



Paul E. Klopsteg

Prosthetic Devices, which he headed for ten years. He co-edited a book, *Human Limbs and Their Substitutes*, that recorded the committee's accomplishments.

Klopsteg was chairman of the advisory board of governors of Argonne National Laboratory from 1948 to 1950 and was a member of the Atomic Energy Commission's personnel security review committee from 1953 to 1962. During the 1950s he also helped get the National Science Foundation under way, and he served as associate director until 1958.

Beginning in 1958 Klopsteg headed the National Academy of Sciences Committee on Atmospheric Sciences (he saw to it that the name was changed from mere "Meteorology"), whose recommendations resulted in the establishment of the National Center for Atmospheric Research in Boulder, Colorado. He was a member of the executive committee and a trustee for the related University Corporation for Atmospheric Research from 1964 to 1967.

In view of the breadth of Klopsteg's interests in science it is not surprising that he was heavily involved with the American Association for the Advancement of Science. He was a member of the AAAS council for many years and president of the association in 1959. His devotion to physics teaching was unwavering—he looked back on the founding of AAPT as the greatest satisfaction of his professional career. He deplored the inferior position teaching was accorded compared with research in the colleges and universities, and in an effort to raise the prestige of teaching he established what became the AAPT Oersted Medal for notable

contributions to teaching.

Klopsteg's contributions to physics itself lay mainly in instrumentation, in applications and in the relation of physics to other research fields. While the specific instruments he designed have largely become outmoded, several of the institutions he helped to form have flourished.

MELBA PHILLIPS
New York, New York

Stephan Berko

Stephan Berko, a professor of physics at Brandeis University and an innovator in the use of positrons to study condensed matter, died at his home in Wellesley, Massachusetts, on 15 May 1991.

Berko was born 16 December 1924 in Oradea, Romania, and spent his youth in the town of Sighet. In the spring of 1944 he and his entire family were transported along with the large Jewish population of Sighet to Auschwitz. He was transferred to the ghetto in Warsaw and finally to Dachau. Liberated by the US Army in 1945, he was the sole survivor of his immediate family.

After some time as a UN volunteer organizing schools in Munich, Berko enrolled at the Technical University of Munich in 1946. He won a fellowship from the US Hillel Foundation and went to the University of Virginia, where he received a BA in physics in 1950 and a PhD in physics in 1953, after completing a thesis on cosmic-ray muons under the direction of Frank L. Hereford. From 1953 to 1961 he held postdoctoral fellowships at Princeton University and at the Bohr Institute, Copenhagen, and joined the physics faculty at the University of Virginia.

In 1961 Berko moved to Brandeis University to initiate a program in experimental physics. He served as chairman of the physics department from 1965 to 1967. In 1978 he was appointed the William R. Kenan Jr Professor of Physics.

Berko's research concerned the study of fundamental interactions, many-body effects and the chemistry and physics of positrons in ordinary matter, especially the chemical and other interactions of positrons with matter. In a seminal paper in 1958, Berko and J. S. Plaskett comprehensively recast the description of the angular correlation of annihilation radiation in solid-state terms that have since provided the foundation for much additional work on oriented single crystals. Berko played a leading role in the extension of angular



Stephan Berko

correlation techniques to the study of magnetic structures using spin-polarized positrons and to the use of large-area detectors to measure the Fermi surfaces and electronic structures of disordered alloys and other materials. He and his student Howard Weisberg also made significant contributions toward the measurement of positron lifetimes in metals.

In 1974 Berko and his colleagues Karl F. Canter and Allen P. Mills Jr used a slow-positron beam to form positronium in vacuum and to measure the effects of quantum electrodynamics on its level structure. This work led to the study of the interaction of positrons with surfaces and to the discovery of more efficient ways to produce slow positrons. From 1982 to 1989 Berko worked with a group at the Brookhaven National Laboratory Reactor to study the interactions of slow positrons with solid surfaces using the two-dimensional angular correlation method. Berko was most recently involved in the study of high-temperature superconductors, the characterization of polymers and momentum density measurements on semiconductors.

In her opening remarks at a symposium honoring Berko on the occasion of his 60th birthday, Brandeis president Evelyn Handler thanked Steve for his active and deep concern for the university's philosophy and governance. In addition to his research and teaching, Steve served the university as chairman of the faculty senate and as faculty representative on the board of trustees. He was interested in all aspects of the university and was widely known as an excellent teacher, a respected critic and a warm friend. His masterful lecturing, his uncom-

WE HEAR THAT

promising integrity, his intense sense of justice and responsibility, his endless store of puns and his love for science will be greatly missed by his students and colleagues.

ALLEN P. MILLS JR
AT&T Bell Laboratories
Murray Hill, New Jersey
KARL F. CANTER
Brandeis University
Waltham, Massachusetts

Robert N. Thorn

Robert N. Thorn, former deputy director of the Los Alamos National Laboratory and a theoretical physicist who devoted his professional career to the development of a credible nuclear deterrent, died on 25 October 1990 after a long and courageous fight with cancer. He was 66 years old.

Thorn earned his bachelor's degree (1948), master's degree (1949) and PhD (1953) in physics from Harvard University. During World War II he was a member of the Alpine Mountain Troops and was wounded in Europe. Thorn joined the theoretical physics division at Los Alamos in 1953 and became group leader of the thermonuclear design team in 1964. He was appointed a division leader in 1970, and shortly thereafter he was made an associate director, responsible for the entire nuclear weapons program at Los Alamos. He was the deputy director of the lab from 1979 to 1985. Twice during this period—in 1979 and again in 1985—Thorn was acting director of Los Alamos.

A prolific weapons designer and innovator, Thorn played a significant role in designing nuclear weapons and in searching for ways to diminish the nuclear threat through arms-control negotiations and constraints on the proliferation of nuclear weapons and nuclear materials. He served on many national and international boards and commissions chartered to explore ways to reduce the nuclear danger. His expertise in nuclear technology and his experience in weapons design were invaluable in the arms-control arena.

Thorn was especially interested in international cooperation on basic science. He was responsible for the lab's extensive collaboration with France, on a wide array of scientific and engineering programs.

In addition to his professional activities, Thorn made many contributions to the Los Alamos community. He was active in the county government and in the development of the extensive Pajarito ski area. In his final years, he worked long hours on



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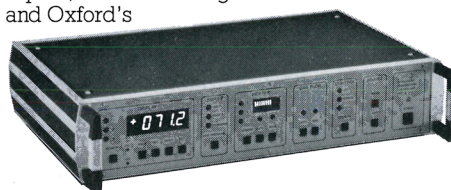
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