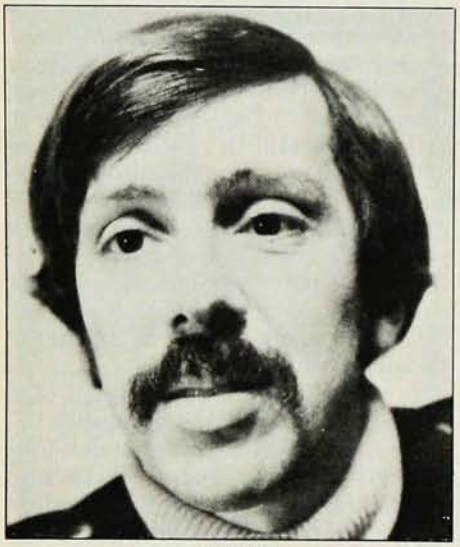
we hear that

ment of Science. Breton will be the third fellow supported by the Optical Society since 1976. The fellowship was established to provide for greater interaction between the legislative and scientific communities by allowing scientists and engineers to spend a year working on the staffs of US Congressmen or one of the congressional committees.

An experimental psychologist, Breton specializes in the psychophysics of color vision. He received his bachelor's degree from Amherst College and his doctorate from the University of Chicago. Breton was a postdoctoral fellow at Columbia University for two years before joining the Optics Section of the National Research



BRETON

Council of Canada. He has performed research in temporal response characteristics of chromatic mechanisms, saccadic eye movements, visual quantum counting and color matching. Currently, he is working on a model for chromatic brightness perception.

Daniel C. Drucker of the College of Engineering in the University of Illinois (Urbana) has been awarded the Gustave Trasenster Medal for 1979 from the University of Liege, Belgium. Drucker is cited for his work on the theory of plasticity.

Gerhard Ertl, professor of physical chemistry at the University of Munich, has been awarded the E.W. Müller Lectureship for 1979 by the Laboratory for Surface Studies at the University of Wisconsin-Milwaukee.

Jean Teillac was reelected president and **Paul Levaux** vice-president of the CERN Council for 1979. **Gunther Lehr** was elected vice-president in succession to **A. C. Pappas.**

Thomas F. George has been given the 1979 Marlow Medal of the Faraday Division of the Chemical Society. The medal is awarded to scientists under 33 years old who have done outstanding work in physical chemistry and chemical physics.

Henry Kressel has been appointed staff vice-president, Solid State Technology, RCA Laboratories. Kressel will be responsible for RCA's integrated circuit research at Princeton, N.J. and for the RCA Solid State Technology Center, Somerville, N.J.

obituaries

Donald E. Kirkpatrick

Donald E. Kirkpatrick, for many years chairman of the physics department at Queens College of the City University of New York, died on 8 February after a long illness. He had almost reached his seventy-fifth birthday.

Kirkpatrick was born in Swepsonville, North Carolina, located just a few miles from Duke University where he received his bachelor's degree in 1927 and his master's degree in 1928. He earned his PhD at New York University in 1934 and continued teaching there until 1937 when the newly established Queens College opened. He was the first chairman of the new physics department and served in that capacity at intervals for many years. Before his retirement in 1972 he was instrumental in starting graduate work in physics at Queens College when the city colleges united into the present City University of New York.

The present Placement Service of the American Institute of Physics owes much to the efforts of Kirkpatrick, who in 1946, with the cooperation of Director Henry A. Barton and Wallace Waterfall, revived George H. Burnham's project, which had been interrupted by the war.

During the war years, from 1942 to 1945, Kirkpatrick served as Senior Physicist at the Oceanographic Institute at Woods Hole, Massachusetts, where, with two of his colleagues, Edward M. Thorndike and Alexander P. Marion, he engaged in research involving underwater signalling and photography.

During the years immediately following the war, when Civil Defense became a matter of national concern, Mayor Robert Wagner named a committee of scientists to advise on radiation dangers in New York City and Kirkpatrick was chosen as a member of that committee. He helped to select the instruments necessary to detect and monitor harmful radiation and instructed local groups in their use.

Kirkpatrick's contribution to Queens College touched practically every facet of college life from teaching and administration to the mechanical aspects of running an educational institution. He served for two years as Dean of Administration. His devotion to general college matters was recognized by a presidential citation in the spring of 1968.

Underlying Kirkpatrick's many activities at Queens College was a deep concern for the development of both intellect and character in students. On his retirement his colleagues honored him by setting up the Donald E. Kirkpatrick Award to be given annually to an outstanding graduating senior.

HUGO N. SWENSON
Professor Emeritus
Queens College

Dennis Gabor

Dennis Gabor, the inventor of holography, died 9 February in London at the age of 78. He was born in Budapest, Hungary and received his education at the Technical University, Budapest, the Technische Hochschule in Charlottenburg, Germany, where he received the degree Dr Ing in 1927, and the University of London. He was a research engineer at Siemens and Halske in Berlin (1927–33) and at Thomson-Houston in Rugby (1933–48). He then joined the staff at Imperial College, London, where he became Professor of Applied Electron Physics until his retirement in 1967.

In 1947, while concerned with improving the resolution of the electron microscope, Gabor made the invention that later brought him fame and the Nobel Prize. He conceived a technique for recording the wave field scattered by the electron-illuminated object, then recreating from this record a replica of the wave field, complete in amplitude and phase, but with light waves instead of the original electron waves. All of the electron-wave aberrations, resulting from the imperfections of electron lenses, would carry over to the light waves, and could be compensated by the well-known techniques of the lens designer. To this process Gabor gave the quite descriptive name "wavefront reconstruction," and the record he called a "hologram," from the Greek *holos*, meaning "whole."

Gabor's solution to the electron-wave problem was a bold and imaginative one, although, as it turned out, not very successful. Nevertheless, when carried out entirely with light waves, holography became an immensely successful process, giving rise to three-dimensional imagery that has captivated scientists and nonscientists alike, to powerful optical computing techniques, to rather surprising forms of interferometry, and to many other significant optical processes.

In its early years, however, even purely