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obituaries

occupation he took seriously all his life. Probably because he had not formally submitted a thesis for a PhD and had not even visited England, then the Mecca for Indian scholars, he was not made a professor. A postcard from Einstein with a single sentence to the vice-chancellor of Dacca University saying that many of those in Europe had benefitted by the presence of Bose, later cleared the way to a professorship.

In 1945 he returned to his alma mater as Khaira Professor of Physics at Calcutta University. Later he was vice-chancellor of Vishwabharati, the university established by the Indian Nobel-prize-winning poet Rabindranath Tagore. In later life Bose's interests were centered on the unified field theory and the theory of numbers. He took a very active part in public life in India and was at one time or another the president of all the reputable scientific bodies in India.

The remarkable thing about Bose's ascension to the highest echelons of science was that he got there by his own efforts. It is to be remembered that in those days India was ruled by the British, and there were very few Indian scientists of international reputation. Raman, too, at that time was working on light-scattering experiments at Calcutta and had not yet acquired a reputation. Bose belonged to the school of Bengali intellectuals like Vivekananda, Tagore, Saha and others, who strived to boost the intellectual pride of India, an accomplishment essential to her later political emergence.

Throughout his career Bose was a source of inspiration to younger scientists, and his kindness endeared him to anyone who came in contact with him. He was always ready to help them with their scientific problems and was liberal with his pocketbook whenever the situation demanded.

> JAGADISH SHARMA Feltman Research Laboratories Picatinny Arsenal Dover, New Jersey

Sharma studied physics under Bose at Calcutta University.

Edmund O. Fiset

Edmund O. Fiset, a physicist, died on 8 August 1973. He was 33 years old.

Born in Seattle, Fiset earned his MS (1964) and PhD (1967) at the University of Washington. As a postdoctoral research associate at Los Alamos Scientific Laboratory (1968-69), as an assistant professor at Brooklyn College (1970-71), and as a postdoctoral re-



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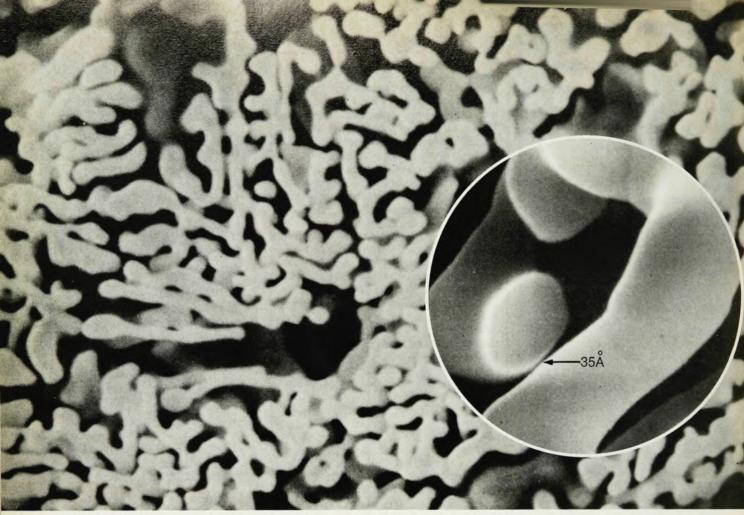
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obituaries

search associate at the California Institute of Technology (1971–72), he made significant contributions to nuclear many-body theory.

Fiset was an avid outdoorsman and an enthusiastic mountaineer. In 1972 he left the world of physics, and he and his wife established a primitive-style farm on the Olympic Peninsula of Washington State. He died near his cabin.

> LAWRENCE WILETS Department of Physics University of Washington

Frank D. Enck

Frank D. Enck, professor of physics and, since 1961, chairman of the physics department at Franklin and Marshall College, died on 16 December at the age of 47.

After graduating from Franklin and Marshall College, Enck pursued graduate studies at the University of Maryland, completing his PhD in 1957. Except for the 1966-67 academic year, during which his time was divided between work with Clayton A. Swenson's group at Iowa State University and Jorgen L. Olsen's group at the Eidgenössiche Technische Hochschule in Zurich, Enck spent his entire professional career at Franklin and Marshall.

Although Enck considered himself primarily a teacher, he was active in several areas of research, especially low-temperature thermal properties of superconductors.

LEONARD V. CHERRY Department of Physics Franklin and Marshall College

Heinrich B. Helmbold

Heinrich B. Helmbold, the man responsible for the aerodynamic design of the HE-178, the first jet airplane ever to fly, died on 22 December.

Born in Eisenach, Germany, in 1899, Helmbold was a student at the Humanistiches Gymnasium, the same high school Martin Luther attended several hundred years before. After studying engineering and technical physics at Hanover and the University of Göttingen, he became chief of the theoretical aerodynamical and jet-airplane research department at the Ernest Heinkel Airplane Manufacturing Co. It was here that he worked on the HE-178.

Helmbold came to the US in 1951 to work in the engineering research department at the University of Wichita. He remained there until 1956, when he joined the Fairchild Airplane Division in Hagerstown, Maryland. In 1964 he



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