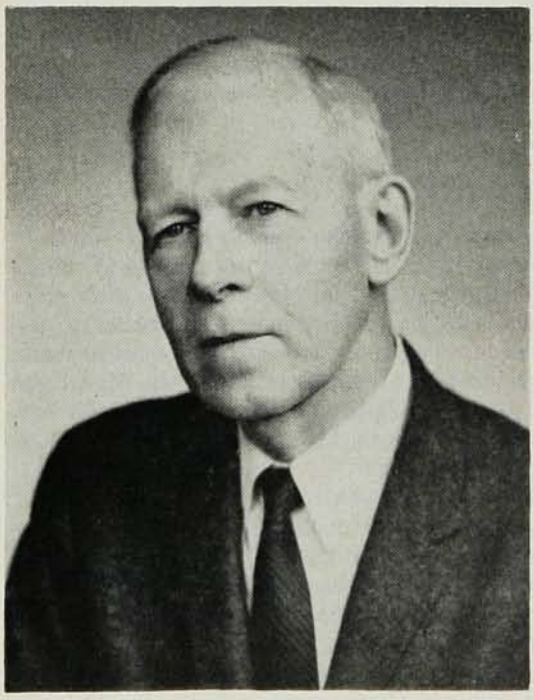
fellow at Stanford University and later as a research associate at the School of Mines of the University of Minnesota. In 1951, he went to the Franklin Institute as a specialist in rheological, wetting, and adhesion problems, remaining there until 1959. Dr. Philippoff is currently a senior research associate at the Esso Research and Engineering Company in Linden, N. J., where he is engaged in general rheology studies, particularly in the field of polymer solutions.

Debye Award

Robert S. Mulliken, emeritus distinguished professor at the University of Chicago, has been named by the American Chemical Society to receive the $2000 Peter Debye Award in Physical Chemistry for his work in molecular chemistry and physics. The award, established last year under the sponsorship of the Humble Oil & Refining Company, will be presented at the Society's national meeting in Los Angeles next April.

Prof. Mulliken was born in Newburyport, Mass., and received his education at the Massachusetts Institute of Technology and at the University of Chicago, where he earned his PhD in 1921. He joined the Chicago faculty in 1928, serving as associate professor of physics until 1931, when he was advanced to the rank of professor of physics. In 1956 he was named to the University's Ernest DeWitt Burton Distinguished Service Professorship, a post established in honor of the third president of the University of Chicago and awarded for distinction in scholarship or science. Prof. Mulliken, who is known particularly for his studies of the chemical bond of molecules, using spectroscopic methods, and for his work on the theory of molecular spectra and the electronic structure of molecules, is a fellow of the American Physical Society and served as the first chairman of the APS Division of Chemical Physics.



Robert S. Mulliken

The Debye Award is named for Nobel Laureate Peter J. W. Debye, emeritus professor of chemistry at Cornell University and an internationally known authority on molecular structure, particularly the structure of polymers. Prof. Debye, who is also a fellow of the Physical Society, joined Cornell as professor and head of the Department of Chemistry in 1940 and was named emeritus professor in 1952.

Belfer Award

The First Annual Yeshiva University Belfer Graduate School of Science Award was presented on September 24 to Willis E. Lamb, Jr., professor of physics at Yale University. The award, which is given for outstanding contributions in physics and mathematics, carries an honorarium of $1000.

Dr. Lamb, who shared the 1955 Nobel Prize in physics for work on the hyperfine structure of the hydrogen spectrum, was also cited by Yeshiva for significant contributions to the knowledge of atomic and nuclear structure, microwave spectroscopy, and the fine structure of hydrogen and helium. A fellow of the American Physical Society, Dr. Lamb served from 1956 until July 1962 as Wykeham professor of physics at Oxford University. At Yale, he holds one of the University's four Henry Ford, II, professorships which were established last year under a $2.5 million endowment by Mr. & Mrs. Henry Ford, II, of Detroit.

Franklin Institute Medals

At the annual award ceremonies at the Franklin Institute in Philadelphia on October 17, the Institute's highest award, the Franklin Medal, was presented to Sir Geoffrey I. Taylor, research professor of the Royal Society. During his long and distinguished career, Sir Geoffrey has made many contributions to the fundamental understanding of fluid mechanics and the physics of metals with applications to aeronautics, hydraulics, meteorology, oceanography, lubrication, biology, chemical engineering, and other subjects. The Franklin Medal has been awarded annually since 1915 to "those workers in physical science and technology, without regard to country, whose efforts in the opinion of the Franklin Institute have done the most to advance a knowledge of physical science or its applications".

Elliott Cresson Medals were awarded to James G. Baker, research associate at the Harvard College Observatory, for contributions to the design of astronomical equipment and to Wernher von Braun for contributions to rocketry and astronautics.

Stuart Ballantine Medals went to a number of scientists in recognition of their contributions to the devel-

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opment of lasers. Charles H. Townes, provost of the Massachusetts Institute of Technology, and Arthur L. Schawlow, professor of physics at Stanford University, were honored "for their theoretical work on maser operation and, specifically, for their brilliant concept of a completely practical, solid-state, three-level maser operating in the optical region". Theodore H. Maiman, president of the Korad Corporation of Santa Monica, Calif., was honored for his development of the "first pulsed maser operating in the optical region of the electromagnetic spectrum which was the first time that monochromatic emission at optical frequencies had ever been produced". Ali Javan of MIT was honored for his conception and development of the first continuous optical maser which utilized neon and helium gases.

The Francis J. Clamer Medal was awarded to Alan H. Cottrell of the University of Cambridge for his pioneering studies of dislocation behaviors and their relation to the properties of metals and alloys. The Howard N. Potts Medal went to Wilbur H. Goss, assistant director of the Johns Hopkins Applied Physics Laboratory, for his work in the development of ramjet engines.

John Price Wetherill Medals were given to five scientists for their demonstration that parity is not conserved in weak interactions. Ernest Ambler, Raymond W. Hayward, Dale D. Hoppes, and Ralph P. Hudson, all of the National Bureau of Standards, and Chien-Shiung Wu, professor of physics at Columbia University, were cited for the experimental work carried out at NBS in 1956 which showed conclusively that the law of parity conservation does not hold in the beta decay of oriented cobalt-60 nuclei.

Bigelow Medal

The Woods Hole Oceanographic Institution has awarded its Henry Bryant Bigelow Medal for distinguished contributions to the scientific study of the oceans to J. C. Swallow of the National Institute of Oceanography, Surrey, England. The $2500 award, which was established in honor of one of the founders of the Woods Hole establishment, was presented to Dr. Swallow for his studies of the circulations of the deep layers of the ocean.

Dr. Swallow, who was educated at Cambridge, where he received his PhD in 1954, joined Britain's National Institute of Oceanography in the same year, and in 1955 introduced his first neutrally buoyant float, known as the "Swallow Float", which has become the principal tool for the study of deep water circulation.

Stratton Awards

In September, the National Bureau of Standards presented its first Samuel Wesley Stratton Awards to three members of the Bureau staff: James R. Wait, Peter L. Bender, and Raymond L. Driscoll. The awards, which have been established to give recognition to outstanding contributions by NBS scientists, are named for the first director of the Bureau. Dr. Stratton was responsible for the organization of NBS at the beginning of the century. Each award consists of a sculptured bronze plaque and $1500.

Dr. Wait, who is a consultant to the director of the Bureau's Boulder Laboratories in Colorado, was cited for "his contributions to a better understanding of the mechanisms of electromagnetic radiation and radio-wave propagation".

Dr. Bender and Mr. Driscoll were honored for "their contributions to precision electromagnetic measurement and, particularly, the determination of the gyromagnetic ratio of the proton". Dr. Bender is now at the Joint Institute for Laboratory Astrophysics operated by the Bureau and the University of Colorado on the University's campus in Boulder. Mr. Driscoll has served since 1936 as a physicist on the NBS staff in Washington, D. C.

Radiation Protection Medal

At the closing of the Tenth International Congress of Radiology at Montreal in September, the first Radiation Protection Medal of the Royal Swedish Academy of Science was presented jointly to K. Z. Morgan, director of the Health Physics Division of the Oak Ridge National Laboratory, and Walter Binks, director of the Radiological Protection Service of the (British) Ministry of Health and Medical Research Council. The medal has been established to recognize valuable contributions to the work of international radiation protection which have been made during the ten-year period preceding the award.

The Balzan Foundation

A new international award foundation has been established with headquarters in Berne, Switzerland. Named in memory of the late Eugenio Balzan, an Italian newspaperman who died in 1953, the International Balzan Foundation will award cash prizes that are approximately equal in amount to the Nobel awards. The Foundation is made up of two administrative bodies: one, in Zurich, will supervise the funds; the other, in Milan, will award the prizes. Three prizes are to be distributed annually, one for accomplishments in physics, chemistry, engineering, or medicine, one for contributions to international peace, and one for achievements in philosophy and the arts. At the award committee's discretion, as many as five prizes may be awarded in one year.

The first award made by the Balzan Foundation was a prize of one million Swiss Francs (approximately $232 000) which was presented to the Nobel Foundation in Stockholm together with an expression of gratitude for guidance received and a declaration that it is the aim of the new institution to supplement, rather than to compete with, the activities of the Nobel Foundation.