1944, at the radar laboratory station in Malvern, England.

After the war, Golian joined the Naval Research Laboratory, where he engaged in cosmic-ray studies with instruments on the V-2 and Viking rockets. He then moved to the Brookhaven National Laboratory for three years to work on the construction of the Cosmotron. He also continued his work on cosmic rays with Skyhook balloons and field expeditions to the Caribbean. Returning to the Naval Research Laboratory in 1951, he was involved in the planning and execution of diagnostics for nuclear weapons tests. Later he joined a team to design and construct the NRL research reactor and the associated experimental program and became head of the nuclear-reactor branch in 1956. In 1958 he joined the Aeronutronic Division of the Ford Motor Company in Newport Beach, California, where he was manager of the space physics department and worked on various aspects of both civil and military space efforts. He retired in 1971.

> THOR A. BERGSTRALH Rancho Palos Verdes, California

cut in 1955. Between 1942 and 1948 he held staff physicist positions at the Camp Evans Signal Laboratory, at Columbia University and at the Metallurgical Laboratory of the University of Chicago.

In 1955, Forstat joined the MSU faculty and began a research program in low-temperature physics, which prompted the purchase of a helium liquefier, the physics department's first major piece of research equipment. One of his areas of interest was research in heat transfer and temperature control of helium. He also conducted extensive experiments on the specific heats of paramagnetic and antiferromagnetic crystals at low temperatures. He was the author or coauthor of numerous scientific articles and abstracts.

While at MSU, Forstat taught introductory and advanced physics courses. He guided the doctoral and master's degree dissertation research of about a dozen students. He always set the highest intellectual standards for himself and held his students to those same standards as well.

# his willingness to take whatever time and effort were necessary to explain a point or to help with a problem, but also his lifelong pursuit of intellectual interests as diverse as archaeology, French literature and the history of physics.

VAN E. WOOD

Battelle Columbus Laboratories
RALPH J. HARRISON

Army Materials and Mechanics Research

Center

## **Harold Forstat**

Harold Forstat, professor of physics at Michigan State University, died last spring. He had been on medical leave from the University since September

Forstat was born in 1921 in Brooklyn, New York, and received a bachelor of science degree from Brooklyn College in 1942. He earned a master of science degree in 1950 at Purdue and a doctorate at the University of Connecti-

### FORSTAT



# **Eugene Baroody**

Eugene M. Baroody, a theoretical physicist at Battelle Memorial Institute for many years, died 26 August 1982 in Richmond, Virginia, where he was born in 1914. He graduated from the University of Richmond in 1935 and received his doctorate in theoretical physics under Hans Bethe at Cornell in 1940. After teaching at the North Dakota Agricultural College and the University of Missouri, he joined the Battelle staff in 1943. The following year, at Bethe's request, he went to Los Alamos, where he worked until 1946. He then rejoined Battelle and remained there, except for short sabbaticals and visiting professorships, until his retirement in 1977.

His chief areas of research dealt with electron interactions in solids, energy loss and secondary emission, and radiation-damage effects in solids. His wider interests included such diverse areas as thermal shock in solids, the Matano-Boltzmann method of solving the nonlinear diffusion equation, the spectra of isoelectronic atomic ions, and more recently the Korteweg-de Vries equation and soliton theory. Probably Baroody's best known scientific work is his theory of secondary electron emission, which explains, among other things, the positive correlation between work function and electron yield.



BAROODY

His friends will remember not only

# **Rudolf Frerichs**

Rudolf Frerichs, retired professor of physics at Northwestern University, is dead at 81.

Much of his early work during the 1930s and 40s was with cadmium sulfide, the synthetic crystals that were incorporated later into photocells for use in automatic light switches, light meters and automatic cameras. In later years he worked on a new class of optical materials, the infrared transmitting "sulfide glasses," and on the development of new material for extremely thin electrical wires.

Born in Cologne, Germany, Frerichs received his PhD there in 1924. His initial area of specialization was spectroscopy. From 1928 to 1930 he studied at the University of Michigan and at Caltech. On his return to Germany, he was a physicist with the German Bureau of Standards and later with the German Electric Company. He came to the US in 1947 and joined the physics department at Northwestern University, where he continued actively in both research and teaching.