



Julius Sumner Miller

people and the history of science led to appearances on many TV programs, including segments on "The Mickey Mouse Club" as Professor Wonderful.

Miller always preached that after one's health and family the most important ingredient in one's life is imagination—a tenet he learned from Albert Einstein and Walt Disney. Miller's imagination lives on through his indelible influence on demonstrations of the behavior of nature.

Wherefore, O judges, be of good cheer about death, and know this of the truth—that no evil can happen to a good man, either in life or after death. —Socrates

FRANKLIN POTTER
University of California
Irvine, California

Oldwig von Roos

Oldwig von Roos was born on 23 January 1925 in Koblenz, Germany, and died on 25 May 1986 in Pasadena, California.

Von Roos received his BS (1951), MS (1954) and PhD in physics (1956) from the University of Marburg, where he served as assistant professor for one year before coming to the United States at the invitation of the US Government. At Marburg he worked on quantum electrodynamics, publishing a paper on eliminating the divergences in QED (*Z. Phys.* **144**, 323, 1956). After coming to the US, he worked at the Caltech Jet Propulsion Laboratory, with one brief hiatus, from 1957 until his death. Initially,

as a member of the research analysis section, he worked on missile trajectories, guidance systems and heat transfer, including an analysis of the transition from spinning to tumbling in the orbit of Explorer I. In 1958 he transferred to the physics section, where he worked on the theory of quantum plasmas, solid-state physics and statistical mechanics. He led a research group from 1960 to 1965.

From 1965 to 1970 von Roos was a staff scientist at the Astrophysics Research Corporation (Los Angeles, California), performing analytical studies of electromagnetic scattering from rocket exhausts and reentry plasmas. He returned to the Jet Propulsion Lab as a member of the technical staff in 1970, studying electromagnetic wave propagation in the Earth's troposphere and ionosphere, and fluctuations in the solar wind. Since 1977 he worked mainly on the theory of solid-state devices, such as solar cells, and he became a member of the honorary editorial advisory board for the international journal *Solid-State Electronics*. Those who had the opportunity to work with him are saddened by his passing, and will miss his unique and ingenious style of doing theoretical physics.

JOHN A. ZOUTENDYK
Jet Propulsion Laboratory
Caltech
Pasadena, California

J. Irvin Swigart

J. Irvin Swigart, professor emeritus of physics at the University of Utah, died 17 January 1987 at the age of 83.

He received his MS and PhD (1938) degrees from Indiana University. In 1931, he joined the physics department of the University of Utah. In addition to teaching, he was active in upper atmosphere research during the 1950s and 1960s. He was a past president of Sigma Xi and a fellow of the Utah Academy of Sciences. In 1969 he received the Distinguished Teacher Award from the University of Utah, and in 1970 the Distinguished Service Citation of the American Association of Physics Teachers.

I first met Swigart as a graduate student at the University of Utah. As one of his teaching assistants, I began to attend his lectures, and he taught me how to teach. His demonstration lectures were always interesting and stimulating. It is rare to know a great teacher; to know Swigart was a privilege.

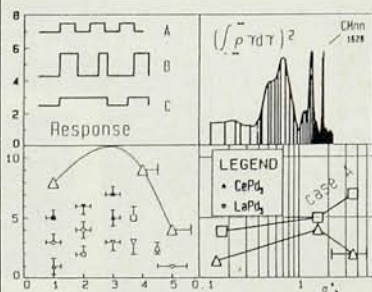
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