Claus Hugo Hermann Weyl, professor of mathematics, Institute for Advanced Study, Princeton.

Foreign associates were elected as follows:

Bernardo A. Houssay, facultad de medicina, Instituto de Fisiologia, Buenos Aires, Argentina.

James P. Hill, professor emeritus of embryology, University of London.

Giuseppe Levi, visiting professor, Institute of Pathology, University of Liège.

Sir Henry Dale, National Institute for Medical Research, Hampstead, England.

Dr. L. J. Henderson, Lawrence professor of chemistry, Harvard University, was reelected foreign secretary for a term of four years, beginning on July 1. Dr. J. C. Hunsaker, head of the department of mechanical engineering, Massachusetts Institute of Technology, was elected to succeed Dr. Arthur Keith as treasurer for a term of four years, beginning on July 1.

Members of the council elected were: Samuel A. Mitchell, professor of astronomy and director of the McCormick Observatory, University of Virginia, to succeed the late F. K. Richtmyer, for the term ending June 30, 1941; W. Mansfield Clark, De Lamar professor of physiological chemistry of the School of Medicine of the Johns Hopkins University, succeeding H. S. Jennings, for the term ending June 30, 1943; Oswald Veblen, professor of mathematics at the Institute for Advanced Study, Princeton, was reelected for the term ending June 30, 1943.

SCIENTIFIC NOTES AND NEWS

DR. HERMAN LEROY FAIRCHILD, professor of geology emeritus of the University of Rochester, observed his ninetieth birthday on April 29.

DR. WALTER B. CANNON, George Higginson professor of physiology in the Harvard Medical School, retiring president of the American Association for the Advancement of Science, has been elected a foreign member of the Royal Academy of Science of Sweden and also an honorary fellow of the National Academy of Medicine of Mexico.

THE honorary degree of doctor of agriculture of the North Dakota Agricultural College will be conferred on H. H. Kildee, dean of the Division of Agriculture at the Iowa State College at Ames, and on M. L. Wilson, head of the Federal Extension Service.

THE University of Aberdeen on April 4 conferred the doctorate of laws on Sir William Jameson, professor of public health at the University of London, and on Professor F. A. Lindemann, professor of experimental philosophy at the University of Oxford.

DR. FRANZ BOAS, emeritus professor of anthropology at Columbia University and chairman of the Committee for Democracy and Intellectual Freedom, was presented on April 20 with the annual award of the American Federation of Teachers for "outstanding services in the cause of education for democracy."

THE William Bowie Medal of the American Geophysical Union was presented at the recent Washington meeting to Dr. Arthur L. Day, formerly director of the Geophysical Laboratory of the Carnegie Institution of Washington. The presentation was made by Dr. T. Wayland Vaughan, emeritus director of the Scripps Institution of Oceanography. The medal was established in 1939 as an award "for outstanding researches on problems in geophysics." It is named in honor of Major William Bowie, of the U. S. Coast and Geodetic Survey.

A PORTRAIT of the late Dr. James Tate Mason, of Seattle, was presented to the Department of Medicine of the University of Virginia, Charlottesville, on April 13, by members of his class at the university and other friends. Dr. Mason died in 1936 a few weeks after he had been installed *in absentia* as president of the American Medical Association.

PROFESSOR R. J. POOL, of the department of botany of the University of Nebraska, was honored at a dinner given at the Student Union on the evening of April 20, "in recognition of his service of thirty-three years as a teacher in the department, during the last twenty-five years as chairman." The department was founded in 1884 by Dr. Charles Edwin Bessey, who was its head until his death in 1915. There have been but two administrative heads of the department since its establishment fifty-six years ago. The dinner was followed by an informal program, at the close of which Dr. Pool was presented with a bound volume containing letters of congratulation from a hundred and thirty-two former graduate students of the department and from other professional friends throughout the world.

THE 1940 medal of the Canadian Society of Chemical Industry will be presented to Fred J. Hambly, of the Electric Reduction Company, Ltd., Buckingham, Quebec, at the annual convention in May of the Canadian Chemical Association.

THE Iron and Steel Institute, London, has awarded the Bessemer Gold Medal for 1940 to Dr. Andrew McCance, of Glasgow, in "recognition of his eminent services in connection with the application of science to the iron and steel industry."

DR. DETLEV W. BRONK, professor of biophysics

and director of the Institute of Neurology and of the Johnson Foundation for Medical Physics at the University of Pennsylvania, has been appointed professor of physiology and head of the department of physiology and biophysics at Cornell University Medical College. Dr. Bronk succeeds Dr. Joseph C. Hinsey, who recently resigned the professorship of physiology to become professor of anatomy and head of that department. Other new appointments, all from the University of Pennsylvania, are Dr. H. Keffer Hartline, associate professor; Drs. Arthur J. Rawson, John P. Hervey and M. G. Larrabee, assistant professors, and Frank Brink, instructor. Dr. Dayton J. Edwards and Dr. Wm. H. Chambers continue as associate professors in the department.

DR. FRED C. KOCH, professor of physiological chemistry at the University of Chicago and chairman of the department of biochemistry, has been appointed Frank P. Hixon distinguished service professor of biochemistry. He succeeds Dr. Anton J. Carlson, who will retire with the title emeritus at the end of the current year.

DR. EVERETT STANLEY WALLIS, associate professor of chemistry at Princeton University, has been promoted to the rank of professor and has been designated A. Barton Hepburn professor of organic chemistry. He succeeds Professor Lauder W. Jones, who retired in 1937 after serving for seventeen years. The professorship was established by Mr. Hepburn in 1919.

DR. WILLIAM G. YOUNG, associate professor of chemistry at the University of California at Los Angeles, has been named chairman of the department of chemistry to succeed the late Dr. William Conger Morgan.

PROFESSOR LASZLO LECHMEISTER, of the University of Pécs, Hungary, whose investigations of carotenoids and other naturally occurring substances are well known, has been appointed professor of organic chemistry in the California Institute of Technology and is now in residence in Pasadena.

Nature states that Professor F. L. Warren, formerly of the Fuad I University, Cairo, has been appointed professor of chemistry in the Natal University College, Pietermaritzburg.

THE National Tuberculosis Association has approved a grant of $500 to the University of Minnesota for a study under the direction of Dr. Arthur T. Henrici, of the department of bacteriology, for an investigation of the acidfast actinomycetes in relation to tuberculosis.

DR. W. REID BLAIR, who has been connected with the New York Zoological Society for thirty-eight years, since 1926 as director of the New York Zoological Park, retired from active service on May 1.

DR. JAMES STOKLEY has resigned as director of the Buhl Planetarium and Institute of Popular Science, Pittsburgh.

AT the New Orleans meeting of the American Society for Pharmacology and Experimental Therapeutics, Dr. Carl F. Schmidt, professor of pharmacology and experimental therapeutics at the University of Pennsylvania and vice-president of the society, was elected editor of the *Journal of Pharmacology and Experimental Therapeutics* for a three-year term to succeed Dr. Paul D. Lamson.

AN expedition to collect fossil remains for the Field Museum of Natural History left Chicago on April 29 under the leadership of Paul O. McGrew, of the division of paleontology. Other members of the expedition are Orville Gilpin, of Chicago, and John Schmidt, of Homewood, Ill. Most of the summer will be spent along the Pine Ridge escarpment of northwestern Nebraska, southwestern South Dakota and eastern Wyoming.

DR. ALBERT W. C. T. HERRE, curator of ichthyology at the Natural History Museum of Stanford University, left on April 27 for a scientific tour of the Philippines, Malaya, Burma and India. He will investigate fisheries for the U. S. Bureau of Fisheries, and will collect cold-blooded vertebrates.

DR. PERRIN H. LONG, associate professor of medicine at the Johns Hopkins University, gave the sixth lecture in the series of "Lectures to the Laity on the Art and Romance of Medicine" at the New York Academy of Medicine on April 25. The title of his lecture was "Chemical Warfare Against Disease."

THE Christian A. Herter Lectures for the session 1939–1940 at the New York University College of Medicine were delivered on April 9 and 10 by Dr. Lowell J. Reed, dean and professor of biostatistics at the Johns Hopkins University School of Hygiene and Public Health. The subject of the lectures was "Public Health Problems as Related to Population Growth."

PROFESSOR PETER DEBYE, Baker visiting lecturer at Cornell University, will give a John Howard Appleton lecture at Brown University on Friday, May 10. He will speak on "Experimental Analysis of Thermal Motion." On May 3 Professor Harold C. Urey, of Columbia University, gave an Appleton lecture on "The Separation of the Isotopes of Carbon by Chemical Means."

THE ninth annual James Arthur Lecture of the American Museum of Natural History on the "Evolution of the Human Brain" was given by Dr. John F. Fulton, of Yale University, on the evening of May 2. His subject was "A Functional Approach to the Evolution of the Primate Brain."

PROFESSOR IRVINE MCQUARRIE, professor of pediatrics and head of the department of the University of Minnesota, who is visiting professor of pediatrics at the Peiping Union Medical College, addressed the eighth annual meeting of the Sigma Xi Club of Peking on May 4 on "The Significance of Water Metabolism in Health and Disease."

THE western summer meeting of the American Physical Society will be held at the University of Washington, Seattle, from June 18 to 21, in affiliation with the Pacific Division of the American Association for the Advancement of Science. In the East the summer meeting will be held at Pittsburgh on June 20, 21 and 22.

THE department of psychology of the University of California at Los Angeles will celebrate its first semester in its new building on the afternoon of June 13 by presenting a program of four papers. The speakers and their subjects will be as follows: Dr. George M. Stratton, University of California at Berkeley, "Social Psychology"; Dr. Milton Metfessel, University of Southern California, "Criminal Psychology"; Dr. E. R. Hilgard, Stanford University, "Experimental Psychology"; and Dr. R. B. Loucks, University of Washington, "Physiological Psychology." In the evening there will be a social gathering for invited guests and members of the Western Psychological Association, which meets on June 14 and 15.

A SYMPOSIUM on "The Social Function of Science" will be held at the Engineering Societies Building, New York City, on May 9 at 8:15 P.M. by the New York Branch of the American Association of Scientific Workers. The symposium will be a report of the work of a committee and will consist of the following: Introduction, A. Sandow; Historical Aspects of the Science-Society Relationship, C. H. Fuchsman; Science and Education, H. Rogosin; the Organization of Scientific Research, S. A. Karjala; Misapplication and Suppression of Science, E. Kabat. These papers, while individually presented, are the result of discussions of the committee, which, in addition to the speakers, includes N. Boroff and C. Hyman.

DR. W. H. TWENHOFEL, of the University of Wisconsin, visited the Agricultural and Mechanical College of Texas at College Station, from April 16 to 20. While there, he delivered a series of eight lectures on the general topic, "Phases and Problems in Sedimentary Geology." This series of lectures was sponsored by the department of geology and was intended to be of help in Gulf Coast stratigraphy. On Saturday, April 20, a short field trip was arranged for members of the Houston Geological Society and others, followed by a general afternoon conference on "Local Cycles of Sedimentation in Subsurface Correlations." In the evening, a banquet was given by the Geology Club of the Agricultural and Mechanical College. Dr. Twenhofel was made an honorary life member of the club.

THE eighteenth annual meeting of the Georgia Academy of Science was held at Emory University, Atlanta, on April 5 and 6 with an attendance of approximately a hundred and fifty. The program included papers on agriculture, biology, chemistry, mathematics, medicine and physics. Members of the academy and visitors were guests of Emory University at a dinner on Friday evening. After the dinner Dr. Roy R. Kracke, of the Medical School, discussed the relation of certain drugs to blood diseases. The fourth annual meeting of the Georgia Entomological Society was held following the meeting of the academy on April 6 with twenty-five entomologists from various points in the state in attendance. The nineteenth annual meeting of the academy will be held at Wesleyan College, Macon, on April 4 and 5, 1941. Officers for the coming year are: *President,* R. B. Holt, Agnes Scott College; *Vice-president,* W. B. Baker, Emory University; *Secretary-Treasurer,* Geo. H. Boyd, University of Georgia.

THE Medical School, at Chicago, of Northwestern University has received a bequest in excess of $2,000,000 for the erection and endowment of a hospital and for medical research from the estate of Mrs. Margaret Gray Morton. The new hospital will be the fourth medical unit to be built. Recent gifts from G. Herbert Jones, steel manufacturer, are now enabling Wesley Hospital to erect a $2,500,000 building as the third unit in the medical center. Mrs. Morton's bequest is the third large gift received by the university. In March, 1939, $6,735,000 was received from the Walter P. Murphy Foundation of Chicago for the establishment of the Northwestern Technological Institute, and in December $1,500,000 from the estate of Clara A. Abbott for the advancement of medical and surgical science.

A GROUP of psychologists holding the doctor's degree will be given an opportunity to study and conduct research at the Summer Station in Psychology of Cornell University as guests of the university. No tuition or other fees will be charged the guests, unless they are actually enrolled in the regular summer session of the university. Those holding doctor's degrees will be given the status of resident doctors with all the rights and privileges of university membership. Dr. Madison Bentley, emeritus professor of psychology and now psychological consultant on the staff of the Library of Congress, will be in attendance throughout the session. He will assist the departmental staff in placing the facilities of the university at the disposal of the members of the station and in arranging seminars on subjects selected by them.

THE Chicago Section of the American Chemical Society plans to hold an American Chemical Exposition from December 11 to 15 at the Stevens Hotel. Arrangements will be in the hands of leading chemists in the Chicago area and the exposition will have the support and cooperation of national groups, that will officiate in an advisory character. The exhibits will stress the application of chemistry in industry and will reveal many new processes and new developments.

DISCUSSION

VITAMIN L AND FILTRATE FACTOR

LAST year Morgan and Simms[1] reported *inter alia* that "if the mother rats were deprived of the filtrate factor from the day of mating the litters were of normal size and weight, but none could be reared to weaning age." More recently, Sure[2] found that in albino rats complete failure of lactation resulted with the supplement of crystalline thiamin, riboflavin, vitamin B_6, choline and nicotinic acid, and the addition of factor W (filtrate factor) concentrate resulted in success in every trial. In the words of Sure, if there exist needed components other than those just named "these unidentified substances must have been furnished by the solution containing W factor, which was prepared from liver extract." Thus the question of the specific factor for lactation has been narrowed down to the filtrate factor fraction, the fraction in which we found our vitamin L.[3]

Since our first publication on the subject[4] we insisted that the failure of lactation (vitamin L deficiency) can be produced on diet entirely adequate for growth. We recently re-examined the subject and found that our vitamin L complex deficient diet, consisting of polished rice powder 75 g. purified fish protein 10 g., butter fat 10 g., McCollum's salt mixture 5 g., supplemented with acid earth adsorbate of baker's yeast (yield from 10 g. of dried yeast), was absolutely adequate for growth, inasmuch as the growth of young rats on this diet was in no way inferior to that on a similar diet with whole brewer's yeast supplement, replacing acid earth adsorbate. In both cases, young rats weighing about 25 g. grew to about 200 g. in 10 weeks. Vitamin L deficiency produced by us is quite independent of filtrate factor deficiency.

The source of filtrate factor in our vitamin L complex deficient diet proved to be polished rice powder, since when this was extracted with dilute alcohol the L deficient diet above mentioned produced subnormal growth (filtrate factor deficiency).

Another evidence pointing to the non-identity of vitamin L and filtrate factor is based on the fact that two different substances (L_1 and L_2) are involved in vitamin L complex. For example, liver filtrate is an accepted source of filtrate factor and yet we know that it supplies only one (L_1) of the two components. Baker's yeast filtrate is potent as filtrate factor but we also know that it does not contain vitamin L_1. Evidence seems to be growing that the so-called filtrate factor consists of two or more components, but these component substances occur together in liver as well as yeast filtrates. We believe that it is impossible to identify vitamin L with filtrate factor, and that the filtrate factor in the sense of Morgan and Simms and the W factor concentrate used by Sure are mixtures of filtrate factor and vitamin L.

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THE ATTEMPTED CHARACTERIZATION OF MALIGNANT TISSUE PROTEIN WITH D-AMINO ACID OXIDASE

IN a recent paper, Lipmann, Behrens, Kabit and Burk[1] have reported results obtained by subjecting acid hydrolysates of normal and malignant tissue proteins to the action of d-amino acid oxidase. The average percentages of nitrogen liberated by the oxidase were as follows: for proteins (insulin, Bence-Jones protein, gliadin), 1.1 per cent.; for normal tissues, 1.8 per cent.; for one benign tumor, 1.8 per cent.; for malignant tissues, 1.7 per cent., and for one sample of leukemia tissue, 2.1 per cent. 71 to 87 per cent. of the d(−)glutamic acid nitrogen added to the tissue hydrolysates could be recovered. On the basis of these results, the above authors conclude that "whatever interest certain of Kögl's data may retain for general biochemistry, the main contention concerning malignancy specificity[2] is, for the cancer field, evidently no longer tenable." We are unable to agree that the results reported justify this conclusion. Our objections are discussed in the remainder of this communication.

(1) Certain amino acids, notably serine, proline, cystine and alanine, are partly racemized during acid

[1] A. F. Morgan and H. D. Simms, SCIENCE, 89: 565, 1939.
[2] B. Sure, *Jour. Nutrition*, 19: 57, 1940.
[3] W. Nakahara, F. Inukai and S. Ugami, SCIENCE, 87: 372, 1938.
[4] W. Nakahara and F. Inukai, *Sci. Pap. Inst. Phys. Chem. Research*, 22: 301, 1933.

[1] SCIENCE, 91: 21, 1940.
[2] *i.e.*, that malignant tissue protein contains partly racemized glutamic acid residue, as well as small amounts of other slightly racemized residues (leucine, lysine, hydroxyglutamic acid, valine).