

### PROMOTIONS IN THE UNIVERSITY OF CALIFORNIA AT BERKELEY

THIRTY-THREE members of the faculties of the University of California have been promoted to full professorships; thirty-four have been made associate professors, and thirty-two have been given assistant professorships.

At Berkeley, promotions in the sciences are as follows:

*Professorships:* E. W. Gifford, anthropology; R. W. Jeans, architecture; A. S. Foster, botany; L. C. Marshall, electrical engineering; C. J. Vogt, mechanical engineering; C. B. Morrow, mathematics; Miriam Simpson, anatomy; P. L. Kirk, biochemistry; I. L. Chaikoff, physiology; R. C. Tryon, psychology; A. H. Miller, zoology; T. E. Rawlins, plant pathology, and G. J. Seaborg and R. S. Pitzer, chemistry.

*Associate professorships:* Melvin Calvin, chemistry; L. J. Black, electrical engineering; Alfred Tarski, mathematics; L. A. Strait, biophysics; A. L. Foster, mathematics; H. R. Josephson, forestry; H. A. Barker and W. Z. Hassid, plant nutrition; E. M. Mrak, food technology; Helen L. Gillum and Catherine Landreth, home economics.

*Assistant professorships:* E. A. Steinhaus, bacteriology;

H. W. Iversen and P. C. Nelson, mechanical engineering; L. A. Swinford, mathematics; M. W. Morgan, Jr., optometry; W. E. Hazen, physics; A. E. Michelberger, entomology and parasitology, and P. R. Day, soils.

### THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

THE Board of Scientific Directors of the Rockefeller Institute for Medical Research announces the promotion of Dr. Charles L. Hoagland from associate member to member.

Other promotions and new appointments are as follows:

*Promotions:* From associate to associate member, Dr. Lyman C. Craig, Dr. Lewis G. Longworth and Dr. Theodore Shedlovsky. From assistant to associate member, Dr. Paul B. Hamilton and Dr. C. Arthur Knight, Jr.

*New appointments:* Associate member, Dr. Henrik Dam; Associate, Dr. Maelyn McCarty; Assistants, Dr. Charles F. Huebner, Dr. Daniel H. Labby, Dr. Gardner Middlebrook and Dr. Gerald Oster.

The board also announces that Dr. Peyton Rous, who has reached the age of retirement, has been made member emeritus of the institute.

## SCIENTIFIC NOTES AND NEWS

HARVARD UNIVERSITY at its commencement exercises conferred the degree of doctor of science on Sir Alexander Fleming, discoverer of penicillin, professor of bacteriology at St. Mary's Medical School, University of London; on Dr. Roger Adams, head of the department of chemistry of the University of Illinois; on Frederick E. Terman, head of the department of electrical engineering of Stanford University, now on leave as director of radio research for war at Harvard University; on Dr. Edwin J. Cohn, professor of biological chemistry at the Harvard Medical School and director of blood plasma research during the war; on Dr. Frederick V. Hunt, professor of physics and director of the underwater sound laboratory of Harvard University, and on Dr. A. Baird Hastings, professor of biological chemistry at Harvard University. The doctorate of laws was conferred on Bradley Dewey, formerly rubber director of the War Production Board.

SIR ALEXANDER FLEMING, M.D., was awarded the honorary degree of doctor of science at the convocation on June 18 of the University of Pennsylvania. The degree was presented by Dr. A. N. Richards, professor of pharmacology and chairman of the U. S. Committee of Medical Research, to "the discoverer of penicillin, the most potent weapon yet known to man in the war of science against disease."

DR. WALTER S. ADAMS, director of the Mount Wilson Observatory of the Carnegie Institution of Washington, was awarded the honorary doctorate of science by the University of Chicago at the spring convocation on June 15. The citation was as follows: "An astrophysicist who discovered a method of determining the distances of the stars from their spectra and who developed spectrographic instruments of high dispersion for the study of the atmospheres of the stars."

THE degree of doctor of science was conferred at the commencement of Hunter College, New York City, on Dr. Margaret Barclay Wilson, professor emeritus of physiology and hygiene.

DR. JOSEPH W. BARKER, of New York, who has been special assistant to the Secretary of the Navy since before Pearl Harbor and who has been largely responsible for the establishment of the highly successful training programs of the Navy, has received the Distinguished Civilian Service Award. The presentation was made at a special ceremony by Ralph A. Bard, Under Secretary of the Navy. The citation reads: "Through his energy, ability and tact, he contributed in an outstanding manner to the formulation of basic personnel policies and to the highly successful cooperation between the armed services in matters of personnel administration. Through his services Dr.

Barker rendered a distinguished contribution to the Navy and to his country in time of war, which rightly deserves the Navy's highest civilian award." Dr. Barker is returning to his post as dean of engineering, Columbia University.

IN recognition of his work on the various types of Rh factors and on their genetic transmission, the College of Physicians of Philadelphia is awarding on July 14 the Alvarenga Prize for this year to Alexander S. Wiener. Dr. Wiener will give the Alvarenga Lecture before the College of Physicians of Philadelphia and the Philadelphia County Medical Society on October 3, on "Rh Blood Factors in Clinical Medicine." The Alvarenga Prize was established by the will of Pedro Francisco daCosta Alvarenga of Lisbon, Portugal, an associate fellow of the College of Physicians, "to be awarded annually by the College of Physicians on each anniversary of the death of the testator, July 14, 1883." The award is usually made for outstanding published work, and the recipient is invited to deliver an Alvarenga Lecture before the college.

ON the occasion of his retirement after serving for thirty-six years, Dr. John W. Roberts, plant pathologist of the Bureau of Plant Industry of the U. S. Department of Agriculture, was the guest of honor at a banquet given on June 15 by his friends.

HENRY T. HEALD, president of the Illinois Institute of Technology, has been elected president of the Western Society of Engineers.

PROFESSOR W. H. TWENHOFEL, chairman of the department of geology of the University of Wisconsin, who retired on July 1 to become emeritus professor of geology, is spending the summer in Newfoundland, where he is studying the Silurian for the Newfoundland Geological Survey. Dr. Parker D. Trask, of the U. S. Geological Survey, has been appointed professor of geology to carry on instruction in sedimentation, a subject to which Professor Twenhofel has mainly devoted himself.

DR. HARRISON HALE, for the past twenty-seven years head of the department of chemistry of the University of Arkansas, retired on July 1 with the title of emeritus professor of chemistry. Dr. Hale will conduct a survey of the industrial water supplies of Arkansas with the University Bureau of Research. Dr. E. Wertheim, professor of chemistry, will become head of the department.

DR. CARLETON C. MURDOCK, professor of physics at Cornell University, has been elected dean of the faculty. He succeeds Dr. Cornelius Betten, who recently retired. Dr. Murdock has been a member of the faculty of Cornell University since 1909.

DR. SIDNEY J. FRENCH, professor of chemistry at Colgate University, has been appointed dean of the faculty.

WILLIAM I. BOOK, professor of physics at the University of Pennsylvania, who has just attained the age of seventy years, has been appointed professor emeritus. He retired from active duty on July 1. He and Mrs. Book will continue to live in Narberth, Pa., in the house that Professor Book designed and built with his own hands twenty-three years ago. As a tribute to him the Society of the Alumni of the Graduate School of the University invited him to deliver his demonstration lecture on "The Physical Basis of Music" at their annual meeting held on June 27. Professor Book has delivered this lecture to the undergraduates at the close of each academic year for many years.

DR. JOSEPH B. REYNOLDS, professor of mathematics and theoretical mechanics at Lehigh University, has been appointed head of the department of mathematics and astronomy.

AT Yale University Dr. Richard Foster Flint has been promoted to a professorship of geology.

DR. GEORGE A. BURNHAM, associate editor of *The Review of Scientific Instruments*, and for the last three years assistant to the director of the American Institute of Physics, has been appointed associate professor of physics and assistant to the president of Norwich University, Northfield, Vt.

DR. DIO L. HOLL, professor of mathematics at Iowa State College and research professor of applied mathematics in the Engineering Experiment Station, has been named head of the department of mathematics. His predecessor, Dr. Edwin R. Smith, remains as professor in the department.

DR. KENNETH E. CASTER, assistant professor of geology at the University of Cincinnati, who is now on leave as visiting professor at the University of São Paulo, Brazil, has been appointed director of the department of geology-paleontology at São Paulo. Dr. Caster is reorganizing the curriculum in the natural sciences in preparation for the establishment in Brazil of the first school of geology, as a pure science. He is aiding also in plans for forming a Brazilian Geological Society and is directing field studies of Devonian-period fossils in that area.

DR. EDWARD G. BAYFIELD has resigned as head of the department of milling industry of the Kansas State College to become director of products control and research for the Standard Milling Company. His new address will be 309 West Jackson Boulevard, Chicago 6, Illinois.

THE National Society of Sigma Xi has made an award of \$300 to Dr. Josiah L. Lowe, of the New York State College of Forestry at Syracuse University, for the purpose of aiding in a taxonomic study of the pore fungi of the eastern United States. He will make a further study of the classification and the relationships between various species of these organisms which cause rot in lumber and other products of the forest. The material accumulated by Dr. Lowe will be used in the preparation of a manual on the subject which will be published by the New York State College of Forestry.

DR. RALPH W. HEINKAMP, professor of chemistry at the University of Rochester, will leave soon for Germany on a mission for the Army and the Office of Scientific Research and Development.

DR. IRVINE H. PAGE, director of the Research Division of the Cleveland Clinic Foundation, addressed on May 10 the Hollywood Academy of Medicine on "The Nature and Treatment of Hypertension," and the School of Aviation Medicine at Randolph Field on May 6 on "The Mechanism and Treatment of Shock."

THE annual A. C. Helmholtz Lecture at the University of Wisconsin was delivered on June 1 by Dr. Thomas Duckett Jones, assistant professor of medicine at the Harvard Medical School. His subject was "Rheumatic Fever."

THE fiftieth annual installation of new members was conducted on June 8 by the University of Minnesota Chapter of the Society of the Sigma Xi. At this meeting Dr. Owen H. Wangenstein, head of the department of surgery of the School of Medicine and president of the chapter, discussed "The Graduate Student and Research." Forty new members were initiated.

THE third Inter-American Conference on Agriculture will be held at Caracas, Venezuela, opening on July 24, for a period of approximately two weeks. The primary objective of the discussions will be to survey the problems affecting agriculture in the postwar period. The *Experiment Station Record* reports that a series of technical bulletins is being prepared by Venezuelan authorities on agriculture and animal husbandry. The U. S. Department of Agriculture is cooperating in the preparation of documentary material as well as a bulletin of information on agriculture in the United States, which will be available for public distribution in Latin America after the conference.

NATIONAL INSTITUTE OF HEALTH research fellowships are being set up under the Public Health Service. They offer opportunities for study and research with specialists in the chosen field of the student at the institute or in some other institution of higher

learning. The junior research fellowships will be awarded to those holding masters' degrees in the sciences allied to public health from an institution of recognized standing. They will receive \$2,400 per annum. The senior research fellowships are for those holding a doctorate degree in one of the sciences allied to public health. Senior fellows will receive \$3,000 per annum.

AN executive order, providing for the release of scientific information, was signed by President Truman on June 8. To determine what should be released for publication, the director of War Mobilization and Reconversion, according to *Chemical and Engineering News*, is authorized to review all scientific and technical information and recommend release. To assist the director an interdepartmental board, a Publication Board, has been established, consisting of the director as chairman, the Attorney General, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce and the Secretary of Labor. The Secretary of War, the Secretary of the Navy, the director of the Office of Scientific Research and Development and the chairman of the National Advisory Committee for Aeronautics may designate one liaison officer each, who may attend meetings and participate in discussions of the board. Committees of civilian employees of the Government and of officers of the Army and Navy may be set up to assist in the work.

A RESOLUTION was adopted on June 22 at the quarterly meeting of the New England Council appealing to the Congress to grant draft deferments to scientific and technical students and correct a situation "which has already placed this country at a disadvantage compared with other Allied Nations and promises if continued to be destructive to postwar prosperity" in the industrial United States. It is pointed out that Selective Service was "creating a dearth of young American scientists and engineers, and that "both Great Britain and Russia had continued throughout the war the policy of deferring such young men."

THE name of the Spencer Lens Company, of Buffalo, N. Y., was changed on June 30 to the American Optical Company Scientific Instrument Division. For ordinary purposes the firm will still be known as the Spencer Lens Company.

At an annual conference on April 12 and 13 of the X-ray Analysis Group of the British Institute of Physics and of the Conference on X-rays in Industry, Sir Lawrence Bragg discussed the conclusions of a sub-committee on publication. According to *Nature*, he reported that there is at present no journal dealing satisfactorily with the interests of the group, and

papers on crystallographic subjects appear in nearly sixty different periodicals. The committee is satisfied that there are enough British papers yearly to make possible the publication of a quarterly journal. The scope of the journal would be determined by the material investigated, not the methods used; that is, it would cover structure of matter, not diffraction. The American Society for X-ray and Electron Diffraction is discussing a similar project, and cooperation with them might be arranged. The possibility of cooperating with continental workers is also under consideration. The conference expressed its general approval of a new journal and authorized the committee to continue with the project.

PROFESSOR W. J. LUYTEN, of the University of Minnesota, and Martin Dartayet, Cordoba, Argentina, announce the discovery on June 16 of a new white dwarf in the constellation Chamaeleon. They state that the star is of the seventeenth photographic magnitude, and thus by far the faintest white dwarf known. It has a proper motion of 0".57 annually in a direction of 308 degrees which suggests that the star is comparatively near and some 40,000 times less luminous than the sun. This in turn implies that the star is probably not much larger in size than the moon, and must have a density of the order of 10,000,000 times that of water or more than one hundred tons per cubic inch.

THE CASE SCHOOL OF APPLIED SCIENCE held on June 6 a symposium on "Mathematical Analyzers and their Applications in Industry." Included among the speakers, and their subjects, are Dr. H. W. Bode, of the Bell Telephone Laboratories, "Applied Mathematics in Industry"; Dr. H. A. Travers, of the Westinghouse Electric Corporation, "The Use of the Network Analyzer in the Power Industry"; Dr. Sidney W. McCuskey, of Case School, "Harmonic Analysis and Synthesis"; H. A. Peterson, of the General Electric Company, "Solution of Engineering Problems with the Differential Analyzer," and Dr. Wallace J. Eckert, director of the Watson Scientific Computing Laboratory, Columbia University, "Punched Card Methods in Engineering Computations." At the luncheon meeting, Dr. William E. Wickenden, president of the Case School, acted as toastmaster and

Charles A. Kirk, vice-president of the International Business Machines Company, spoke on "The Influence of Machine Calculating Methods on Industrial Progress."

THE Public Health Service announces the establishment of National Institute of Health Research Fellowships after July 1. The junior research fellowships will be available to those holding master's degrees in the sciences (such as physics, chemistry, entomology, etc.) allied to public health from an institution of recognized standing. The stipend will be \$2,400 per annum. The senior research fellowships will be available to those holding a doctorate degree in one of the sciences allied to public health. The stipend will be \$3,000 per annum. These fellowships will offer an opportunity for study and research in association with highly trained specialists in the candidates' chosen field at the institute or some other institution of higher learning. Letters of inquiry should be addressed to The Director, National Institute of Health, Bethesda 14, Maryland.

THE oil companies of the Shell group have given a capital sum of £435,000 and £2,500 a year to the University of Cambridge for the establishment of a school of engineering and the provision of scholarships.

A REUTER'S dispatch from London states that the French Government has made a grant of 10,000,000 francs to the Pasteur Institute, Paris, to enable it to develop research into the preparation of penicillin.

PROFESSOR R. COURRIER, of Paris, would like to receive reprints from 1940 to date in the field of endocrinology. All reprints may be sent directly either to his address, Collège de France, Rue des Ecoles, Paris 5\*, or to Dr. Joseph Schiller, Carnegie Institution of Washington, Department of Embryology, Wolfe and Madison Streets, Baltimore 5, Md., who will forward them. The assistance of his colleagues in the United States would be greatly appreciated.

DR. H. F. CHU, of the department of entomology of the University of Illinois, is collecting reprints on all phases of zoology for the National Academy of Peiping, China. He would appreciate receiving literature in zoology, especially in entomology.

## SPECIAL ARTICLES

### A FILTER-PASSING AGENT PRODUCING INTERSTITIAL MYOCARDITIS IN ANTHROPOID APES AND SMALL ANIMALS<sup>1</sup>

IN November, 1944, the body of a well-nourished,

<sup>1</sup> From the Laboratory Division, AAF Reg. and Conv. Hosp., Miami Beach, Fla.

adult male gibbon was brought to our laboratory because of its sudden and unexpected death. The animal had always been well until one morning it suddenly dropped dead without warning. It had shown no paralysis. An autopsy revealed a dilated heart, pericardial effusion, pulmonary edema and a