Reactor Testing Station, which was operated for the US Atomic Energy Commission by the atomic energy division of Phillips Petroleum Co. He continued to work there through five changes of contractor and two changes of facility name: It is now known as the Idaho National Engineering and Environmental Laboratory.

Russ made many contributions in the fields of nuclear physics and nuclear technology and their applications—both through his own research and through his leadership of an active research group. He led the laboratory's nuclear structure physics group until 1964, managed the nuclear physics branch until 1967 and then managed the physics division. In 1983, he became one of a select group of science and engineering fellows at the laboratory, and, after retiring in 1986, he became an emeritus fellow. In retirement, he continued to work as a consultant at the laboratory until a few weeks before his death.

Russ served on many national committees and was active in several technical societies. He chaired the American Nuclear Society's isotopes and radiation division in 1983, the ANS-16 standards subcommittee from 1978 onward and the National Academy of Sciences' nuclear detector subcommittee in 1965–70. In 1982, he received the prestigious Radiation Science and Technology award from the ANS.

His international activities began in 1961, when he served as a member of the US Department of State's Atoms for Peace mission to Venezuela. In 1972, he was a member of an Atomic Energy Commission Exchange Mission to the USSR.

In the late 1950s and 1960s, Russ was a pioneer in the development of gamma-ray spectrometry as a useful tool for basic nuclear structure research, as well as in many facets of nuclear technology. He was among the first to develop the standard "3 × 3" sodium iodide (Tl) detectors, the associated electronics and the methodology for analyzing the resulting spectra. Russ's group was also active in the early development of high-resolution germanium spectrometry through the use of cooled field-effect transistor preamplifiers.

Understanding the needs of researchers, Russ collected gamma-ray spectra from both NaI(Tl) scintillation and germanium semiconductor detectors. These spectra were published in three widely distributed catalogs, which are known collectively as *Gamma-ray Spectrum Catalogue* (US Atomic Energy Commission, 1957, 1964, 1974). His interest in the expansion of gamma-ray spectrometry as a tool for applied research was still evident as he worked, in the last two years of his life, on a CD-ROM version of his catalogs. Under the impetus of his guidance, the members of Russ's Idaho Falls group have gone on to be very active and productive in the fields of nuclear structure, gamma-ray metrology and applied radiation measurements throughout the US.

Russ's enthusiasm for the work he chose to devote his life to and his warm, down-to-earth personality were appreciated by all who knew him, and will be missed.

Richard G. Helmer
Idaho National Engineering and Environmental Laboratory
Idaho Falls, Idaho

Joseph Edward Lannutti

Joseph Edward Lannutti, a professor of physics and associate vice president for research at Florida State University (FSU), died suddenly in Tallahassee on 21 October 1997.

Born in Cedar Hollow, Pennsylvania, on 4 May 1926, Joe was drafted into the US Army during World War II. At the end of the war, he took advantage of the GI Bill of Rights to study physics at the Pennsylvania State University, where he earned a BS in 1950. Continuing to study physics, Joe earned an MS at the University of Pennsylvania in 1953 and a PhD at the Berkeley campus of the University of California in 1957.

After graduating, Joe became an assistant professor at FSU, where he established a program of research in high-energy physics. He focused initially on using emulsions to study par-

JOSEPH EDWARD LANNUTTI

ticles with nonzero strangeness. In the 1960s, he used bubble chambers to study pion and kaon interactions. And in the 1970s, he headed the FSU participation in one of the early large bubble chamber experiments at Fermilab.

The demand for higher statistics in particle experiments spurred Joe to participate in a triggered bubble chamber experiment at the Stanford Linear Accelerator Center in the late 1970s. Later, to gather more data on strange particles, he led the FSU group in its first electronic counter experiment at Fermilab, which was called E-557. After several experiments at Fermilab, he joined the ALEPH collaboration at CERN in 1985.

Joe was elected and appointed to many national committees including the board of trustees of the University Research Association, which oversees the operation of Fermilab, and the Department of Energy's High Energy Physics Advisory Panel.

This committee work got him interested in the demographics of scientists and engineers and the projected deficit of qualified scientists. In 1981, he proposed the creation of an engineering college at FSU and convinced the board of regents and the Florida state legislature to fund such a program. A year later, the college was created as a joint effort between Florida A&M University and FSU. A very patient man, as well as a skilled diplomat, Joe had managed to bring together two very diverse universities with very different missions. He served as the first dean of the college and, at the same time, was promoted to the position of associate vice president of FSU.

In the early 1980s, there were very few supercomputers available to researchers at US universities. In 1984, Joe successfully proposed the acquisition a supercomputer through the creation of the Supercomputer Computations Research Institute (SCRI)—a joint venture of the Federal government, the State of Florida and private industry.

After directing SCRI for nine years, Joe became interested in the world supply of food. During the past few years, he worked toward the creation of a research institute for marine aquaculture aimed at large-scale fish farming in the Gulf of Mexico.

Joe will be remembered as a person who was willing to take on extremely complex challenges and bring them to successful conclusions, whether it was a complicated physics experiment or the founding of an institute. He trained many of us at FSU in the fine points of both experimental physics and teaching, and touched the lives of a great number of individuals across the nation. His friends around the world will miss him.

SHARON HAGOPIAN
VASKEN HAGOPIAN
JOSEPH F. OWENS
Florida State University
Tallahassee, Florida

Hermann Rudolf Robl

Hermann Rudolf Robl, who directed the Army Research Office (ARO) in Research Triangle Park, North Carolina, died in his home in Durham, North Carolina, on 27 November 1997. He was 78.

A Viennese native, Hermann was drafted into the German army during World War II. This turn of events not only interrupted his undergraduate studies in physics at Vienna University but also led to his being wounded in a tank battle on the eastern front. Picked up by US troops, he was taken to a military hospital, where he developed the contacts that ultimately resulted in his being recruited to join the US Army's new Office of Ordnance Research, which became the ARO in 1962.

Immediately after the war, Hermann returned to Vienna University to work on his PhD in theoretical atomic physics, which he completed in 1948. When he left Vienna in 1955 for his position at ORO, he was an assistant professor at the university's Institute for Theoretical Physics.

Hermann was one of the first US Army scientists to recognize that maser research could be extended into the visible part of the spectrum and that the optical maser would be useful for range finding and target illumination. At ARO, he established a comprehensive laser research effort, which brought together many of the field's pioneers.

HERMANN RUDOLF ROBL