

Ernst Mach Honorary Medal for Merit in the Physical Sciences to **Vaclav Vitek**, a professor in the department of materials science and engineering at the University of Pennsylvania.

At the Symposium on Atomic and Surface Physics in Folgaria, Italy,

OBITUARIES

Andrei Tsolakovitch Amatuni

Andrei Tsolakovitch Amatuni, a versatile and eminent physicist and administrator, died from a heart attack on 10 October 1999 while flying to an international workshop.

An ethnic Armenian, Andrei was born on 10 January 1928 in Leningrad. In 1938, when the repression under Stalin's rule was at its height, Andrei's father was falsely accused of subversive activity and executed. Young Andrei was then exiled with his mother to the desert region of Turkmenistan. From that bleak period of his life, Andrei's only positive recollections were of the brilliant teachers in the local elementary school—former university professors—who, like him, had been exiled from Leningrad or Moscow. These were the circumstances under which Andrei's passion for science was seeded.

During World War II, Andrei managed to find refuge with his relatives in Yerevan, Armenia, where he graduated from high school in 1945. Despite his suspicious past, he was admitted to Moscow University and graduated from its physics department in 1950. But until 1956, when his father was posthumously rehabilitated by Krushchev's regime, Andrei could not find a permanent job. He made his living by teaching courses in schools in Armenia, but continued theoretical research on his own. In 1956, he was able to return to Moscow University, where, that same year, he defended his PhD thesis and published three noteworthy papers on the quantum theory of antiferromagnetism.

In 1957, he returned again to Yerevan as the head of Yerevan Physics Institute's theoretical laboratory. He worked on the design of the 6 GeV Yerevan synchrotron—the biggest in the USSR—and obtained several fundamental results in the theory of x-ray transition radiation. Since the mid 1960s, partially stimulated by a one-year term at CERN, Andrei shifted his scientific interests to high-

energy physics. He published papers on the application of functional analysis methods to nonlinear S-matrix theory, the theory of complex momenta applied to high-energy photo- and electro-production processes, and on parastatistics in particle physics. Several of his findings were later confirmed experimentally at the Yerevan Synchrotron and elsewhere.

His administrative career developed with equal success. He served as deputy director of Yerevan Physics Institute from 1964 to 1973 and as its director from 1973 to 1992. During these three decades, he initiated new directions in theoretical and experimental research, such as the physics of accelerators and cosmic rays and applied and computational physics. He developed collaborations with most of the leading high-energy physics centers in the former USSR and abroad. He also served on several international committees.

Andrei devoted a large portion of his time to teaching and popularization of science. For almost 40 years, he taught advanced graduate courses in theoretical physics.

Keen to forge closer ties between fundamental science and industry, he was among the first to promote accelerator-driven transmutation of nuclear waste; the application of radioactive isotopes and electron accelerators in medicine and agriculture; the application of synchrotron radiation in medicine, biology, and microelectronics; and the application of high-current electron accelerators to the production of artificial diamonds.

Andrei's official activities and responsibilities never distracted him from active engagement in fundamental research. He made numerous contributions in different areas of theoretical physics, notably his theoretical discovery in the early 1980s of the self-acceleration and self-focusing of electron bunches by plasma wake fields. And when he relinquished his administrative responsibilities in 1992, he continued to work on the theory and application of nonlinear interactions of charged particles with

intense beams of electromagnetic radiation, plasmas, or both.

Besides science, Andrei loved literature, classical music, history, and art. He was a great father and grandfather and an extraordinarily nice person. Those of us who knew him personally will probably remember him most for his endless optimism, friendliness, and infinite kindness—qualities that were naturally combined with his integrity, wisdom, and intellect.

IGOR POGORELSKY

*Brookhaven National Laboratory
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Kurt J. Lesker Jr

Kurt J. Lesker Jr, the founder and chairman of the Kurt J. Lesker Co, a manufacturer and distributor of vacuum equipment, died unexpectedly in his sleep in Byron, California, early in the morning of 7 December 1999.

Born on 13 March 1922 in the Pittsburgh neighborhood of Carrick, Kurt attended Duquesne University, where—as he liked to explain—he paid for his education by bartending in his father's saloon. Kurt's university education was interrupted by World War II, in which he served as an officer in the US army.

In 1947, he returned to civilian life and Duquesne, finished his chemistry degree, and started selling scientific instrumentation for Boder Scientific. But just three years elapsed before he was recalled to the army for the Korean war. When he was finally released from his military service, he started his own company in April 1954, which he named, not after himself, but after his father. Starting modestly but with typical entrepreneurial flair, Kurt became



KURT J. LESKER JR