led to a new value for the speed of light and also to new rovibrational constants for CO_2 that served as the foundation for international laser frequency measurements. Subsequently, he expanded frequency-synthesis techniques covering the far infrared to the visible regions of the spectrum. His work in infrared molecular spectroscopy, using these new synthesis techniques, is unsurpassed in accuracy and resolution. Many of the molecular transitions he measured are used as secondary frequency and wavelength standards in the infrared. In 1982 he was coleader of the team that directly measured visible frequencies and thereby gave impetus to the recent redefinition of the meter.

KENNETH M. EVENSON
DONALD A. JENNINGS
JOSEPH S. WELLS
National Bureau of Standards

Harold Jacobs

Harold Jacobs, born in 1917, received a BA degree in chemistry from Johns Hopkins University in 1938 and MA and PhD degrees in physics and education from New York University in 1942 and 1945.

From 1942 to 1945 he was employed by RCA, Lancaster, Pennsylvania, as a research and development physicist. Subsequently he worked for Sylvania Electric Company, Kew Gardens, New York, and in 1949 joined the US Army Electronics Research and Development Command, Ft. Monmouth, New Jersey, as a research physicist. Except for a brief period in 1955 with CBS Laboratories, New York, he spent the rest of his career at Fort Monmouth until his death on 24 December 1983.

Jacobs was an instructor in the electrical engineering department at Polytechnic Institute of Brooklyn from 1946 to 1950. In 1957 he joined the faculty of Monmouth College, West Long Branch, New Jersey, and set up that school's department of electronic engineering. For the rest of his life he was associated with the College, serving as chairman of the electronic engineering department until 1978, and subsequently as professor of electronic engineering.

Jacobs wrote his PhD thesis on disassociation energies of surface films of oxides. His research efforts, which produced more than 20 patents, concerned silicon carbide research, lasers and quantum electronics, microwave semiconductor devices, millimeter wave devices, microminiaturization of electronics, optical masers and thin films.

KONRAD FISCHER
Monmouth College □