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tional conferences. The highlight of this research was the discovery in 1980 of the thermodynamically reversible roughening transition on the surfaces of hexagonal He^4 crystals at about 1K, which was subsequently confirmed at laboratories in Moscow and Paris.

D. O. EDWARDS

Ohio State University

S. G. LIPSON

University of Sussex, on sabbatical leave from Technion

Roman Laubert

Roman Laubert, associate professor of physics at East Carolina University, died last spring. Laubert was born in Riga, Latvia, in 1938 and came to the United States in 1949. He received his BS from City College of New York in 1961 and his PhD in physics from New York University in 1970.

Laubert was a prominent experimentalist during the explosive resurgence of inner-shell ionization studies that occurred in the early 1970s. His experiments at NYU, in which two of us (WB and IS) participated, led to the present formulations of binding and Coulomb-deflection effects in inner-shell ionization. Working at the NYU Radiation and Solid State Laboratory with an accelerator that he built and with accelerators at the Carnegie Institution, the Brookhaven National Laboratory and, later, the Oak Ridge National Laboratory, Laubert made wide-ranging studies, via x-ray emission, of the dependence of inner-shell ionization on projectile atomic number, charge state, and energy. His best-known work arose in the course of these experiments, namely, the 1972 discovery of "molecular orbital" x-rays in energetic ion-atom collisions, which was published in collaboration with Frans Saris and others from the Fundamenteel Onderzoek der Materie Institute.

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Interested also in stopping powers of clusters of projectiles, he made important contributions to the understanding of dynamic screening of projectiles in matter. His most recent enthusiasm concerned investigations elucidating properties of "convoy" electrons as they emerge with projectiles from targets, through electron capture into a continuum state of the projectile outside the target or from states within the target. His work at East Carolina centered on post-collision effects using molecular targets in electron capture to the continuum. He also collaborated on experiments with an University of Tennessee-Oak Ridge group on electron capture and loss to continuum in gas targets.

GEORGE BISSINGER
East Carolina University
WERNER BRANDT
New York University
IVAN SELLIN
University of Tennessee

Leonard O. Olsen

Leonard Oliver Olsen, former president of the American Association of Physics Teachers, died last summer. In 1960 Olsen had joined the faculty of the Naval Postgraduate School as professor of physics after a long and illustrious career on the faculty at Case Institute of Technology. He retired as emeritus professor at the Naval Postgraduate School in 1975.

Throughout his career Olsen had a deep and abiding interest in the education of students and in the physics community. He was a founder and first president of the Cleveland Physics Society and a fellow of the American Physical Society. An active member of the American Association of Physics Teachers, he served it in many capacities, including president-elect (1959-60) and president (1960-61). From 1961 through 1964 he was a member of the

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Board of Governors of the American Institute of Physics.

Born 1 November 1910 in Cedar Falls, Iowa, Olsen was educated in the public schools there. He entered Iowa State Teachers College and received his AB degree in 1932. After transferring to the University of Iowa, he earned an MS degree in 1934 and a PhD in physics in 1937. That same year he joined the faculty at Case Institute of Technology as instructor. He was promoted to assistant professor in 1941, to associate professor four years later, and to professor in 1948. His research activities were in atomic and molecular collisions, spectroscopy, and the physics of surfaces, especially those of ferromagnetic materials.

After teaching several summers at the Naval Postgraduate School, in 1950 Olsen accepted an invitation to supervise the undergraduate physics courses for a newly established baccalaureate program. In 1960 he became professor of physics, a position he held until he retired in 1975 as professor emeritus. Throughout his years in Monterey he was active in faculty affairs and helped reorganize the faculty to include a faculty council and a faculty chairman, a structure that provided a harmonious relationship between faculty and administration for the succeeding years.

E. C. CRITTENDEN JR
J. N. COOPER
Naval Postgraduate School

Benjamin W. Roberts

Benjamin W. Roberts died after an accidental fall in his home on 14 June 1981 at the age of 58.

He was born in 1922 in Kenmore, Ohio. He received a bachelor's degree in mathematics and physics at Kent State University in 1946 and, at MIT, an MS in 1949 and PhD in 1951 for a thesis on the x-ray analysis of short- and long-range order in CuAu.

He joined the General Electric Research Laboratory in 1951. There he worked in many capacities: as research scientist, liaison scientist and technical coordinator. He was also a key member of a group that designed and installed one of the first neutron spectrometers at the graphite reactor at Brookhaven National Laboratory. Dividing his time between Schenectady and Brookhaven, he carried out x-ray and neutron diffraction studies on magnetic alloys, order-disorder, and hydrogen and deuterium in metals. Robert's interest then shifted to other areas of solid-state physics, and he investigated the magneto-optic effect in BiMn alloy, band structure of very pure metals and magneto-acoustic oscillations in aluminum and gallium. He discovered acoustic cyclotron resonance in gallium



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single crystals. Roberts studied the structure and chemistry of carbon fibers and participated in the search for superconductors operating at high critical temperatures.

Roberts joined with others in the late 1950s to found Volunteers in Technical Assistance, an organization dedicated to assisting people in developing countries to help themselves. He also collected and sent tons of scientific books and journals to poorly equipped schools in China, a country in which he had a strong interest from his having flown there in World War II.

WALTER L. ROTH
State University of New York at Albany

Alexander V. Bushkovitch

Alexander V. Bushkovitch belonged to the old school of academic physicists; he preferred the quiet, scholarly, unobtrusive life of the campus and library to the more limelighted pace of today's international physicist who travels widely, attends the big society meetings, and is often involved in industrial and federal science.

Bushkovitch, theoretical physicist at Saint Louis for many years, died this past January in his 75th year. He was born in Russia into an academic family, came to the United States at high school age, and studied physics at the University of Pennsylvania, where he received all of his degrees (AB, MS, PhD) in the years 1930-34. He spent the bulk of his active life at St. Louis University. For some 30 years every graduate student in the department came under Sasha's influence in his courses on quantum mechanics, group theory, and general relativity. His courses were never routinely repetitive, but always progressed to include current developments and thinking.

A. H. WEBER
St. Louis University