainment and outstanding contribution to the advancement of cooperative research in fundamental geophysics," was made to Dr. J. A. Fleming. This presentation was followed by an address by President R. M. Field on "Geophysics and World Affairs."

SCIENTIFIC NOTES AND NEWS

THE Walker Prize for Cancer Research of the Royal College of Surgeons of England has been awarded to Dr. Peyton Rous, of the Rockefeller Institute for Medical Research.

THE Patron's Medal of the Royal Geographical Society, London, has been awarded to Dr. Isaiah Bowman, president of the Johns Hopkins University, for his travels in South America and for his great services to the science of geography while director of the American Geographical Society of New York.

DR. HENRY SIGERIST, director of the Institute of the History of Medicine of the Johns Hopkins University, and Dr. Esmond R. Long, professor of pathology at the University of Pennsylvania, director of the Henry Phipps Institute and president of the American Association of the History of Medicine, have been elected honorary members of the Atheneum of the History of Medicine, Buenos Aires.

In a celebration on May 11 of the discovery of uranium, students of chemistry at the College of the City of New York presented a scroll to Dr. Enrico Fermi, of Columbia University, in recognition of his work in radioactive chemistry. Dr. Fermi, in accepting the award, outlined the history of experiments with uranium.

THE annual award of merit, given by the Alumni Association of Stevens Institute of Technology for distinguished service to the school, was presented on May 10 to Dr. Franklin De Ronde Furman, professor of mechanism and machine design, who will retire on

September 1, after having served for forty-eight years on the faculty, the last thirteen as dean. Dr. Furman received the award from Dr. Harvey N. Davis, president of the institute, at the alumni dinner at the Union Club. The retiring dean will be succeeded next September by Frederic E. Camp, formerly assistant to the dean of Princeton University and a member of the Stevens Board of Trustees.

DR. F. S. MCKAY has been elected a veteran member of the International Association for Dental Research. This action, which grants a life membership, was in recognition of his outstanding contributions to endemic mottled enamel.

CHARLES RAY, JR., research fellow of the Blandy Experimental Farm of the University of Virginia, was awarded the annual research prize of the Virginia Academy of Science at its annual meeting in Richmond on May 2 and 3, for his paper entitled "Cytology and Genetics in the Flax Genus, *Linum*."

DR. JOHN H. YOE, professor of chemistry at the University of Virginia, and Dr. Lyle G. Overholser, research assistant in analytical chemistry, have been given the 1941 Interacademy Award for their paper on the "Application of a New Class of Organic Reagents to the Detection and Determination of Palladium." This paper won the Jefferson Award of the Virginia Academy of Science at its annual meeting last May and thus automatically entered competition for the Interacademy Award, which is the Jefferson Gold Medal and a cash prize of \$100 for the

paper adjudged the best from the Academies of Science of Florida, Georgia, North Carolina, South Carolina and Virginia.

DR. W. H. GATES, head of the department of zoology of the Louisiana State University, on April 26 was elected president of the Louisiana Academy of Sciences at the eleventh annual convention held at Lake Charles. The meeting in 1942 will be held at New Orleans.

DR. JAMES HOWARD MEANS, Jackson professor of clinical medicine at the Harvard Medical School, was elected president of the Association of American Physicians at its fifty-sixth annual meeting at Atlantic City. Dr. George Blumer, David P. Smith clinical professor of medicine at the School of Medicine of Yale University, was elected vice-president. Dr. Alphonse R. Dochez, John E. Borne professor of medical and surgical research at the College of Physicians and Surgeons of Columbia University, was elected to the council.

DR. HENRY C. SWEANY, of Chicago, was named president-elect of the National Tuberculosis Association at the recent meeting in San Antonio, Texas.

DR. RALPH H. MUELLER, professor of chemistry at New York University, was elected chairman of the New York Section of the American Chemical Society at the annual meeting of the section on May 9. Dr. Charles N. Frey, director of the Fleischmann Laboratories of Standard Brands, Inc., was chosen chairman-elect, to take office next year.

The Experiment Station Record reports that Dr. William F. Kirkpatrick, head of the department of poultry husbandry of the University of Connecticut, retired on February 1. His service to the institution began in 1912 and was preceded by five years in the Rhode Island Station and two years in the Mississippi College and Station. He has been succeeded by Dr. H. M. Scott, associate professor of poultry husbandry and poultry production in the Kansas College and Station.

PROFESSOR FRANK B. ROWLEY, director of the Engineering Experiment Laboratories of the Institute of Technology of the University of Minnesota, has become head of the department of mechanical engineering. He retains his post as director of the Engineering Experiment Station and of the Oak Street Laboratories.

THE National Organization of Women in Scientific Research of Sigma Delta Epsilon has awarded the \$1,500 National Research Fellowship for 1941-1942 to Dr. Frances Dorris Humm, research assistant in embryology at the Osborn Zoological Laboratory of Yale University. She is making a study of "the

origin and physiology of the pigment cell in the chick and the rat."

DR. DONALD D. VAN SLYKE, member of the Rockefeller Institute for Medical Research, has been elected president of the American Bureau for Medical Aid to China, an affiliate of United China Relief. He succeeds Colonel Theodore Roosevelt, Jr., who resigned when he became commander of the 26th Infantry Regiment.

ACCORDING to *Nature*, Dr. W. W. C. Topley, professor of bacteriology and immunology at the University of London, has been appointed secretary of the British Agricultural Research Council in succession to Sir Edwin Butler, who has retired on account of ill health.

DR. RALPH W. CHANEY, professor of paleontology at the University of California at Berkeley, and Dr. Erling Dorf, paleobotanist of Princeton University, expect to leave about the middle of June for Disco Island, off the west coast of Greenland, under the auspices of the American Greenland Commission, which has been supplying the inhabitants of the Danish colony from New York since the German occupation of Denmark. Dr. Chaney plans to obtain fossil specimens of angiosperms.

The News Bulletin of the Institute of International Education reports that Dr. Zing Yang Kuo, the Chinese psychologist, head of the China Institute of Physiology and Psychology at Chungking, formerly president of Chekiang University in Hangchow, arrived in California recently from Chungking, where he has spent a year. Professor Kuo has long been closely associated with Chiang Kai-shek and is concerned with furthering the cultural relations of China with the United States and with Great Britain.

DR. EARL E. KLEINSCHMIDT, associate professor of public health and preventive medicine at Loyola University, who is chairman of the department of preventive medicine, public health and bacteriology, has leave of absence for three months to enable him to work at Washington in the national defense program making health studies, plans for the protection, care and guidance of students employed in vocational training for defense work in industry and supervising courses of instruction for intensive training of supervisors of health education in schools.

DR. COLIN G. FINK spoke on May 1 as the third annual guest lecturer of the Powder Metallurgy Laboratory of the Stevens Institute of Technology on the "Powder Metallurgy of Ductile Tungsten."

DR. J. O. PERRINE, assistant vice-president of the American Telephone and Telegraph Company, gave a demonstration lecture at the Pennsylvania State College on April 28 on "The Artificial Creation of

Speech." The principal exhibit was the voder. The lecture was sponsored by the Pennsylvania State Student Branch of the American Institute of Electrical Engineers, Sigma Xi and Sigma Pi Sigma.

DR. H. KEFFER HARTLINE, associate professor of physiology at the Cornell University Medical College, spoke on "The Electrical Activity of the Eye" at the annual initiation dinner of the Kappa Chapter of Sigma Xi. The dinner was held at the Men's Faculty Club of Columbia University on May 6.

DR. HARLAN TRUE STETSON, of the Massachusetts Institute of Technology, addressed the University of Michigan Chapter of Sigma Xi at the annual banquet held in Ann Arbor on April 30. He spoke on "The Sun and the Atmosphere."

DR. WILMER SOUDER, principal physicist of the National Bureau of Standards, delivered the annual lecture before the University of Kentucky Chapter of Stefan Bergmann. In addition single lectures have "Scientific Evidence and the Conviction of the Criminal."

As a contribution toward assisting essential American industries in the defense program, Brown University announces a twelve-week summer session of intensive instruction and research in the field of advanced mechanics. Besides a seminar in dynamics and elasticity, regular courses are offered in partial differential equations, fluid dynamics and elasticity. The regular staff for the summer session consists of Dr. Richard von Mises, Dr. Kurt O. Friedrichs, Dr. I. S. Sokolnikoff, Dr. Jacob D. Tamarkin and Dr. Stefan Bergmann. In addition single lectures have been arranged by ten of the leading experts on the practical and theoretical sides of mechanics. Information may be obtained from the dean of the Graduate School.

THE eighteenth annual meeting of the Virginia Chapter of Sigma Xi was held on April 18 at the University of Virginia. Twenty-four members and nineteen associates were initiated into the society. The speaker this year was Dr. George R. Clark, of the department of anatomy of the University of Pennsylvania. His subject was the "Growth and Behavior of Blood Vessels and Certain Other Tissues as Observed Microscopically in the Living Adult Mammal," illustrated by lantern slides and moving films.

THE third annual field meet of the Texas Herpetological Society, under the presidency of Dr. C. S. Smith, of the Southwest Texas State Teachers College, was held on April 19 and 20 at Sealy, with an attendance of thirty-five. Activities included field collections, a barbecue and a campfire discussion of herpetological problems. The guests of the society in-

cluded Karl P. Schmidt, of the Field Museum of Natural History, Chicago, who in an informal talk at the campfire told of his experiences in collecting crocodiles and incidents of his trip to Peru. Officers elected for the coming year were: Dr. Leo T. Murray, of Baylor University, *president*; Jack Davenport, of the Witte Memorial Museum, San Antonio, *vice-president*; Ottys Sanders, manager of the Southwestern Biological Supply Company, Dallas, *secretary-treasurer*.

THE eleventh annual summer Research Conference of the Johns Hopkins University will be held from June 2 to 6 and 9 to 13 at the Henlopen Hotel, Rehoboth Beach, Del. The first week, with Dr. Leslie H. Lerman as chairman, will be devoted to a series of biochemical papers on certain aspects of isotopic work, intermediary metabolism, immunochemistry, protein surface films and natural fibrous proteins. Drs. Rudolf Schoenheimer, William C. Stadie, Vincent J. Schaefer, Michael Heidelberger, M. E. Krahle, W. W. Davis, Joseph Shack and Milton Harris will be the speakers. The second week, with Dr. Alsoph H. Corwin as chairman, will include discussions of chromatographic analysis, isomerization, alkylation, polymerization and the kinetics, mechanisms and thermodynamics of organic reaction. The speakers will be Drs. Frederick D. Rossini, Dorothy Wrinch, Walter A. Patrick, Stephen Brunauer, Alfred W. Francis, H. Mark, Henry Eyring, F. O. Rice and Dr. Corwin. The conference affords an opportunity for a group of specialists to discuss informally various fundamental topics in biochemistry and in organic chemistry. The attendance is kept sufficiently small to allow all present to participate in the discussions. The schedule is so arranged as to leave time for recreation, including surf bathing, golf, fishing, boating and tennis. Further information may be obtained from the director of the conferences, Dr. P. H. Emmett, the Johns Hopkins University, Baltimore, Md.

THE South Carolina Academy of Science held its eighteenth annual meeting at the University of South Carolina on April 26 with an attendance of about three hundred. The morning session was devoted to topics of general interest and to the address of the retiring president, E. B. Chamberlain. The afternoon session was divided into sections for the physical sciences, the biological sciences and for philosophy and psychology. G. Robert Lunz, Jr., of the Charleston Museum, received the Jefferson Award for a paper entitled "Polydora, a Pest in South Carolina Oysters." The Research Grant for 1941 of the American Association for the Advancement of Science was divided between Mr. Lunz and Bud E. Smith, of Coker College. The following officers were elected: *President*,

Dr. F. W. Kinard, Medical College of the State of South Carolina; *Vice-president*, Dr. Velma D. Matthews, Coker College; *Secretary-treasurer*, Dr. Charles F. Poole, U. S. Regional Vegetable Breeding Laboratory; *Executive Committee*, E. B. Chamberlain, Dr. G. G. Naudain, H. E. Sturgeon, C. D. Riddle and Dr. H. L. Hunter; *Curator*, Dr. James E. Copenhagen; *Representative to the American Association for the Advancement of Science*, Dr. Gilbeart H. Collings. The meeting will be held in Charleston in 1942.

CEREMONIES at the laying of the cornerstone of the Langley Porter Clinics, San Francisco, were held on April 5. The exercises included addresses by the Honorable Culbert L. Olson, governor of California, Dr. Robert G. Sproul, president of the University of California, and Dr. Langley Porter, dean emeritus of the School of Medicine. Dr. Aaron J. Rosanoff, director of the Department of Institutions of the State of California, was master of ceremonies. The Langley Porter Clinics, a part of the Department of Institutions, is being constructed at the Medical Center of the university. It will have approximately one hundred beds and an out-patient department for use in the care, study and treatment of acute psychiatric cases.

AN ornithological expedition to southern Texas, Arizona, New Mexico and Colorado, to collect material for proposed new exhibits, was sent out by the Field Museum of Natural History early in April. Emmet R. Blake, assistant curator of birds, and Melvin S. Traylor, Jr., associate in ornithology, are conducting the expedition. They are traveling by automobile and will camp in collecting regions. Collections of reptiles and small mammals are also being made. The expedition, after working in localities ranging from the plains of the deep Southwest to the high Rocky Mountains, is expected to return to Chicago late in July.

At the meeting of the Board of Directors of the Finney-Howell Research Foundation, Inc., the following annual fellowships were awarded: Dr. Glenn

Horner, Algire, to work at the National Cancer Institute, Bethesda, Md.; Dr. Earl Leroy Green, to work at the Jackson Memorial Laboratory, Bar Harbor, Me.; Dr. Joseph Gilbert Hamilton, to work at the Radiation Laboratory, University of California, Berkeley, and Dr. Rose I. Shukoff, to work at the Glasgow Royal Cancer Hospital, Glasgow, Scotland. Fellowships were renewed for a year for Drs. Margaret Nast Lewis, Bernard E. Kline, Julius Charles Abels, Alfred Marshak, John F. Menke and Paul C. Zamecnik. Fellowships carrying an annual stipend of \$2,000 are awarded for the period of one year, with the possibility of renewal up to three years, at the annual meeting of the Board of Directors, held at the end of February. Applications must be made on the blank forms furnished by the secretary, and must be filed in the office of the foundation before January 1 of each year. Fellowships are awarded only for research into the cause or causes and the treatment of cancer.

THE regular annual meeting of the Trustees of the Elizabeth Thompson Science Fund was held on April 21. Grants were awarded as follows: \$500 to Dr. Rose L. Mooney, H. Sophie Newcomb Memorial College, for a study of the structure of the monosaccharides; \$250 to Dr. Edward Girden, Brooklyn College, for a study of pupillary changes in human subjects who have been subject to the process of conditioned reflexes; \$150 to Dr. Philip Wright, Montana State University, for a study of the relation of color change to the reproductive cycle in the weasel; \$154 to Dr. Clinton M. Osborn, the Ohio State University, for physiological and chemical studies on the formation of melanin; \$145 to Dr. Robert H. Williams, Boston City Hospital, for a study of some of the pharmacologic effects of the thyrotropic hormone. The following trustees and officers of the fund were reelected: *President*, Gregory Baxter; *Treasurer*, C. P. Curtis, Jr.; *Secretary*, Jeffries Wyman, Jr.; *Trustees*, G. B. Wislocki, A. C. Redfield, J. C. Slater.

DISCUSSION

HEAVY CARBON PRODUCTION BY THERMAL DIFFUSION

CONSIDERABLE experience has now been gained in the concentration of C^{13} using methane gas in a multi-stage thermal diffusion apparatus of the type already described.^{1,2} In view of the interest in this heavy carbon for tracer-atom work, a brief statement of these results would seem to be of value.

¹ W. W. Watson, *Phys. Rev.*, 56: 703 (L), 1939; 57: 899, 1940.

² H. L. Schultz and W. W. Watson, *Phys. Rev.*, 58: 1047, 1940.

To obtain a larger separation factor, at the "heavy" end of the six-unit all-copper apparatus² a 3-meter glass column has been attached by means of a pair of glass convective coupling tubes. The hot surface of this last unit is 6 mm in diameter, heated by a single tungsten wire along its axis. The annular space between hot and cold surfaces is 4.7 mm in width, and at the lower end a collecting volume of from $\frac{1}{2}$ to 2-liter capacity is convectively attached. All hot surfaces have been held at 350° C., the power consumption being about 6½ kw with a gallon of water per minute to cool the outer surfaces. The total length