we hear that

neering Company, Linden, New Jersey; Gabor A. Somorjai, professor of chemistry at the University of California, Berkeley: Robert W. Wilson, head of the radio physics division, Bell Laboratories, Holmdel, New Jersey.

Among the new foreign associates are: Michael S. Longuet-Higgins, Royal Society professor of the department of applied mathematics and theoretical physics, University of Cambridge, UK; Abdus Salam, professor of physics at Imperial College, London, UK; Yakov B. Zeldovich, academician at the Institute of Applied Mathematics, Academy of Sciences, Moscow, USSR.

John Kunzler is 1979 Kamerlingh Onnes medalist

The Kamerlingh Onnes Medal for 1979 will be presented to John E. Kunzler at the 15th International Congress of the International Institute of Refrigeration at Venice, Italy in September. Kunzler, who is director of the Electronic Materials and Device Laboratory of Bell Laboratories, Murray Hill, New Jersey, will be honored for his work on hard superconductors. The Onnes Medal is awarded about every five years by the Netherlands Association of Refrigeration for extraordinary merit in the development or application of cryogenic engineering.

Kunzler earned a BS degree in physical chemistry from the University of Utah in 1945 and a PhD in the same field from the University of California at Berkeley in 1950. He became a member of the Purdue University faculty in 1945 and a year later returned to Berkeley where he was a research associate until 1952. In that year, Kunzler joined the staff of Bell

Laboratories.

New members chosen by Arts and Sciences Academy

Ninety scholars, public figures, scientists and artists joined the ranks of the American Academy of Arts and Sciences, as a result of elections held last May.

The following physicists and scientists in related fields were honored with

membership:

Charles P. Bean, physicist at GE Corporate Research and Development, Schenectady, New York; Arthur D. Code, Joel Stebbins Professor of Astronomy at the University of Wisconsin, Madison; Roger F. Dashen, professor of physics at the Institute for Advanced Study, Princeton, New Jersey; Stanley Deser, professor of physics at Brandeis University; Michael E. Fisher, professor of chemistry, physics and mathematics at Cornell University; Hans E. Frauenfelder, professor of physics at the University of Illinois, Urbana-Champaign; Robert

Herman, head of the Traffic Science Department, General Motors Research Laboratories, Warren, Michigan; Mark G. Inghram, professor of physics at the University of Chicago; Martin J. Klein, professor of the history of science at Yale University; Edward P. Nev. Regent's Professor of Physics and Astronomy of the University of Minnesota; Robert Serber, professor of physics at Columbia University; Lynn R. Sykes, professor of geology at Columbia University; Peter H. von Hippel, professor of chemistry at the University of Oregon; Benjamin Widom, professor of chemistry at Cornell University; Hatten S. Yoder Jr, director of the Geophysical Laboratory, Carnegie Institution of Washington.

Included among the 18 foreign honorary members elected was Ludwig D. Faddeev, V. A. Steklov Institute of Mathematics, Leningrad, USSR.

Michael Kosterlitz, formerly of the University of Birmingham, has been named professor of physics at Brown Univer-

Robert W. Decker, professor of geophysics at Dartmouth College, is the new scientist-in-charge of the US Geological Survey's Hawaiian Volcano Observatory. The Observatory conducts basic research on eruption processes and is the focus of the federal government's Volcano Hazards Program.

David L. Stonehill, director of the Computer Center at the State University of New York at Binghamton, has been appointed vice-provost for computing at the University of Rochester.

John R. Cameron has been named the Farrington Daniels Professor of Radiology and Physics at the University of Wisconsin-Madison.

obituaries

Leland J. Haworth

Leland J. Haworth, prominent physicist, administrator and government official, died on 5 March in Port Jefferson, New York, at the age of 74. A former Director of the Brookhaven National Laboratory, Commissioner of the Atomic Energy Commission and Director of the National Science Foundation, he brought to those organizations a wealth of experience as a teacher, a research scientist, a project leader and a science administrator.

Haworth was born in Flint, Michigan, on 11 July 1904. He received his AB in 1925 and AM in 1926 from Indiana University and his PhD in 1931 from the University of Wisconsin, all in physics.

He served as instructor in physics at the University of Wisconsin from 1930 to 1937. Following a year as Lalor Fellow in Physical Chemistry at MIT, Haworth, in 1939, joined the physics department of the University of Illinois. His early research was in solid-state physics, principally the surface structure of metals. In 1934 he switched to nuclear physics.

Haworth and his associates at Illinois developed one of the first time-of-flight systems for the direct determination of slow neutron velocities. Experimental results included the determination of the mean life of neutrons in water and the hydrogen capture cross section, and the velocity dependence of the absorption of boron for slow neutrons.

Haworth's first contact with "big science" came when he was engaged in wartime microwave radar research and development at MIT's Radiation Laboratory. His responsibilities grew from those of a components development engineer to those of head of the receiver components division and a member of the

Laboratory's Steering Committee. His specialty was electronics, data presentation and precision instrumentation.

Following a brief return to the University of Illinois as professor of physics, Haworth in 1947 joined the Brookhaven National Laboratory as Assistant Director in charge of special projects and in 1948 became Director of the Laboratory.

Haworth brought Brookhaven to a position of international eminence. He was a strong proponent of the national laboratory concept, which brought together the resources of the government, academia and a resident staff of scientists and engineers to provide research opportunities not otherwise available. Under his leadership Brookhaven's multidisciplin-

