



J. H. Van Vleck

Langmuir prize

The American Physical Society and the American Chemical Society, with the sponsorship of the General Electric Foundation, have joined in establishing a new \$5000 prize, to be called the Irving Langmuir Award in Chemical Physics. The two societies will alternate each year in selecting a scientist, residing in the US, who has made an outstanding contribution to chemical physics or physical chemistry within the ten preceding years.

Irving Langmuir, who was associated with the GE Research Laboratory from 1909 until his death in 1957, was a chemist by training whose interests ranged broadly over a number of scientific disciplines. Winner of the 1932 Nobel Prize for his work in surface chemistry, he also made important contributions in the areas of electron emission and space-charge phenomena, gaseous discharges, weather research, and the study of proteins, and aided in the development of many technological devices.

The first Langmuir Award winner, chosen this year by the American Physical Society, is John H. Van Vleck of Harvard University. He was honored for his investigations of the magnetic properties of chemical systems, in particular of rare-earth ions in crystals and of oxygen and nitric oxide clathrates. The Award was presented at the March meeting of the APS in Kansas City.

A native of Middletown, Conn., Professor Van Vleck received his doctorate in 1922 at Harvard University, where he had been a student of Edwin Kemble. He taught physics at the Universities of Minnesota and

Wisconsin before joining the Harvard faculty in 1934, and since 1951, has held the post of Hollis Professor of Mathematics and Natural Philosophy.

Dr. Van Vleck's early work in the theory of magnetism was summarized in his *Theory of Electric and Magnetic Susceptibilities*, published in 1932. Shortly thereafter, he developed, with Schlapp and Penney, the theory of magnetic behavior in crystalline electric fields, which is the basis of much of modern magnetochemistry and ligand field theory. Since that time, Dr. Van Vleck has made many other contributions to valence theory, atomic and molecular spectra, ferromagnetic and ferrimagnetic resonance, and line widths. During World War II, he was engaged in the study of radar wave propagation at Harvard and at the MIT Radiation Laboratory. More recently, Dr. Van Vleck's work has dealt with the magnetic behavior of clathrate compounds, the gyromagnetic ratio of cobaltous salts, and the Knight shift in magnetic resonance.

A fellow of the American Physical Society, Dr. Van Vleck served as APS president during 1952. He is also a former vice president of the International Union of Pure and Applied Physics and of the American Academy of Arts and Sciences.

NAS honors

On the occasion of the 102nd annual meeting of the National Academy of Sciences in Washington, D. C., the Academy presented its Watson and Draper Medals and announced the election of new members and foreign associates.

Paul Herget of the University of Cincinnati became the 18th recipient of the James Craig Watson Medal, the oldest of Academy awards, which is given in memory of a pioneer American astronomer. Professor Herget was cited for his work in the field of celestial mechanics, and particularly his application of electronic-computer techniques to calculations of the orbits of comets, earth satellites, and asteroids. A member of the Cincinnati faculty since 1931, he received his PhD in 1935 and since 1943 has held the position of professor and di-

rector of the University of Cincinnati Observatory. Effective June 13, he will be accorded the title of Distinguished Service Professor of Astronomy at Cincinnati.

Martin Ryle of the University of Cambridge received the Academy's 35th Henry Draper Medal for outstanding achievement in astronomical physics. Professor Ryle's award was in recognition of his development of radio-telescopic equipment, especially antenna systems, which have made it possible to determine accurately the positions of many weak radio sources. He was also cited for his use of equipment to produce catalogs of radio sources that give basic data for optical and radio astronomy, and for his use of data derived from radio sources in evaluating rival theories of cosmology.

Professor Herget is widely known for his investigations of the asteroid belt and at the Cincinnati Observa-



Martin Ryle



Paul Herget