we hear that

of high energy nuclear reactions," the ACS recognized Poskanzer's discovery of 29 isotopic elements including two that had been predicted not to exist (Li¹¹ and Be¹⁴). He was also cited for performing the first differential recoil study, the first counter study of nuclear fragmentation and his formulation, with associates, of the fireball concept of nuclear collisions.

Poskanzer took an undergraduate degree at Harvard College in 1953. Columbia University awarded him an MA in 1954 and MIT a PhD three years later. A chemist at Brookhaven National Laboratory from 1957 to 1966, he then joined the LBL staff. For the past two years, Poskanzer has been scientific director of the Bevalac, LBL's relativistic heavy ion accelerator. He is spending the current academic year at CERN.

The American Society for Testing and Materials has presented the H.V. Churchill Award to Richard F. Jarrell, principal scientist and manager of the Optical Emission Spectrochemical Applications Laboratory, Jarrell-Ash Division of Fisher Scientific Company.

Julian Gibbs has been installed as the new president of Amherst College.

Gerald W. Stewart has joined the Applied Sciences Division of Aerodyne Research Inc as principal scientist and director of the Center for Chemical and Environmental Physics. Stewart was previously chief of the Supporting Research Branch of the Department of Energy Morgantown Energy Technology Center. Also coming to Aerodyne is James W. Duff, formerly of Los Alamos Scientific Laboratory. Duff will be senior research scientist at the Applied Sciences Division.

obituaries

Nathan Sanders Wall

Nathan Sanders (Sandy) Wall, professor of physics at the University of Maryland died on 2 September at the age of 54.

He was born in Chicago in 1925 and entered the Rensselaer Polytechnic Institute in 1943. Wall interrupted his education there for two years service with the US Army in the South Pacific, where he earned a Bronze Star for heroism by returning under fire to bring out a wounded comrade. He completed his BS degree at Rensselaer in 1949, and his PhD at MIT in 1954.

After research associateships at Indiana and Rochester Universities, Wall served as director of the MIT Cyclotron Laboratory from 1955 until 1964. In 1964, he accepted an appointment at the University of Maryland, where he played a senior role in founding their Cyclotron Laboratory and in planning the K = 165, 100-MeV proton cyclotron, which was one of the most advanced nuclear physics accelerators in the world when it became operational in 1970. In addition to his active involvement in research and teaching, Wall served on the Scientific Advisory Committee of the Space Radiation Effects Laboratory, on the Bonner Prize Committee of The American Physical Society and on the National Academy of Sciences-National Research Council's Subcommittee on Nuclear Structure.

His work exhibited his great breadth of interest, encompassing topics as diverse as improved measurement of the upper limit of electron lifetimes, subthreshold coherent pion production by composite projectiles, rearrangement effects in nuclear reactions, and the sensitivity of



WALL

gravitational wave detectors to cosmic rays. One major area of his work involved studies of elastic and inelastic scattering of various projectiles. Among these were measurements of nuclear sizes using elastic scattering of deuterons and, later, of electrons and medium-energy alpha particles. He was particularly interested in the optical-model description of elastic scattering, and in "unique" optical potentials for higher-energy composite projectiles. This interest spurred his efforts to probe the inadequacies of that model via experimental studies using medium energy protons and calculations in which he sought to modify the conventional optical potentials to include more sophisticated effects. One of his "first loves," to which he frequently returned during his career, was his discovery of the anomalous large-angle scattering of



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obituaries

low-energy alpha particles. The effect has continued to puzzle nuclear physicists for over a decade, prompting him, with typical Wall whimsy, to bestow upon it the acronym "ALAS."

His quest for a broader range of experimental techniques led him often into the role of visiting scientist at various laboratories, including the Harvard Cyclotron Laboratory, the National Bureau of Standards, the Brookhaven National Laboratory, and the Los Alamos Scientific Laboratories. In one such collaboration at the BNL Cosmotron in 1967, Wall and his colleagues were among the first to utilize high-energy (1 GeV) protons for nuclear structure studies.

By nature gregarious, Wall believed in the great value of interchange of ideas through communication and collaboration among scientists at different laboratories. He himself, at various times during his career, held fellowships and/or visiting professorships at the Niels Bohr Institute (1961-62), at the Weizmann Institute of Science (1971), at the South African Institute of Physics (1975) and at the Catholic University of Louvain-la-Neuve (1978). On the other side, he frequently arranged for visitors from all over the world to make extended visits at Maryland; these arrangements included a long-term research collaboration involving the Jagellonian University in Krakow. Indeed Wall's address book was an international directory of the nuclear physics community, and the world-wide tributes that flowed in to Maryland at his death testified to both the breadth and depth of his interactions with that com-

Wall's colleagues often cite his personal warmth and his enthusiasm for new insights into physics (as much for the other person's insights as for his own). These traits allowed him to be comfortable with intellectual conflict, and to help promote its intelligent resolution; he exhibited them consistently, with young students as easily as with well-established colleagues.

Wall's family has suggested that friends wishing to honor his memory do so in the form of contributions payable to the American Committee for the Weizmann Institute, and earmarked for the N.S. Wall Memorial Fund.

DAVID A. GOLDBERG JAMES J. GRIFFIN PHILIP G. ROOS University of Maryland College Park, Maryland

John W. Hafstrom

On 13 June, John W. Hafstrom died at the age of 36. He attended the Massachusetts Institute of Technology from 1961 to 1969, receiving an SB degree in physics in