and for his leadership in structure analysis of matter by electron, x-ray and neutron diffraction.

Earlier this year Karle was named to the Chair of Science for the Structure of Matter at NRL, created in recognition of his distinguished service.

### AEC Honors Frenchmen For Atomic-Energy Research

The US honored four French scientists, Frederic Joliot and Hans Halban, posthumously, and Lew Kowarski and Francis Perrin, for their contributions to the early development of nuclear energy. The award consists of a plaque, citation and honorarium. It recognizes the experimental research of Joliot, Halban and Kowarski in 1939 and 1940, and the theoretical work of Perrin. They were concerned with neutron emission in the fission process and the determination of critical cross sections of nuclear fields and moderators.

Kowarski, a senior scientist for CERN, is now teaching in the US. Perrin is high commissioner of the French atomic energy authority.

# Strnat, Olson, Hoffer Get Materials-Technology Award

The Air Force Materials Laboratory gave its Cleary Award to Karl J. Strnat, John C. Olson and Gary I. Hoffer for their work in magnetic materials. They studied the anisotropic magnetization behavior of ferromagnetic intermetallic compounds.

The award is presented annually in recognition of outstanding scientific contributions to materials technology. It honors Charles J. Cleary who was with the laboratory for 25 years and was assistant chief at his death.

# Velinsky Dies; Was Oakland Teacher, Beta Spectroscopist

Libor Jeri Velinsky, assistant professor of physics at Oakland University, died on 21 Oct. of heart failure while jogging on the Oakland campus. Velinsky, who was born in Brno, Czechoslovakia in 1931, received his BA degree from Vanderbilt University, his MA from the University of Rochester and his PhD from Michigan State University in 1964. Before going to Oakland, he taught at Michigan State University and at Albion College.

Velinsky's research field was betaray spectroscopy. At Michigan State he built a very-high-resolution, iron-free beta-ray spectrograph and was the author of studies of Auger and of internal-conversion electrons. He served as a consultant for the National Science Foundation Coöperative College-School Science Program and was especially active in developing student laboratory projects and lecture-demonstration equipment. He was a member of the American Physical Society and of Sigma Xi.

### Jerzy Sawicki Dies in Crash; Was Theoretical Physicist

Jerzy Sawicki died on 11 Sept. in an airplane crash. He was returning from the Cargese Summer School in Theoretical Physics, where he had been giving two seminars.

Sawicki was born in Warsaw, Poland, in 1931. He studied there, obtaining his MA in 1954 and his PhD in 1957. The latter was the crowning of a series of works on the polarization of nucleons in reactions with deuterons, on the photodisintegration of the deuteron, Coulomb effects and

polarization phenomena in nuclear reactions, for which he was already well known to nuclear physicists. In 1957 he left the University of Warsaw to take up a position as research associate at the Palmer Physical Laboratory at Princeton. In 1959 he worked for several months at the physics department of the University of Washington, Seattle, then joined the theoretical nuclear physics group of the Radiation Laboratory at Berkeley, where he worked until 1961.

On returning to Europe, he went to Bologna, Italy, and directed a group of young nuclear physicists at the Institute of Physics; at the same time teaching at the Scuola di Perfezionamento in Fisica in Rome. From 1963 to 1965 he was visiting professor at the Institut de Physique Nucléaire, Faculté des Sciences at Orsay, France. In 1967, after a short stay at CERN and at the Centro de Investigacion y de estudios avanzados del Instituto Politecnico Nacional in Mexico, he became leader of the Theoretical Nuclear Physics group at the International Centre for Theoretical Physics in Trieste. Concurrently he taught theory of nuclear structure at the University of Trieste. There, until the last, he showed his talents as a dynamic and inspiring leader.

The abundant scientific works of Sawicki are concerned with nuclear matter as well as finite nuclei; light nuclei as well as heavy ones; spectroscopy as well as nuclear reactions. His last studies concerned the microscopic theory of nuclear structure—in particular the interpretation of excited states in nuclei and their electromagnetic properties, using realistic nucleon-nucleon potential. He had just brilliantly presented the first encouraging

results at Cargese when he was killed.

Sawicki had a striking personality and lived intensely and passionately. He spoke about ten languages and was also interested in mountaineering and archeology. In discussions he did not hesitate to interrupt and spared no one while expressing his disagreement. But his enthusiasm for research and his affinity for work were contagious, and an inspiration of the highest degree. He was also a pleasant friend, jovial and kind. In 1964 he married an Italian architect, Valeria Settimi.

ABDUS SALAM
Director, International Centre
for Theoretical Physics, Trieste
Maurice Jean
University of Paris

# F. P. Bowden Was Surface Physicist at Cavendish

Frank Philip Bowden died on 3 Sept. after a long illness. He was professor



of surface physics and director of the surface - physics subdepartment at the Cavendish Laboratory, University of Cambridge.

Bowden's first research was on the

structure and topography of catalytic surfaces and on the stability of electro-deposited hydrogen and oxygen monolayers. At the Cavendish his interests included optical and electrical properties of solids, deformation of solids at high rates of strain, properties of finely divided matter, range of surface forces, and properties of solids at extremely high temperatures. He was a Fellow of the Royal Society.