

Marshak, was on the theory of meson production.

That same year, Kaplon was appointed instructor and then, soon after, assistant professor, and thus began a long and highly productive association with the physics department at Rochester. Following the death of Bradt and the departure of Peters, Kaplon assumed the leadership of the emulsion group. Under his direction, the group made important contributions to the understanding of cosmic-ray phenomena and studied the abundance of the light elements in the primary cosmic rays. Most notably, it determined the helium-3 to helium-4 ratio, a benchmark even for today's cosmology.

Emulsions were a useful tool not only for studying cosmic rays but also the elementary particles and their interactions. Kaplon and his colleagues were among the first to observe the neutral π meson and eventually to make an estimate of its lifetime. They discovered the tau-prime decay of the K meson, that is, $K^+ \rightarrow \pi^+ \pi^0 \pi^0$, and investigated extensively the $K_{\mu 3}$ decay, $K^+ \rightarrow \pi^0 \mu^+ \nu_\mu$. As the Berkeley Bevatron began delivering separated beams of K mesons, Kaplon's group exposed emulsion stacks in those beams and were able to carry out detailed studies not only of K decays but also of the hyperons produced in the emulsion. However, the bubble chamber was becoming a much more powerful tool for the study of accelerator-produced elementary particles. Kaplon quickly recognized the importance of that development and encouraged his younger colleagues to move in that direction. As a result of his efforts, a fine bubble-chamber film analysis group was established at Rochester.

Kaplon kept pace with the rapidly evolving experimental techniques and recognized their relevance to the problems that interested him. He was convinced that there were sources of γ rays in the sky, and he and his colleagues Everett Hafner, Giovanni Fazio, and J. G. M. Duthie were among the pioneers in the early 1960s to fly in a high-altitude balloon a scintillation Čerenkov-counter telescope to search for point sources. Also during this time, his colleagues Roland Cobb, Duthie, and Joseph Stewart were the first to fly a triggered spark chamber to search for cosmic γ rays. Even though the short flight time and the small detector areas were insufficient to give an unambiguous signal, they were among the first groups to launch the field of γ -ray astronomy. Eventually, the first detection of point sources of γ rays was made in 1972

when William Kraushaar and George Clark and their collaborators at MIT used a satellite-born telescope.

While leading the cosmic-ray group, Kaplon was also heavily involved in the administration of the department of physics and astronomy. He was promoted to associate professor in 1955 and to full professor in 1960. In 1964, he assumed the chair and was instrumental in expanding the size of the faculty and the scope of its research. He made the appointments that led to the creation of a strong observational astronomy program and of the quantum optics group at Rochester; he was able to convince Elliott Montroll to accept an Einstein professorship, and Montroll attracted a strong theoretical group to Rochester. Until he left Rochester (in 1971), Kaplon continued his involvement in cosmic-ray research, primarily on NASA-sponsored missions.

The year 1968 was a tumultuous one at US universities: Students were protesting against the Vietnam War and there was unrest on campus. Differences of opinion with the university administration led Kaplon to resign as department chair. Marshak left Rochester that year to assume the presidency of the City College of New York and asked Kaplon to join him. Kaplon served first as associate provost from 1971 to 1975 and then as vice president for administrative affairs from 1975 to 1986. He again showed his talent for administration and took a hands-on approach in adapting CCNY to the new environment of open enrollment without compromising academic standards.

Kaplon retired from CCNY in 1982 and switched his interests to computer science, which he continued to pursue well after retirement.

Kaplon was a person of the utmost integrity, yet had a genial and generous personality. He was respected by his students and colleagues alike. He is remembered for his scientific contributions, for his wise and fair academic administration, and for the strength of his personality.

Masatoshi Koshiha

*University of Tokyo
Tokyo, Japan*

Adrian C. Melissinos

Malcolm P. Servedoff
*University of Rochester
Rochester, New York*

Larry Kevan

Larry Kevan, the Cullen Distinguished Professor of Chemistry at the University of Houston since 1980, died from a heart attack at his home



Larry Kevan

on 4 June 2002. He was working out on the treadmill, reading, and listening to music all at once. Those who knew him will appreciate that he died as he lived: actively pursuing several things simultaneously.

Born 12 December 1938 in Kansas City, Missouri, Larry graduated from the University of Kansas in 1960 with a BS in chemistry. He received his PhD in 1963 from UCLA, where he studied radiation chemistry with Nobel laureate Willard F. Libby. After pursuing postdoctoral research in Newcastle upon Tyne, England, Larry took a post as an instructor of chemistry at the University of Chicago in 1963. In 1965, he returned to the University of Kansas, where he remained for 4 years before moving to Wayne State University. He spent the next 11 years there before joining the University of Houston.

Larry's scientific contributions principally involved applications of electron paramagnetic resonance (EPR) to problems in materials science, chemistry, biology, self-assembly, imaging, and polymers. His research interests in the early days of his career mainly involved the application and extension of various magnetic resonance techniques such as electron-nuclear double resonance (ENDOR), electron-electron double resonance (ELDOR), and electron spin echo to problems in radiation chemistry and physics. In addition to extensive experimental contributions to radiation chemistry and the electronic and conductive properties of molecular solids, his groups at Kansas and Wayne State University in the late 1960s and 1970s made significant theoretical contributions to the electronic struc-

ture of the trapped electron in disordered systems. Larry's early work in radiation chemistry led him into the study of ion-molecule reactions using tandem mass spectrometry and ion cyclotron resonance spectrometry on both positive and negative ions.

In recent years, he had turned to problems in heterogeneous catalysis, photoionization processes of molecules in micelles and vesicles, and bulk solvation geometry of paramagnetic species. In particular, his extensive EPR studies, coupled with the advances he made in the application and analysis of electron spin echo envelope modulation in disordered solids, were fundamental in elucidating transition metal-ion interactions with adsorbate molecules in mesoporous materials. Larry had an amazing ability to see the potential value of introducing a technique in one field into a new area of research.

As a reflection of Larry's positive influence, a great number of students, postdoctoral fellows, and scientists who were attracted to his laboratory were inspired by him to continue their own research in related fields. The tremendous impact that Larry had on chemical applications of EPR was clear: A rather large percentage of the participants at a small EPR meeting in Warsaw, Poland, in 1996 had worked in Larry's lab at one time or another. Participants gathered from Germany, Israel, Italy, Japan, Korea, Poland, Sweden, and the US, and were honored as we posed for photographs with our former mentor. The Warsaw meeting seemed to be a microcosm of the situation in the worldwide community of scientists who practice chemical applications of EPR. Larry's direct contributions were enormous, but the indirect benefits of the symbiotic relationships that developed among all who came under his tutelage have been great indeed in both breadth and depth.

Larry served on the editorial boards of many journals in the areas of chemical physics, radiation sciences, and magnetic resonance. In 2000, capping a career in which he received numerous awards, the International ESR Society gave him its Silver Award during a special symposium session in his honor.

Larry's phenomenal success may be traced in large part to his ability to nurture relationships with people from around the world. He was both approachable and open to new ideas, while still providing, at the same time, a steady course at the helm. He used his extraordinary capacity to undertake many tasks while making col-

leagues feel as if they were at the center of his research program. Larry was unsurpassed as a teacher, especially in one-on-one situations. He welcomed into his lab those who wished to learn, and inspired them to do their best.

Many of Larry's former colleagues have reported that they would not have achieved their full potential without his influence. By his example, he taught the crucial qualities of organization, perseverance, and hard work, and demanded more from himself than from us.

We remember Larry for his aggressive approach to all aspects of life and his dedication to many causes outside of science. He loved and appreciated music, live theater, art, and ballet, and he was an extremely knowledgeable student of literature. He could advise you which wine to buy after discussing how to solve a tough problem in physics or chemistry. A sportsman, he was an avid sailor and diver who led charters to island groups from the Adriatic Sea to the South Pacific and from the Caribbean Sea to the Gulf of California. He was a proud member of the Level-70 racing circuit, skipping weekly races and the tough yearly race from Galveston, Texas, to Veracruz, Mexico. He skied and played tennis, handball, or anything else that was proposed.

Larry was scrupulously honest and approached everything he did with the highest level of integrity. He lived life to the absolute fullest, even to that last moment on the treadmill. He was an inspiration to all of us who knew him. We miss him sorely, but remember him with joy.

Barney L. Bales

*California State University,
Northridge*

Robert N. Schwartz

University of California, Los Angeles

Michael K. Bowman

*Pacific Northwest National Laboratory
Richland, Washington*

Jacques Pierre Friederich Sellschop

Jacques Pierre Friederich "Friedel" Sellschop, a leading figure in South African and international science and a pioneer in basic and applied nuclear physics, died peacefully at home in Greenside, Johannesburg, South Africa, on 8 August 2002.

Sellschop was born 8 June 1930 in Lüderitz in what is now Namibia (the photo shows him in front of the former hospital in which he was born). Sellschop completed his BSc in



Jacques Pierre Friederich Sellschop

physics, mathematics, and geology in 1949 at the University of Pretoria and his MSc in physics in 1952 at the University of Stellenbosch. He then went to the University of Cambridge, where he earned his PhD in nuclear physics in 1958.

Another great South African scientist, Sellschop's friend and mentor Basil Schonland, encouraged him to return to South Africa. Even before Sellschop had completed his doctoral degree, he was appointed founding director of the nuclear physics research unit at the University of the Witwatersrand (Wits) in 1956 and thus began an association with Wits that would last more than 45 years. The research unit later became known as the Schonland Research Centre for Nuclear Sciences, in recognition by Sellschop of Schonland as one of the most eminent of South African scientists and in acknowledgment of Schonland's help and encouragement to Sellschop over the years.

At Wits, Sellschop had many administrative responsibilities. In 1959, he was appointed professor of nuclear physics and became the first holder of such a chair in South Africa. He was later appointed dean of the faculty of science (1979–83). He also served as deputy vice-chancellor of research (1984–96), his last position before retirement. In that position, he was responsible for all research and related activities at Wits and introduced systems of research evaluation and support in line with international norms.

Sellschop loyally remained in South Africa despite many temptations and offers to work abroad. That loyalty was recognized at an international conference on physics held in his honor on the occasion of his 70th