

## SCIENTIFIC NOTES AND NEWS

DR. JULIAN HUXLEY, secretary of the Zoological Society, London, was the guest of honor on December 2 at a dinner arranged by the Smithsonian Institution, the American Association for the Advancement of Science and *The Scientific Monthly*. Dr. Forest Ray Moulton, permanent secretary of the association, presided. Remarks were made by a representative of the Marquis of Lothian, the British Ambassador, who was unable to be present, and by Dr. Charles G. Abbot, secretary of the Smithsonian Institution. Dr. Isaiah Bowman, president of the Johns Hopkins University, introduced Dr. Huxley, whose address was entitled "Science, Social and Unsocial."

DONALD WILLS DOUGLAS, president of the Douglas Aircraft Company, Santa Monica, Calif., has been awarded by the Institute of the Aeronautical Sciences the Daniel Guggenheim Medal for 1939 "for outstanding contributions to the design and construction of transport airplanes."

THE Lamme Medal of the Ohio State University was presented to Thomas Alvin Boyd, since 1923 head of the fuel department of General Motors Research Laboratories, who was the codiscoverer of anti-knock effects of liquid lead compounds, at a dinner of the fourth annual Industrial Research Conference.

FREDERICK SKENE, who for eighteen years has been dean of the School of Technology of the College of the City of New York, was the guest of honor at a reception by the Engineering Alumni on November 29 at the City College Club.

FRANCIS P. GARVAN, JR., has been elected *president* of the Chemical Foundation, an office held by his father, the late Francis P. Garvan, from the formation of the foundation until his death in 1937. George J. Corbett was elected *vice-president*; William M. Buffum, *treasurer*, and Edward J. Muhs, *secretary*.

CERTIFICATES of honorary membership in the American Society of Mechanical Engineers were presented at the sixtieth annual meeting, which opened in Philadelphia on December 4, to Dexter Simpson Kimball, dean-emeritus of the College of Engineering, Cornell University; to Edwin Jay Prindle, retired patent attorney and mechanical engineer, East Orange, N. J.; to Charles T. Main, industrial engineer and expert on power and textile plants, Boston, Mass., and to Henry Hague Vaughan, consulting engineer and president of the Canadian Foreign Investment Corporation, Montreal, Canada.

DR. WILDER PENFIELD, director of the Montreal Neurological Institute and professor of neurology at McGill University, has been elected president of the Royal College of Physicians and Surgeons of Canada.

THE degree of doctor, *honoris causa*, has been conferred by the faculty of medicine of the University of Bordeaux on Dr. Constantin Daniel, professor of obstetrics and gynecology at the University of Bucharest. The diploma and the insignia were handed to him in the presence of the deans of the university and of prominent citizens.

DR. NAGAMICHI KURODA, an authority on the birds of Japan and eastern Asia, has succeeded to the title of Marquis Kuroda previously held by his father, who died last August at the age of seventy-two years.

ACCORDING to the *Australian Journal of Science*, the title of emeritus professor has been conferred by the senate of the University of Sydney on Dr. J. Douglas Stewart, who recently retired from the chair of veterinary science at the university. Professor Stewart was the first professor of veterinary science at Sydney, and served for thirty years as dean of the faculty.

DR. W. ALBERT NOYES, JR., has been appointed head of the department of chemistry of the University of Rochester. He succeeds Professor Victor J. Chambers, who has become professor emeritus.

DR. HARRY STACK SULLIVAN, chairman of the faculty of the Washington School of Psychiatry, has been appointed professor of psychiatry and director of the department of psychiatry and neurology at the Georgetown University School of Medicine. He succeeds the late Dr. Daniel Percy Hickling, who was a member of the faculty for more than forty years.

*Industrial and Engineering Chemistry* reports that Jules Bebie, for a number of years director of research at the Monsanto Chemical Company, has been appointed lecturer in chemical engineering at Washington University, St. Louis.

ERWIN H. AMICK has resigned his position with the Standard Oil Development Company to become an assistant professor in chemical engineering at the University of Pennsylvania.

SIR ROBERT KELLY, from 1922 to 1939 professor of surgery at the University of Liverpool, has retired with the title emeritus.

DR. RICHARD VAN DER RIET WOOLLEY has been appointed director of the Commonwealth Solar Observatory at Mount Stromlo, Australia. Dr. Woolley was chief assistant at the Royal Observatory, Greenwich, from 1933 to 1937, and since then has been John Couch Adams astronomer in the University of Cambridge. He has been editor of *The Observatory* since 1933.

DR. ELMER O. KRAEMER, formerly connected with the Experimental Station of E. I. du Pont de Nemours and Company, has recently returned from Europe, where he spent a year as fellow of the Lalor Foun-

dation, continuing his researches on the sizes and shapes of giant molecules with Professor The Svedberg at the University of Upsala, Sweden. Dr. Kraemer is now associated with the Biochemical Research Foundation of the Franklin Institute in Philadelphia.

DR. CHARLES O. WARREN, JR., instructor in physiology at Cornell University Medical College, has been awarded a grant from the Committee on Scientific Research of the American Medical Association for the continuation of studies on the metabolism of bone marrow. A renewal has been made of the grant of last year to Dr. Joseph H. Roe, professor of biochemistry in the School of Medicine of the George Washington University, in support of the continuance of his work on methods for the determination of ascorbic acid and of a study of the effect of vitamin C upon gastric function.

DR. IRVINE MCQUARRIE, head of the department of pediatrics at the Medical School of the University of Minnesota, has leave of absence. He plans to spend six months as visiting professor of pediatrics at the Peiping Union Medical College. He will leave for China early in January.

ACCORDING to *The Harvard Alumni Bulletin*, Dr. Lewis W. Hackett, who represents the International Health Division of the Rockefeller Foundation in the Mediterranean region, has moved from Rome to Egypt. His address after January 30 will be the Public Health Laboratories, Cairo.

HARLAN B. HOLMES returned to the service of the Bureau of Fisheries in October after a four-year period of detail to the War Department, during which time he designed the fishways at Bonneville Dam and supervised the initial period of their operation. Mr. Holmes now assumes charge of the recently established Hydraulics Section of the Division of Scientific Inquiry. Associated with Mr. Holmes in the Hydraulics Section is O. W. Lindgren, associate hydraulic engineer, who has recently been engaged in directing the installation of screens at various federal irrigation projects in the Northwest.

DR. WILLIAM M. MANN, director of the National Zoological Park, Washington, D. C., lectured on November 30 to an audience numbering over eight hundred before the Lancaster Branch of the American Association for the Advancement of Science. He described the work accomplished by the National Geographic Society-Smithsonian Expedition of 1937 in the Dutch East Indies.

PROFESSOR DOUGLAS JOHNSON, of Columbia University, gave an illustrated lecture on "The Physical History of the Grand Canyon District" before the students and faculty of the Connecticut College on October 31. On December 7 he addressed the Geology

Society of the College of the City of New York on "The Supposed Meteorite Craters of the Carolina Coast."

DR. F. F. NORD, of Fordham University, editor of *Ergebnisse der Enzymforschung*, lectured under the auspices of the Research Council at the Iowa State College on November 27 and 28, on "Low Temperature and Its Relation to Colloid Chemistry" and on "The Enzyme System of *Fusaria* and Its Action." At a meeting of Sigma Xi he spoke on "The Modern Concepts of the Mechanism of Alcoholic Fermentation."

DR. GEORGE JOBBERS, head of the department of geography of the Canterbury University College, Christchurch, New Zealand, is a visiting scholar in geomorphology at Columbia University during the current semester. In November he delivered a course of four illustrated lectures on "The Geology of New Zealand," under the auspices of the department of geology. On November 28 he gave an illustrated lecture on New Zealand Landscapes, under the auspices of the Columbia Institute of Arts and Sciences.

THE Croonian lecture of the Royal Society was delivered by Professor J. Gray at the department of zoology of the University of Cambridge on November 16. His subject was "The Aspects of Animal Locomotion."

ACCORDING to *The Fisheries Service Bulletin*, Leo D. Sturgeon, Foreign Service Officer of the Department of State on detail in the department, has been assigned to serve as assistant to Counselor R. Walton Moore. The primary duty of Mr. Sturgeon is to assist in the formulation of policy and in the coordination of action in the State Department on international aspects of fishery matters. This will involve the study and handling of problems concerning methods of regulating the fisheries and the formulation of arrangements for the conservation of international fisheries of concern to American interests. Mr. Sturgeon will act as liaison officer between the Department of State and other government agencies.

THE *Journal* of the American Medical Association reports that members of the state board of examiners in the basic sciences for Florida include the following recently appointed by the governor: Dr. Mark Wirth Emmel, professor of veterinary science, University of Florida, *chairman*; Dr. John Ferguson Conn, professor of chemistry, the John B. Stetson University, *secretary*; Dr. Ezda May Deviney, professor of zoology, Florida State College for Women; Dr. Jay F. W. Pearson, professor of zoology, University of Miami, and Dr. Donald D. Bodé, professor of chemistry, Tampa University.

DR. A. O. WEESE, professor of zoology in the Uni-

versity of Oklahoma, was elected president of the board of directors of the newly incorporated Grassland Research Foundation at a meeting held in Norman, Okla., on November 7. Other officers are G. W. Goldsmith, professor of botany at the University of Texas, and V. E. Shelford, professor of zoology at the University of Illinois, *vice-presidents*; J. M. Aikman, professor of botany at Iowa State College, *secretary*; and Mrs. M. W. Shackelford, professor of biology at the Oklahoma College for Women, *treasurer*. Incorporation of the group has been completed under the laws of Oklahoma. Membership, however, includes those living in the grassland area as far distant from Oklahoma as Saskatchewan, Oregon, Arizona, Texas and Illinois. A meeting of the corporation will be held in Columbus, Ohio, during the Christmas vacation, as part of the meeting of the American Association for the Advancement of Science. The Grassland Research Foundation is the outcome of the work of the committee on ecology of the grasslands of the National Research Council.

For the positions in the Bureau of Animal Industry, Department of Agriculture, of protozoologist at a salary of \$3,800 a year, of associate protozoologist at a salary of \$3,200 a year and assistant protozoologist at a salary of \$2,600 a year, applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than January 2. Vacancies in positions requiring similar qualifications will be filled from these examinations, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion. The salaries named above are subject to a deduction of  $3\frac{1}{2}$  per cent. toward a retirement annuity. Separate lists of eligibles will be established in each of the above grades in: (1) Coccidiosis; (2) parasitic protozoa of the blood; (3) general parasitic protozoa. Permanent employees in the classified service will, upon earning a passing mark in these examinations, have their names placed

upon a separate list of eligible government employees, which list may be certified separately to fill appropriate vacancies in accordance with the civil-service rules.

DR. ERNEST CARROLL FAUST, secretary of the American Academy of Tropical Medicine, reports that the sixth annual session of the academy was held in conjunction with the American Society of Tropical Medicine meeting with the Southern Medical Association at Memphis, Tenn., on November 23. The presidential address was delivered by Dr. W. W. Cort, of the Johns Hopkins University, on the subject "Research on Helminth Diseases and Public Health Progress." The second presentation of the Theobald Smith Gold Medal of the George Washington University for distinguished work in tropical medicine was presented by Dr. Alfred C. Reed, of the University of California, for the academy, to Dr. Richard P. Strong, of the Harvard Medical School. At the business session of the academy, the officers elected were: Admiral Charles S. Butler, *president*; Dr. Marshall A. Barber, *vice-president*; Dr. Ernest Carroll Faust, *secretary*; Dr. Thomas T. Mackie, *treasurer*; Colonel George R. Callender, *councillor*. Five new members were elected, and Dr. L. O. Howard, member, was elected to honorary membership. It was voted to hold the seventh annual session of the academy with the American Society of Tropical Medicine at Louisville, Ky., in November, 1940.

ACCORDING to the *Journal* of the American Medical Association, the Milwaukee Academy of Medicine and the Marquette University School of Medicine have consolidated their medical libraries, forming a collection of 34,000 volumes. Dr. Irving S. Cutter, dean of Northwestern University Medical School, Chicago, was the speaker at the ceremony inaugurating the new library on October 17. Facilities have been enlarged at the university to receive the academy's library, the most important part of which is the collection of the late Dr. Horace Manchester Brown.

## DISCUSSION

### HEAVY WATER AND LONGEVITY

THE suggestion by Barnes<sup>1</sup> that deuterium oxide would be found to retard life processes, thus favoring longevity, was predicated upon the lower energy content of deuterium as compared with hydrogen.

The undersigned<sup>2</sup> have shown, during the past summer, that heavy water retards four chief growth activities of *obelia geniculata*. This is a sessile marine animal living in colonies of a few millimeters length. Forty-six experiments on 27,000 animals were made

with concentrations up to 10 per cent. D<sub>2</sub>O. The results accord with the general trend of observations by others on the growth of various low forms of life<sup>3</sup> and can best be interpreted on the assumption that deuterium oxide blocks anabolism. Since the evidence concerning regressive and senile stages of *obelia* also favors retardation rather than acceleration by D<sub>2</sub>O, the prolongation of individual existence in these animals appears established.

While our results, as far as they go, fulfill the prediction of Barnes, they do not contribute convincingly

<sup>1</sup> T. C. Barnes, *Jour. Am. Chem. Soc.*, 55: 4332-4333, 1933.

<sup>2</sup> F. S. Hammett and H. G. Barbour, *Growth*, 3: 4, 1939.

<sup>3</sup> See reviews: S. L. Meyer, *Jour. Tenn. Acad. Sci.*, 10: 111-115, 1935; H. G. Barbour, *Yale Jour. Biol. Med.*, 9: 551-565, 1937; C. B. Davenport, *Ann. Rev. Physiol.*, 1: 81-108, 1939.