

obituaries

Laboratory (1934–36) worked under Ernest Lawrence in the development of the cyclotron.

After serving as an instructor of chemistry and physics at Chicago (1936–41) and as senior physicist in that university's metallurgical laboratory (1941–43), he became section chief at Clinton Laboratories at Oak Ridge, Tenn. He worked as a technical expert at Hanford Engineering Works (1944–45) and the next year was a group leader at Los Alamos Scientific Laboratory during the development of the first atomic bomb. He became chief physicist at Oak Ridge National Laboratory in 1946 and served in that capacity until joining the Duke Faculty.

In postwar years, Newson had been involved in improving the precision of nuclear spectroscopy, initially through the acquisition and installation at Duke in 1951 of one of the first commercially produced Van de Graaff accelerators.

With AEC support, he established the Triangle Universities Nuclear Laboratory at Duke in 1966 and had since directed numerous experimentalists and theorists in nuclear-structure research based around a 15-MeV tandem accelerator and a 15-MeV cyclotron injector.



NEWSON

Newson's own research and the work of groups at Duke, the University of North Carolina at Chapel Hill and at North Carolina State University, Raleigh, have built a strong reputation for the regional facility.

From 1948 until his death, Newson had been consultant to ORNL and served similarly at Argonne and Brookhaven, and to the National Academy of Sciences in matters of nuclear physics.

J. H. Gibbons, one of Newson's first graduate students, said in his eulogy: "Henry taught me how to be professionally simple-minded—how to sort out the important things in dealing with problems. That is one of the most important lessons in learning to be a physicist, re-

flecting a point of view that nature is exquisitely and elegantly simple. He taught that scientific research can be pure, yet immensely relevant to fulfillment of human needs and to growth of human spirit . . . Newson was literally made of star dust."

The Newson family has established the Henry W. Newson Lecture Series Fund at Duke, which will enable distinguished physicists to address new generations of scientists. Contributions may be earmarked for the fund, c/o Department of Physics, Duke University, Durham, N.C. 27706.

EDWARD G. BILPUCH
Duke University

Vernet E. Eaton

Vernet Eller Eaton, Foss Professor of Physics Emeritus at Wesleyan University, Middletown, Connecticut, died on 18 May 1978 after a short illness. He was 82.

Eaton's particular interests included the physics of surfaces and thin films, and monomolecular layers, but it is as a teacher that he will be best remembered. He was a strong proponent of the demonstration lecture, and it was for these that he became famous to three generations of Wesleyan students. He was awarded the Oersted Medal for his outstanding contributions to physics teaching in 1955 and served on the Advisory Committee for NBC-TV's popular series "Continental Classroom" in 1958–59. The three lectures he delivered himself in this series were widely acclaimed and he made several nationwide lecture tours.

Eaton was born in Castleton, Indiana, in 1895, and earned his BA, MA and PhD degrees from Indiana University. After four years at Williams College, he joined the Wesleyan faculty in 1925. He became Foss Professor of Physics in 1946, a position he retained until his retirement in 1964.

JOHN S. MCINTOSH
Wesleyan University
Middletown, Connecticut

Gerald M. Rassweiler

Gerald M. Rassweiler, Fellow of both The American Physical Society and The Optical Society of America and retired Technical Director of Basic and Applied Sciences at the General Motors Research Laboratories, died 3 May 1978 at the age of 75.

A native of Chicago, Rassweiler graduated from Bucknell University in 1924 and received his PhD degree in Physics from the University of Illinois in 1928. That same year he joined the General Motors Research Laboratories and began

research on the fundamental structure of hydrocarbons by Raman spectroscopy. He is, perhaps, best known in the scientific community for his work with L. L. Withrow on the study of combustion and flame propagation in an operating internal-combustion engine by emission and absorption spectroscopy and high-speed cinematography. This pioneering work on engine-fuel relationships contributed greatly to later developments in high-compression engines and high-octane, lead-free fuels. Their paper on this work entitled "Motion Pictures of Engine Flames Correlated with Pressure Cards" won the Horning Memorial Award of the Society of Automotive Engineers in 1939.

In 1939 he was named assistant head of the physics-instrumentation department of the Laboratories, where he administered and guided research in infrared and



RASSWEILER

atomic-emission spectroscopy, ultrasonics, electron microscopy, electronics, and low-energy radioisotopes for industrial inspection and process control. The research in infrared spectroscopy under his guidance represented a very early, if not the first, industrial effort to develop equipment and procedures for the now standard and widely used methods for analyzing hydrocarbons in fuels and engine exhausts. During this period, he was instrumental in the formation of the General Motors Spectrographic Committee, which developed methods and procedures for chemical analysis by atomic-emission spectroscopy. He was a co-inventor of the Sonigage, an acoustic instrument for locating internal imperfections in metals and for measuring thickness when only one surface is accessible. He was also active in the Society of Applied Spectroscopy and was a founding member and chairman of the Detroit section of the OSA.

In 1957 he was named head of the physics department. Much of his expe-