

uranium was at variance with the value obtained by Edward Teller working in the United States, but was verified within a few months by Georgy Flerov and K. A. Petrzhak working independently in the Soviet Union.

Subsequently, Chatterjee engaged in research on cosmic rays. For that work he was awarded his DSc degree by the University of Calcutta in 1945. In 1949 Chatterjee visited North America and met leading scientists—such as Gerhard Herzberg and Les Marton—with whom he was to maintain contact for many years. During that trip he visited Canada's Chalk River Nuclear Laboratories in Ontario and several laboratories in the US, including the National Bureau of Standards. That same year he became a postdoctoral research fellow in Ottawa and stayed there until 1951. Then the eminent physicist Satyendranath Bose, at the University of Calcutta, recruited Chatterjee as a lecturer in the department of pure physics. Later promoted to the post of reader, Chatterjee set up the first radiocarbon dating laboratory in India and detected fallout across the country from atmospheric nuclear tests conducted by the superpowers in the early 1950s.

In 1956 Chatterjee was invited to head the physics department of the newly constituted Jadavpur University. He built up the department with skill, energy and devotion. His group discovered very high helium content in the gas emanating from the hot springs at Bakreshwar, near Calcutta, and he set up his own laboratory (later taken over by the Department of Atomic Energy) for separating helium from other gases. In time his research interests expanded to encompass experimental solid-state physics, his students studying exoelectron emission from Geiger-Müller counter electrodes, surface states in semiconductors and metal-semiconductor contacts.

Chatterjee also maintained contact with the European scientific community. In 1958, for example, he worked as a fellow of the Davy-Faraday Laboratory of the Royal Institution, in London. During another of his European visits he suggested the possibility of the recoilless emission of gamma rays, and that suggestion led to the discovery of the Mossbauer effect. As recognition of his contribution, he was invited to the Technical University of Munich as a visiting professor in 1964–65.

Chatterjee also was known for his brilliance in electronic instrumentation. He built his own Geiger-Müller and proportional counters, picking up the co-

incidence counting technique from German Nobel laureate Walther Bothe, who had pioneered the technique.

On retirement from Jadavpur University in 1969 Chatterjee joined Bose at the Indian Association for the Cultivation of Science, in Calcutta, as a senior fellow. There he set up a helium laboratory and continued to guide research students, making his encyclopedic knowledge of physics available to colleagues and students. Many of them viewed him as a kindly father figure, ever ready to advise and financially support researchers in need.

He also pursued his scientific interests in his own house, where there was a small laboratory run by the S. D. Chatterjee Foundation, which he set up in the 1970s.

A bachelor with spiritual leanings, Chatterjee bequeathed his house to the Asiatic Society, with one floor continuing to be used by the foundation.

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Hubert Jose Yearian

Hubert Jose Yearian died at home in West Lafayette, Indiana, following a brief illness, on 17 February 1995.

Hubert was born on 17 June 1905 in San Jose, California, and attended the University of Oregon from 1923 to 1929, receiving his BS in 1927 and his MS in 1929 in physics. He then went to Purdue University as a graduate assistant and in 1934 earned Purdue's first PhD in physics, with a thesis in the then-new field of electron diffraction.

After two years as an instructor in Purdue's physics department, Hubert went to Caltech for two years. In 1938 he returned to Purdue as an assistant professor of physics and was promoted to associate professor in 1942, professor of physics in 1946 and professor emeritus in 1971.

During World War II Hubert was engaged in a particularly intense period of research as a member of a Purdue group organized to develop better semiconductor point-contact diodes as rectifiers and microwave detectors for use in radar electronics. The group's most important accomplishments were growth of the first good germanium crystals and the discovery that this material could be used to make the very best point-contact diodes. Hubert made significant contributions to various studies of the properties of germanium, which played an important part in understanding the phys-

ics of transistor operation.

Hubert's research was characterized by meticulousness in his craftsmanship. He also was a very dedicated teacher and was widely known to be a patient, clear and accessible lecturer.

RALPH BRAY

SOLOMON GARTENHAUS

Purdue University

West Lafayette, Indiana

ROBERT BUSCHERT

Goshen College

Goshen, Indiana

MASON YEARIAN

Stanford University

Stanford, California

Ernest Rost

Ernest Rost, a professor of physics at the University of Colorado, died in Boulder on 18 November 1994, after a six-month struggle against cancer.

Ernie was born in Breslau, Germany, in 1934 and moved shortly thereafter with his family to New York State. He received an undergraduate degree in physics at Princeton University in 1956 and a PhD in physics from the University of Pittsburgh in 1961. He then returned to Princeton as a physics instructor, becoming an assistant professor in 1964. He joined the University of Colorado's physics department as an associate professor in 1966 and became a full professor in 1970. He was deeply involved in teaching, research and administration in the department until his death.

Ernie helped develop the widely used computer programs DWUCK and CHUCK, which have been standard tools for the analysis of direct nuclear reactions for two decades. He also developed some of the earliest quantitative treatments of pion-induced nuclear reactions. During the 1980s Ernie played an essential part in developing and refining relativistic descriptions of nuclear scattering processes. His work was important to the experimental programs at such accelerators as TRIUMF and LAMPF (on whose program advisory committees he served).

In addition to being an insightful and productive researcher, Ernie was a gifted teacher, as recognized repeatedly in the form of CU teaching awards, and he was also valued for his wit and honesty. He was a true gentleman in all senses of the phrase.

JAMES R. SHEPARD

University of Colorado

Boulder, Colorado ■