(Bombay), A. Werner (Sydney), H. Umezawa (Manchester) and A. Visconti (Paris), B. d'Espagnat and J. Prentki (Geneva), and E. P. George and G. S. Shrikantia (Sydney), together with a progress report, "New Results on Elementary Particles at the Pisa Conference (12–18 June, 1955)", by P. H. Fowler (Bristol). Twenty-four countries are represented on an editorial board of some forty nuclear physicists of high international standing. The United States representative is V. F. Weisskopf, professor of physics at the Massachusetts Institute of Technology. The subscription price (per annual volume of approximately 700 pages) is $15. (*Nuclear Physics* is distributed in the United States by Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y.)

Wayne R. Arnold, associate research physicist at the Schlumberger Well Surveying Corporation's research laboratories in Ridgefield, Connecticut, died November 15, 1955, as a result of injuries sustained in an automobile accident. He was 34 years old. A native of Missouri, Dr. Arnold received his bachelor's and master's degrees from the University of Chicago and his PhD from the State University of Iowa in 1950. During World War II he was at Argonne National Laboratories and after receiving his PhD served as a member of the scientific staff at Los Alamos for three years. Since 1953, he had been in charge of a nuclear research section at Schlumberger. His major research was in the experimental fields of the measurement of the magnetic moment of the deuteron and neutron, angular correlation, reaction cross sections, and accelerators. He was also an active amateur astronomer and telescope maker. Dr. Arnold was a member of the American Physical Society.

Alva B. Clark, retired vice president of Bell Telephone Laboratories, died on November 14th at the age of 65. Following his retirement from Bell Labs in February 1955 (after more than four decades with the Bell System), Mr. Clark served as director of research and development in a sector of the Department of Defense. He was born in Clay Center, Ohio, and, upon graduating from the University of Michigan, he joined the American Telephone and Telegraph Company in 1911 where he worked in the engineering and later the research and development departments. In 1940 he was given charge of laboratory work in telephone switching, transmission, and equipment development. He became vice president in 1944 and in the same year was named consultant to the Secretary of War and in that capacity made several trips to Europe and the Mediterranean area. During World War II he also served in various capacities with the Office of Scientific Research and Development. Mr. Clark was a fellow of the Acoustical Society of America.

John B. Merrill, an official of Sylvania Electric Products, Inc., died in the crash of a United Air Lines

passenger plane near Laramie, Wyoming, on October 6th. He was forty-five years of age. A resident of Towanda, Pennsylvania, his headquarters were there and in New York City. His wife, the former Ann Tomkins of Towanda, also died in the crash. Mr. Merrill was a native of Cumberland Center, Maine, graduated from Bowdoin College in 1933, and obtained his master's degree in physics at Massachusetts Institute of Technology in 1936. For a time he was engaged at MIT in research on crystals before joining Patterson Screen Company in 1936 as a research physicist. He was superintendent of Patterson's fluorescent powder plant when Sylvania purchased that operation in 1941. Upon completion of Sylvania's new plant in Towanda in 1943, Mr. Merrill became plant manager, and by 1953 he had risen to the position of vice president—operations with over-all responsibility for several of the company's divisions, including those of atomic energy and electronics. He was a member of the American Physical Society and the Optical Society of America.

Richard A. Rubenstein, physicist at Shell Development Company's Exploration and Production Research Division in Houston, Texas, died on December 12, 1955, of cancer of the lung. His age was twenty-seven. Born in De Kalb, Illinois, Dr. Rubenstein entered Ohio State University in 1946 and received a bachelor of science degree in physics in 1950. He pursued his graduate studies at the University of Illinois where he was a teaching assistant in physics for the academic years 1950–52, was awarded a National Science Foundation fellowship for 1952–53, and was employed as a research assistant until he completed the academic work for his PhD degree in physics and joined the Shell organization in December 1954. Dr. Rubenstein was a member of the American Physical Society.

Gerald W. Willard, retired physicist at Bell Telephone Laboratories, died November 18 at the Brook Lodge Nursing Home, Cranford, N. J., after a long illness. His age was 54. A graduate of the University of Minnesota, Mr. Willard received the master's degree there in 1928. He was a member of the Bell Labs technical staff from 1930 until his retirement in August 1955. During the early part of his career he specialized in studies of piezoelectric materials and their applications, especially those related to quartz crystal oscillators. His studies resulted in the development of a number of improved quartz crystal oscillators which now find wide application in both commercial and military radio communication. During World War II he devised many production methods and test instruments to speed the production of quartz oscillators for the armed forces. Since the war he had specialized in ultrasonic investigations and had developed improved ultrasonic generators, propagation media, light-valves, and test methods, as well as an improved concept of "cavitation"—the breaking of liquids under strain. He was a member of the American Physical Society and the Acoustical Society of America.