

Stadler, University of Missouri; Dr. C. F. Cori, Washington University School of Medicine; Dr. A. H. Sturtevant, California Institute of Technology; Dr. J. W. Gowen, Iowa State College; Dr. A. D. Hershey, Washington University School of Medicine.

The speakers included Dr. C. C. Lindegren, Washington University; Dr. G. W. Beadle, Stanford University; Dr. E. L. Tatum, Stanford University; Dr. M. Demerec, Carnegie Institution of Washington;

Dr. S. Spiegelman, Washington University School of Medicine; Dr. A. Hollaender and Dr. J. P. Greenstein, U. S. Public Health Service; Dr. T. M. Sonneborn, Indiana University; Dr. M. Delbruck, Vanderbilt University; Dr. Salvatore Luria, Indiana University; Dr. Sterling Emerson, California Institute of Technology, and Dr. J. W. Gowen, Iowa State College.

There were various exhibits and demonstrations during the meeting.

SCIENTIFIC NOTES AND NEWS

THE doctorate of laws was conferred on Dr. Edwin G. Conklin, professor emeritus of zoology at Princeton University, on the occasion of the winter graduation ceremonies on February 22.

PROFESSOR CHARLES F. BROOKS, director of the Blue Hill Meteorological Observatory of Harvard University, was feted at the celebration of the twenty-fifth annual meeting of the American Meteorological Society held at Kansas City on January 24, 25 and 26. Professor Brooks organized the society at the meetings of the American Association for the Advancement of Science at St. Louis in December, 1919, and has been its secretary for twenty-five years.

THE Lamme Medal for 1944 of the American Institute of Electrical Engineers, conferred annually on a member of the institute in recognition of "high achievements in the development of electrical apparatus or machinery," has been awarded to Soren H. Mortensen, chief electrical engineer of the Allis-Chalmers Manufacturing Company, Milwaukee, in recognition of "his pioneer work in the development of self-starting synchronous motors and for his contributions to the development of large hydraulic and steam turbine driven generators."

THE Joseph A. Capps Prize for Medical Research of \$400 of the Institute of Medicine of Chicago has been awarded for 1944 to Dr. James A. Roth, of the Medical School of Northwestern University, for his investigation on "The Effect of Caffeine on the Stomach."

DR. STEPHEN S. VISHER, professor of geography at Indiana University, has been elected a Jane Smith life member of the National Geographic Society "in recognition of outstanding services as a teacher of geography and notable publications on soil surveys and climatic and economic geography."

DR. CHARLES-EDWARD AMORY WINSLOW, Anna M. R. Lauder professor of public health and chairman of the department of Yale University, will retire at the end of the academic year after serving for thirty years. Succeeding him as department chairman will

be Colonel Ira V. Hiscock, SC, AUS, professor of public health, now on leave of absence, who is serving as chief of the Public Health Section of the Civil Affairs Division of the War Department.

DR. JOSEPH TRELOAR WEARN, professor of medicine at Western Reserve University, has been appointed dean of the School of Medicine. He succeeds Dr. Torald H. Sollmann, who retired last year on July 1.

DR. SIDNEY J. FRENCH, professor of chemistry at Colgate University, Hamilton, N. Y., has been appointed to the newly established post of acting dean of faculty.

BRIGADIER GENERAL JAMES S. SIMMONS, chief of the Preventive Medicine Service of the Office of the Surgeon General, U. S. Army, is non-resident lecturer for the year 1944-1945 at the School of Public Health of the University of Michigan.

DR. GEORGE P. CHILD, assistant professor of biology at Amherst College, has resigned to become F. B. Stearns fellow in pharmacology at the Medical School of the University of Georgia.

DR. W. E. HANFORD, research chemist, assistant director of research of the General Aniline and Film Corporation at Easton, Pa., has been appointed manager of the central research laboratory of the company.

DR. FRANK M. SURFACE, coordinator since 1943 of sales research, has been made executive assistant to the president of the Standard Oil Company of New Jersey.

THE following appointments have been made to the British Colonial Products Research Council: J. C. Fryer, secretary of the Agricultural Research Council, in succession to the late Dr. W. W. C. Topley, and Professor H. V. A. Briscoe, head of the department of inorganic and physical chemistry of the Imperial College of Science and Technology, in succession to the late Sir John Fox, government chemist.

DR. J. F. C. CONN, senior scientific officer of the Ship Division of the British National Physical Labora-

tory, has been appointed naval architect of the British Shipbuilding Research Association.

DR. JAMES G. NEEDHAM, professor emeritus of entomology and limnology at Cornell University, is spending the months of March and April at the Archbold Biological Laboratory at Lake Placid, Fla., doing ecological work on Florida dragonflies and other aquatic insects.

STANLEY F. MORSE, agricultural consultant since 1916 with private practice in the United States and Latin America, previously state director of agricultural extension and professor of agriculture at the University of Arizona, is now chief of the American Food Mission, U. S. Foreign Economic Administration, to French North Africa. He has been serving also as chief of the Food Division of the North African Joint (Anglo-American) Economic Mission. His address is Box 861, Winter Park, Fla.

It is reported in the daily press that Professor Frank G. Haughwout and Mrs. Haughwout have been released from Santo Tomas prison in Manila, where they had been interned since 1942. From 1919 until his retirement in 1927 Mr. Haughwout held the position of protozoologist and head of the section of parasitology of the Bureau of Science of the Philippine Islands.

DR. ROY GRAHAM HOSKINS, research associate in physiology at the Harvard Medical School and director of the Memorial Foundation for Neuro-Endocrine Research, Boston, and of the Worcester State Hospital, has been appointed Salmon Memorial Lecturer for 1945. The title of the series is "The Biology of Schizophrenia." The lectures will be given at 8:30 P.M. at the Academy of Medicine, New York City, on the evenings of November 2, 9 and 16.

DR. EDWIN COWLES ANDRUS, associate professor of medicine at the School of Medicine of the Johns Hopkins University and chairman of the committee on medical research of the Division of Medicine of the Office of Scientific Research and Development, gave on February 20 the annual Walter L. Niles Memorial Lecture at the Cornell University Medical College. He spoke on "Wartime Medical Research."

DR. EDWIN B. ASTWOOD, assistant professor of pharmacotherapy at the Harvard Medical School, will deliver the sixth Harvey Society Lecture of the current series at the New York Academy of Medicine on March 15. He will speak on the "Chemotherapy of Hyperthyroidism."

THE fourth Edwin R. Kretschmer Memorial Lecture of the Chicago Institute of Medicine will be delivered at the Palmer House on April 27 by Dr. William Bloom, professor of anatomy at the School of Medi-

cine of the University of Chicago. The subject will be "Experiments on Hematopoiesis."

ONE hundred and fifty members of the staffs of the Shell Development Company in the San Francisco Bay Area, who are members of the Society of the Sigma Xi, have organized the Shell Development Research Club, with principles, objectives and qualifications for membership identical with those of the society. The petition of the club for affiliation with the national organization was granted last December and the formal ceremony will take place on March 21 at the Hotel Claremont in Berkeley. Professor George W. Beadle, of the department of biochemistry, Stanford University, has been designated by Sigma Xi to be their installing officer. At the same time one hundred and fifty local members of the club will be initiated. The address of the evening will be delivered by Professor William H. Wright, of the Lick Observatory, University of California.

THE meeting of the Society for the Promotion of Engineering Education that was planned to be held at St. Louis from June 21 to 24 has been cancelled in compliance with the request of the War Committee on Conventions of the Office of Defense Transportation.

At the February meeting of the Instrument Society of Washington, L. F. Crabtree, of the Automatic Electric Company, spoke on "The Design and Application of Electromagnetic Relays," illustrated with diagrams and design charts. An informal communication on "The Design of Corrugated Diaphragms" was presented by Dr. W. G. Brombacher, chief of the Aeronautic Instruments Section of the National Bureau of Standards. The first issue of the news letter of the society, which has now more than two hundred members, was distributed during the month. At the next meeting to be held on March 20 at 8:00 P.M. in the Interior Department Auditorium, 18th and C Streets N.W., Washington, D. C., F. A. Tompkins, of the Eastman Kodak Company, will speak on "The Use of Photographic Recordings in Instruments."

THE Charles E. and Emma H. Morrison Fund of \$1,750,000, bequeathed to Northwestern University by the late Mrs. Emma H. Morrison, has been used to establish four professorships. These include a professorship in zoology and a professorship in pathology.

THE Cleveland Health Museum has received authorization from the Colombian Government to duplicate seventy-three units of its exhibits, to be used as a traveling health exhibition in Colombia. Among the duplicates, which will be captioned in Spanish and will occupy an area of two thousand five hundred square feet, are exhibits on preventive dentistry, tuberculosis,

the conservation of hearing and of eyesight, the general biology of the human body and a complete duplicate of the nutrition exhibit "Food for Health."

THE Ordnance Distinguished Service Award has been granted to the Case School of Applied Science. The presentation took place at an all-college convocation, on October 20, and the presentation address was given by Brigadier General A. B. Quinton, Jr., chief of the Detroit Ordnance District Office, representing Major General G. M. Barnes, chief of the Research and Development Service of the U. S. Ordnance Department. This award is in recognition of the work of the department of metallurgical engineering, particularly for the work carried forward by Dr. George Sachs, professor of physical metallurgy, as technical supervisor. His work and that of a group of graduate assistants was carried out with the cooperation of the Frankford Arsenal. At the convocation an address was made on "Metals in War and in Peace," by Dr. Clyde Williams, director of the Battelle Memorial Institute and chairman of the War Metallurgy Committee.

Nature writes: "At the beginning of the war, a number of scientific men in England and France became conscious of the lack of close knowledge and contact between the science and scientific workers of the two countries. As a result, they founded in April 1940 an Anglo-French Society of Sciences to assist the removal of this lack of mutual knowledge. The society was organized in two groups, under the presi-

dencies of Professor P. A. M. Dirac and Professor F. Joliot. The occupation of France interrupted normal proceedings, but during the occupation some members became very prominent in the French resistance movement. The liberation of France has enabled the society to hold its first conference, which was on the topic of 'The Solid State,' and was held in London on January 20 at the Society for Visiting Scientists. Professor Joliot and Mme. Irene Curie-Joliot traveled from France to take part in the proceedings, and were accompanied by Professor Wyart, Dr. J. Laval and Dr. Mathieu."

RECOGNIZING the increasing importance of the communications field, the French Government has decided to establish a modern National School of Telecommunications. Its specific function will be to connect all scientific research on this subject directly with the working industry. Modern and specialized laboratories have already been built, and it is expected that regular courses will be opened soon.

ACCORDING to *Current Science* the Council of Scientific and Industrial Research of India will divide the Laboratories of the Board of Scientific and Industrial Research into two sections—a chemical laboratory and a physical laboratory—with a view to facilitating their amalgamation, respectively, with the National Chemical and the National Physical Laboratories, the plans for which have already been drawn up. Dr. S. Siddiqui will be placed in charge of the chemical section, and Dr. Lal C. Verman will be responsible for directing the work of the physical section.

DISCUSSION

SIR ISAAC NEWTON AND THE SENSITIVE RADIOMETER

IN "Contributions from the Mount Wilson Observatory," *Astrophysical Journal*, Vol. LXIX, pp. 293-311, 1929, I described a tiny radiometer with triple vanes cut from house-fly's wings. It was used with some success to measure the distribution of energy in the spectra of the brighter stars, with the aid of the 100-inch reflector.

As first set up, in a sealed quartz tube filled to 0.2 millimeters mercury pressure with hydrogen gas, the tiny suspension, whose weight was 0.94 milligram and total moment of inertia was 290×10^{-9} gram centimeters², had a time of single swing of 12 seconds. But in an ill-advised moment I cleaned the outside of the quartz tube. It became electrified. The time of single swing dropped below one second and never recovered beyond 1.5 seconds thereafter, despite all attempts to discharge the electric field of force.

We have made several fruitless subsequent attempts to overcome this difficulty. My colleagues, Messrs. Hoover and Clark, used a tube painted with colloidal

graphite, leaving only a small aperture clear to admit radiation. But this clear spot was sufficient to bring ruinous electric influences.

I have recently read Dr. Cajori's exhaustive historical treatment of the circumstances which led Sir Isaac Newton to defer his announcement of the law of gravitation from 1666 to 1686. He shows that Newton must have been aware in 1666 of several fairly accurate determinations of the length of 1° of the earth's circumference. Hence the generally accepted explanation of the delay, namely, that he failed to get good agreement on the moon's motion until Picard's results became known, is inadmissible. Cajori agrees with Adams, Glaisher and Turner that the real reason for Newton's delay was one of exact accuracy which might not have weighed with lesser men. The moon is so far away that any error in assigning the position of the seat of the attractive center within the earth would be negligible. But when one announces as a law that every particle of matter attracts every other particle with a force proportional to the product of their masses, and inversely to the square of their dis-