

obituaries

to work on diffraction throughout his life.

Generally considered his most important contribution to modern physics is his work on electric-dipole and quadrupole radiation. Rubinowicz formulated the selection and polarization rules for electric-dipole radiation in 1918. He worked out the theory of electric-quadrupole radiation during 1928-30, and suggested that the possible quadrupole character of a spectral line could be verified by observing the Zeeman effect. The relevant experiments, carried out in 1930 by Rudolf Frerichs and Campbell in Pasadena and in 1931 by Emilio Segrè and Cornelis Bakker in Amsterdam, confirmed his suggestion and revealed full agreement with the predictions of Rubinowicz's theory. Since that time the occurrence of radiative quadrupole transitions became an everyday fact in atomic and nuclear physics.

During his long academic career he educated whole generations of physicists. In Poland, devastated by two world wars, his continuous activity had an unparalleled impact on the development of theoretical physics.

A man of great modesty and total selflessness, Rubinowicz preserved his unquestionable integrity throughout the changes in the world around him. All who knew Rubinowicz, one of the masters of the old school, realize with sadness that with his death a chapter in the history of physics is closed.

JANUSZ DABROWSKI
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Joseph G. Hoffman

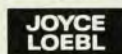
Joseph G. Hoffman, retired professor of physics and biophysics at the State University of New York at Buffalo, died on 8 December. He was 65 years old.

Hoffman earned his doctorate in physics in Cornell University in 1939 and became an assistant physicist for the New York State Institute for the Study of Malignant Disease. He joined the National Bureau of Standards in 1941 and left in 1944 to participate in the Manhattan Project at Los Alamos Scientific Laboratories. During 1946-54 he was director of research at Roswell Park Memorial Institute, a facility for cancer research. In 1947 he joined the Buffalo faculty as a research professor in the medical school, and was named professor of biophysics in 1954 and professor of physics in 1957. He retired from his university duties in June 1974 and acted as consultant to Ecology and Environment Inc of Buffalo until his death. □



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