applied physics in 1978; he continued to be active until the past few years. A great resource to students in preparing theses and in asking penetrating questions, he also gave a series of lectures on the history of solid-state physics as part of Stanford's centennial celebration. With colleagues at the Xerox Palo Alto Research Center, where he was a consultant, he jointly published papers on unexpected properties of hydrogen in silicon.

His many honors include the 1959 Oliver E. Buckley Condensed Matter Prize of the American Physical Society; the Von Hippel Award of the Materials Research Society and the National Academy of Sciences' James Murray Luck Award for Excellence in Scientific Reviewing, both presented in 1980; and the 1984–85 Wolf Prize.

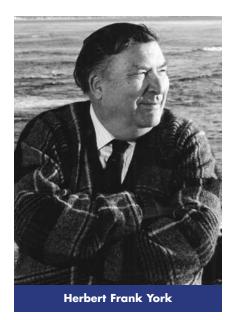
Conyers had many outside interests. Having a deep, nonjudgmental faith in Jesus Christ, he was a lecturer, with nine others, of a science-and-religion series at Stanford in 1985. He thought that theology underlies science because "science is ultimately based on leaps of intuition and aesthetic perceptions." He was an avid tennis player and a wit who could produce a clever limerick almost spontaneously. His contributions to physics will live. Those who knew him will cherish memories of this remarkable man.

Phil Anderson
Princeton University
Princeton, New Jersey
Ted Geballe
Walt Harrison
Stanford University
Stanford, California

## Herbert Frank York

Herbert Frank York, who was the first director of Lawrence Livermore National Laboratory, the first chancellor of the University of California, San Diego, and a leader on issues of defense and arms control, died on 19 May 2009 in San Diego.

Herb was born in Rochester, New York, on 24 November 1921. He grew up in a blue-collar family and pursued his technical bent as an undergraduate at the University of Rochester. After his graduation in 1943, Herb moved to the University of California Radiation Laboratory in Berkeley to participate in the World War II effort. He and many of his Berkeley colleagues soon moved on to Oak Ridge, Tennessee, where they helped establish the Y-12 plant responsible for uranium separation. After the war he returned to Berkeley and re-



ceived his PhD in experimental nuclear physics under Ernest Lawrence in June 1949, then embarked on what he assumed would be a conventional career in academia.

That September the Soviet Union exploded its first atomic bomb, and in January 1950 President Harry S. Truman made the decision for the US to develop the hydrogen bomb. In 1951, as part of Operation Greenhouse, Herb co-led a group at Berkeley in making diagnostic measurements on the nuclear test over the Pacific Ocean to verify the principles of thermonuclear explosions. Following a somewhat chaotic sequence of interactions among Lawrence, Edward Teller—the main proponent of a second nuclear weapons lab in addition to the one at Los Alamos-and members of the Atomic Energy Commission, the Livermore branch of the Radiation Laboratory was established on 2 September 1952 with Herb as its first director, although in true Livermore fashion, he wouldn't use that official designation until after the first year and a half.

The early years at Livermore were difficult but exhilarating ones; early failures led to serious self-examination and then to major successes. Although Herb was just 30 years old on opening day, he was extremely well-suited to the task of director. Lawrence was his role model, and he had many of his mentor's characteristics. What set Herb apart from many of his scientific contemporaries was a wonderfully engaging manner with people at all levels and an intuitive and rapidly developing political savvy. His skill at managing his mostly younger staff-and, more delicately, Lawrence and Teller—

## Research in Germany

The Alexander von Humboldt Foundation enables highly-qualified scientists and scholars of all nationalities and fields to conduct extended periods of research (6-24 months) in Germany. The Humboldt Foundation particularly welcomes applications from qualified, female junior researchers.

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- Monthly stipend of 2,250 EUR

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- Allows for a stay of 6-18 months in Germany; applications may be submitted at any time; Ph.D. received within past 12 years
- Fellowships may be divided into a maximum of three visits lasting three months or longer
  - Monthly stipend of 2,450 EUR.

was crucial in making the new laboratory a fully capable and recognized institution.

When President Dwight D. Eisenhower, in response to the launch of Sputnik 1 in October 1957, created the post of science adviser and established the President's Science Advisory Committee, Herb was asked to join PSAC. He quickly became engaged in space and defense policy, including the major issue of how to contain the nuclear arms and ballistic missile races. Early in 1958 he left Livermore to become the first chief scientist of the newly formed Advanced Research Projects Agency, and at the end of that year he was appointed the first director of defense research and engineering, then the third-ranking position in the Office of the Secretary of Defense. Over several years he gained Eisenhower's confidence, thus ensuring that Herb had considerable influence in shaping US space, missile, and other weapons programs. He also developed a lifelong belief in the need to contain the arms race and the military and technological forces that helped drive it; that belief motivated many of his subsequent activities.

Herb left Washington in 1961 to become the founding chancellor of the University of California, San Diego; he would remain part of that community for the rest of his life. In addition to serving five years as chancellor—his first three years and then two years a decade later—he had stints as physics department head and dean and returned to research and teaching as a professor of physics.

Throughout his subsequent career he served on many boards, delegations, and task forces, most of which were focused on some area of international security, defense policy and related technology, or arms control and disarmament. For example, he served another term on PSAC, was a member of scientific advisory boards in the Department of Defense, and was chosen to lead the US delegation in the comprehensive test ban negotiations in Geneva, Switzerland, in 1979-81. The six books he wrote and most of the courses he taught reflected the same interests. He also received many honors, including the American Physical Society's Leo Szilard Lectureship Award in 1994 and the Department of Energy's Enrico Fermi Award in 2000.

In the early 1980s the University of California strengthened relations between the campuses and the nuclear weapons laboratories. By 1983 several institutes were created that involved both labs and campuses, and a scientific and academic advisory committee was formed to oversee the work of the labs. Herb was a central figure in both endeavors: He was the first chair of the advisory committee and, until he retired to emeritus status in 1989, the first director of the UC Institute on Global Conflict and Cooperation, which was his final institutional creation.

Herb's extraordinary career was matched by his omnivorous interests. They not only ranged over all of science and technology but also included social and educational developments, history, politics, and international affairs. He had a store of anecdotes and personal reminiscences collected over an active and productive lifetime, together with a great sense of humor, a talent for mentoring, and an unpretentious style characterized by openness to new ideas, even-handedness, and goodwill. These traits, even more than his achievements, endeared him to family, friends, and associates at all levels and throughout the world.

Harold Brown

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