## **OBITUARIES**

Lyman J. Briggs, emeritus director of the National Bureau of Standards, died in Washington on March 25 at the age of 88. His death closed a career of 67 years in federal service that spanned two world wars and included personal contributions ranging from early applications of physics dealing with agricultural problems to some of the early work on atomic energy.

Dr. Briggs was born in Assyria, Michigan, on May 7, 1874. At the age of 19, he received his BS degree from Michigan State College and, two years later, earned his MS at the University of Michigan. His PhD was earned in 1901 from Johns Hopkins.

He joined the Department of Agriculture in 1896 and worked at first as a physicist in the Bureau of Soils. Later he was put in charge of biophysical investigations in the Bureau of Plant Industry, an agency which he had been responsible for organizing. During World War I, he was assigned by executive order to work on war problems at the Bureau of Standards. In association with Paul R. Heyl, he invented the earth inductor compass which later guided Lindbergh on his first trans-Atlantic flight. For this device, they received the Magellan Medal of the American Philosophical Society in 1922. His interests in aerodynamics led to pioneering measurements of flow around airplane wings at very high speeds, up to and exceeding the speed of sound. Much of this work was done in association with Hugh L. Dryden, now Deputy Administrator of NASA. Dr. Briggs stayed with NBS after the war and soon became chief of the Mechanics and Sound division. He was named assistant director of the Bureau in 1926 and director in 1933. The budget of the Bureau had been cut in half in an economy move, but, by skillful management, he was able to bring it through the depression with two thirds of the NBS staff retained in a working organization.

In 1939, President Roosevelt asked Dr. Briggs to organize and lead a secret investigation of the possible use of the energy from uranium fission. The investigating group later became section S-1 of the Office of Scientific Research and Development with Dr. Briggs as chairman and H. C. Urey, E. O. Lawrence, J. B. Conant, E. O. Murphee, and A. H. Compton as its executive Committee. Much of the early work on the methods of purification of uranium, establishment of specific properties, and separation of isotopes of uranium was done at the NBS under the direction of Dr. Briggs. He retired officially in 1945 but continued to be active in research at the Bureau until shortly before his death.

A fellow and onetime president (1938) of the American Physical Society, Dr. Briggs held membership in the National Academy of Sciences, the Washington Academy of Sciences, the Philosophical Society of Washington, and the American Philosophical Society.



Lyman J. Briggs



Otto Struve

Otto Struve, professor of astronomy at the University of California and former director of the National Radio Astronomy Observatory, died at Berkeley on April 6. The last of a family which had produced four generations of renowned astronomers, he was the great-grandson of Friedrich Georg Wilhelm von Struve, who founded and directed the Pulkovo Observatory near St. Petersburg at the behest of Czar Nicholas I. Friedrich Struve's son, Otto, later succeeded to the directorship of the Observatory, and Otto's son, Ludwig, was professor of astronomy at the University of Kharkov.

Otto Struve, the son of Ludwig Struve, was born in Kharkov on August 12, 1897. He received his diploma from Kharkov University in 1919, left Russia in 1920, and, after spending some time in Turkey, came to the United States in 1921 to became an assistant in stellar spectroscopy at the University of Chicago. He earned his PhD at Chicago and in 1924 became an instructor at Yerkes Observatory. In 1932, he was named a full professor, director of the Yerkes Observatory, and director of the McDonald Observatory. After fifteen years' service, he relinquished the observatory directorships and became chairman of Chicago's Astronomy Department. In 1950, he joined the faculty of the University of California as professor of astronomy and director of the Leuschner Observatory. He was appointed director of the National Radio Astronomy Observatory at Green Bank, W. Va., in 1959 and remained there for two years before returning to the University of California.

Dr. Struve was president of the American Astronomical Society from 1947 to 1950 and president of the International Astronomical Union from 1952 to 1955. He was a fellow of the American Physical Society, a member of the National Academy of Sciences, a

foreign member of the Royal Society of London and of the Royal Society of Edinburgh, and a foreign associate of the Royal Astronomical Society. In addition, he held memberships in many foreign professional societies and academies of sciences.

His honors included the Gold Medal of the Royal Astronomical Society (1944), the Bruce Gold Medal of the Astronomical Society of the Pacific (1948), the Draper Medal of the National Academy of Sciences (1950), the Medaille Jules-César Janssen of the French Academy of Sciences (1955), and the G. Bruce Blair Award of the Western Amateur Astronomers (1955).



al Rosbaud

Paul Rosbaud, consultant to several scientific publishing houses and the first recipient of the Tate Medal of the American Institute of Physics, died in London on January 28 at the age of 66.

A native of Graz, Austria, he was educated at the Technische Hochschule in Darmstadt, where he received his PhD in chemistry. During the 1930's he became a scientific editor for the Berlin publishing firm of Springer-Verlag, and in that capacity was responsible for having stimulated the publication of many important scientific works. He is also credited with having been the driving force behind the creation of new journals of science and the improvement of existing periodicals. During World War II, his acquaintance with friends in high places who were uncommitted to the Nazi regime enabled him to keep in touch with scientists in various parts of occupied Europe, and at considerable personal risk he managed to communicate as well with Allied scientists by means of neutral channels and the Norwegian underground organization.

In the latter part of 1945 he was invited to come to England, where he became a director of Butterworth Scientific Publications. He served as the first editor of the journal *Research*, a publication which has recently been discontinued. In 1952 he joined the newly founded Pergamon Press as scientific director, and in

1956 he left Pergamon to become European editor of Interscience Publishers, Inc. He also served as a consultant to a number of publishers, including North-Holland, John Wiley, Oliver and Boyd, Allen and Unwin, and Vieweg.

Dr. Rosbaud was chosen to receive the first award (in 1961) of the AIP's newly established John T. Tate Medal for Distinguished Service to the Profession of Physics in recognition of his contributions to the physics community as an editor and an adviser to publishers of the literature of physics.

Wolfgang Riezler, director of the Institute for Radiation and Nuclear Physics of the University of Bonn, died on September 27, 1962. Born in 1905 in Freiburg im Breisgau, he studied at Erlangen and Munich, and in 1929 earned his doctoral degree under the tutelage of Willy Wien, after which he spent a year working in Freiburg and another year in Cambridge under Lord Rutherford. In 1931 he returned to Germany to be assistant to Christian Füchtbauer in Rostock, and while there he was admitted to the faculty as a lecturer. Four years later, Füchtbauer left Rostock for Bonn, and Riezler accompanied him. At Bonn, he became dozent in 1937 and ausserplanmässiger professor in 1942. During the war he did research in Cologne, Bonn, and Paris. After the war, he assisted Walter Gerlach in beginning the reconstruction of the Institute for Radiation and Nuclear Physics at Bonn, and when Gerlach left Bonn in 1949, the direction of the Institute fell to Riezler. He was named extraordinary professor in 1952 and ordinary professor a year later.

Professor Riezler's research career began with a study of the physics of solids carried out during his year in Freiburg. He soon switched to the new field of nuclear physics, concentrating mainly on studies of alpha particles and thermal neutrons. He was one of the first to recognize the applications of nuclear physics to medical therapy and diagnostics, and he collaborated with a medical scientist, Professor Schubert, in numerous tracer experiments on animals and people. One of the major projects of his later life was the construction of a synchrocyclotron-type accelerator at the Bonn Institute.

Professor Riezler was a member of the American Physical Society.

Manfred Pyka, a physics instructor at Princeton University, died in a New York City hospital on November 30, 1962, from the effects of injuries suffered in a laboratory accident with lithium hydride that had occurred on January 11th of last year. Dr. Pyka was thirty years old, having been born on June 10, 1932.

Considered by his colleagues to have been gifted both as a physicist and as a teacher, he graduated from the University of Chicago, where he also received his master's and doctor's degrees. He became a member of the Princeton faculty in September 1961. Dr. Pyka was a member of the American Physical Society.