

in aeroplane structure, are of fundamental importance, but are exceedingly difficult; and here, as elsewhere, Professor Lamb's mathematical skill and power of clear exposition have proved of the highest value.

Davy Medal. Professor Herbert Brereton Baker.—Professor Baker's researches in various fields of chemical investigation, his examination of highly purified tellurium from various sources for the possible presence of higher members of the same group of elements, and the redetermination of its atomic weight, are of outstanding merit. It is, however, his remarkable researches on the influence of traces of water in modifying chemical change, whether of the nature of combination or of decomposition, which constitute perhaps his especial distinction. The results obtained by complete drying were as remarkable as they were unexpected, because they were in direct opposition to those which followed careful drying by usual methods. The bearing of Professor Baker's researches on theories of chemical change is as important as his conclusive experimental demonstrations of the phenomena themselves.

Hughes Medal. Dr. Robert Andrews Millikan.—Dr. Millikan has long been regarded as one of the most skilful experimenters in physical science. He is awarded the Hughes medal especially for his determinations of the electronic charge e and of Planck's constant h . When physicists were still ignorant of the value of the electronic charge to within 5 per cent., Dr. Millikan, by a method of the utmost ingenuity, arrived at the value 4.774×10^{-10} E.S.U., for which he claimed an accuracy of one part in a thousand, a claim which has stood the test of time. His determination of h was not only remarkable in itself, but was of still greater value as finally vindicating the Einstein-Bohr view of the nature of the photo-electric phenomenon.

SCIENTIFIC NOTES AND NEWS

THE presidential address of Professor J. Playfair McMurrich, of the University of Toronto, given before the American Association for the Advancement of Science at Cincinnati on the evening of December 27, is printed in the present issue of SCIENCE. Subsequent numbers of the journal will contain the addresses of the vice-presidents of the association and others of the more important addresses and papers presented at the meeting. A special number will contain a full account of the proceedings.

JOHN TATLOCK has been elected president of the New York Academy of Sciences, in succession to Professor R. A. Harper. The vice-presidents for 1924 are: Carl P. Sherwin, Robert Cushman Murphy, William D. Matthew, Robert S. Woodworth.

At the fifth annual meeting of the Chemical Industry Club of London, Sir William Pope was elected president and Professor W. R. E. Hodgkinson, vice-president.

JOSEPH BARCROFT, F.R.S., reader in physiology in the University of Cambridge, has been appointed Fullerian professor of physiology at the Royal Institution, London, in succession to Sir Arthur Keith.

DR. KONSTANTIN VON MONAKOW, professor of neurology in the University of Zürich and the author of numerous works on the normal and morbid anatomy of the brain and spinal cord, has recently celebrated his seventieth birthday.

THE degree of LL.D. is to be conferred on Dr. Simeon E. Josephi, Portland, by the University of Oregon at the commencement exercises at Eugene, in June, 1924, in recognition of his long services and to commemorate the twenty-five years he spent as dean of the medical school of that university.

DR. JACOB G. LIPMAN, of the University of New Jersey, has been appointed a member of the International Commission of Agricultural Ecology.

At the meeting of the Washington Academy of Sciences on November 17, the following program was presented: "The Origin and Development of the Pan-Pacific Scientific Congress," by Dr. J. C. Merriam, president of the Carnegie Institution; "The Australian Meeting in 1923, the Scientific Proceedings," by Dr. T. Wayland Vaughan, of the U. S. Geological Survey; the resolutions adopted by the Congress on International Cooperation in Scientific Research, by Professor H. E. Gregory, of Yale University, director of the Bishop Museum, Honolulu.

THE following lectures have been given before the Astronomy and Physics Club of Pasadena:

November 2, "Anomalies of largely ionized substances in solution in the light of recent theories:" Dr. A. A. Noyes.

November 9, "An ether-drift experiment:" Professor E. B. Wheeler.

November 16 and 23, "The observational evidence of a velocity-restriction in space:" Dr. Gustaf Stromberg.

December 7, "Rainfall and sunspots:" Dr. Dinsmore Alter.

THE Physical Society of Pittsburgh was organized recently by 75 men interested in physics. The following officers have been elected for the coming year: Dr. L. O. Grondahl, *president*; Dr. G. E. Stebbins, *vice-president*; Dr. R. J. Piersol, *secretary-treasurer*. The society gave a dinner with Dr. Niels Bohr as guest of honor on November 28.

AMONG the lectures announced by the Carnegie In-

stitute of Technology for January are a series by Professor Harry N. Holmes, of Oberlin College, who will discuss "Colloid chemistry," "Emulsions," and "Gels" on January 9, 10 and 11; and a series by Professor Alfred Stansfield, of McGill University, between January 14 and 19 on "The electric furnace for iron and steel." Other public lecturers for whom definite dates have not yet been arranged are Dr. John R. Freeman, consulting engineer of Providence, R. I., and Dr. H. Foster Bain, director of the United States Bureau of Mines.

ON December 8, Dr. W. M. Wheeler, of the Bussey Institution, Harvard University, delivered an address at Toronto before the Royal Canadian Institute on "Social Insects."

DR. HENRY LEFFMANN spoke before the Franklin Institute of Pennsylvania on December 13, on "Hydrogen-ion concentration in relation to animal and plant growth."

DR. ALICE HAMILTON, of the Department of Industrial Diseases of the Harvard Medical School, lectured before the Boston University School of Medicine on October 19 on "What we know about industrial diseases."

DR. THEOBALD SMITH, of the Rockefeller Institute for Medical Research, gave an address on comparative pathology at the University of Edinburgh on November 27.

THE Academy of Natural Sciences of Philadelphia announces the foundation, as a trust with the Academy, of "The Joseph Leidy Memorial Fund." The terms of the trust provide for the award of a memorial bronze medal every third year in recognition of "the best publication, exploration, discovery or research in the Natural Sciences in such particular branches thereof as may be designated." The foundation, which has been established by Dr. Joseph Leidy II, nephew of Dr. Joseph Leidy, also provides for an honorarium to accompany the award.

THE Baillie Library of Chemistry, in connection with the department of chemistry of McGill University, was formally opened by a reception on Tuesday, December 11. Dr. Ruttan, the director, gave a short account of the development of the departmental library of chemistry and announced that the Baillie Library would be a continuation and development of the old departmental library, for which purpose an endowment of \$25,000 had been made by the late Mr. John Baillie. The library, which already possesses thirty-nine sets of journals and periodicals, most of which are complete, was endowed in memory of George Irvine Baillie, a student in chemical engineering who was killed at the battle of Amiens in 1918.

The reading room contains a portrait of Lieut. Baillie and a small, but unique, memorial window. The library will be developed as a reference library and new sets of reference journals in chemistry, as well as the missing volumes required to complete the present sets, are now being added as rapidly as possible.

THE Medical School of Western Reserve University, in Cleveland, announces the availability of a "Crile Research Fellowship" at \$1,500 per annum for graduates in medicine or others who have proper qualifications and desire to pursue research work in one of the departments of the Medical School. The candidate is eligible for reappointment at \$2,000 the second year. Applicants may address inquiries or brief statements as to qualifications to the committee through Professor Carl J. Wiggers.

NEIL M. JUDD, curator of American archeology in the U. S. National Museum, returned to Washington recently after seven months' exploration in New Mexico and Utah for the National Geographic Society. During the months of May to September, inclusive, Mr. Judd directed the important excavations in Pueblo Bonito, largest of the great communal dwellings in Chaco Canyon, New Mexico. This season's activities concluded the third year of the Pueblo Bonito project; it is anticipated that at least two more years will be required for the complete exploration of this prehistoric village. Following his researches in New Mexico, Mr. Judd led a small reconnaissance party into San Juan county, Utah, to explore an unknown section lying north of the Rio San Juan and east of the Colorado. The prime purpose of the expedition was to ascertain whether further exploration in this region is desirable. Inasmuch as portions of the area visited had never before been entered by white men it is not improbable that the reconnaissance will be resumed on a larger scale at some future date.

UNIVERSITY AND EDUCATIONAL NOTES

NORTHWESTERN UNIVERSITY has received a gift of three million dollars from Mrs. Montgomery Ward, to be expended in the construction of a medical center. It is to be known as the Montgomery Ward Memorial and will house the medical and dental schools and serve for medical welfare work.

SIR HEATH HARRISON, Bart., founder of the chair of organic chemistry in the University of Liverpool, has generously contributed a further sum of £2,500 towards the endowment of the chair.

ANNOUNCEMENT has been made of the appointment of two vice-presidents of the University of Chicago. These are: Professor James H. Tufts, dean of faculties, and Trevor Arnett, formerly auditor of the uni-