OBITUARIES

George S. Newell

George S. Newell, associate professor of physics at Purdue University, died on April 3 in Champaign, Ill., following major surgery in St. Elizabeth Hospital in that city.

Dr. Newell was born in San Francisco 41 years ago. After graduating from Pomona College in 1943, he spent three years with Shell Development Company as a junior chemist before commencing his postgraduate studies. In 1946, as a National Research Council fellow, he went to Princeton University, where he received his master's degree in 1948 and his PhD in physics in 1953. While studying for his doctoral degree he served as an assistant in physics and as a research associate.

In 1952, he joined the staff of the Control Systems Laboratory at the University of Illinois and, in 1954, he was appointed assistant professor on the Illinois faculty. He joined the Department of Physics at Purdue in 1959 as an assistant professor and was promoted to associate professor in 1962.

Dr. Newell was a member of the American Physical Society.

I. Fankuchen

I. Fankuchen, professor of physics and head of the Applied Physics Division of the Polytechnic Institute of Brooklyn, died of cancer on June 28 in Maimonides Hospital in Brooklyn. Dr. Fankuchen, who was 59, had undergone major surgery for cancer twice in recent years, but he remained active in teaching and research, and he continued to devote much of his time and effort to the national and international crystallographic organizations in which he had long been involved. He was a vigorous member and former president of the American Crystallographic Association; he was chairman at the time of his death of the US National Committee for Crystallography; and he served as the United States editor of the international journal, *Acta Crystallographica*. His final illness came at the close of this year's session of the intensive (two-week, sixteen-hour-a-day) summer course in x-ray diffraction which he conducted annually at Brooklyn Polytechnic.

Photo by Heka

I. Fankuchen

He was born in Brooklyn in 1904, graduated from Cooper Union in 1926, and received his PhD in physics from Cornell University in 1933. The following year, as a Schweinburg research fellow, he went to England and worked until 1936 in W. L. Bragg's laboratory at Manchester. He then joined Cambridge University's Crystallographic Laboratory, which was headed by J. D. Bernal, and when Bernal left Cambridge in 1938, Fankuchen followed him to Birkbeck College in London. During this period he developed techniques of small-angle diffraction for the study of plant viruses which were then applied to the structure of crystallized sterols.

In 1939, he returned to the United States as a national research fellow at the Massachusetts Institute of Technology and the Harvard Medical School, where he continued to work with x-ray diffraction as a probe in structural investigations. In 1941, he accepted an appointment as an assistant professor in the University of Minnesota Medical School and associate director of the Anderson Institute for Biological Research. He returned to Brooklyn in 1942 as an adjunct professor of crystal chemistry at the Polytechnic Institute, and in the same year was awarded a PhD in physics by Cambridge University—his second. Dr. Fankuchen spent the remainder of his years as a member of the Polytechnic Institute faculty, and his enthusiasm for x-ray methods of analysis was a compelling influence in the subsequent development of the Institute's center of crystallographic and solid-state research. He became an associate professor in 1945 and was named professor of applied physics in 1947.

The "I." in Dr. Fankuchen's name stood for Isidor, but he was known far and wide by the familiar and convenient contraction, "Fan". His spirited approach to teaching, his driving energy, and his quickness of mind stimulated a multitude of students of crystallography and contributed to a wider awareness of the usefulness of x-ray diffraction as an analytical tool. The first and only American editor of *Acta Crystallographica* during the sixteen years of its existence, he was known as a thorough and exacting critic. In 1950, when the American Crystallographic Association was formed through the merger of two older societies, he was elected as the first president of the new organization. He was a fellow of the American Physical Society and of the Physical Society of London.

Alvin G. Fox

Alvin G. Fox, a physicist in the Neurosurgical Research Laboratory of the New York University School of Medicine, died on April 19 after a short illness. He was 36.

A native New Yorker, he received his bachelor's degree from Yale College in 1951 and subsequently pursued graduate studies at both Yale and Co-