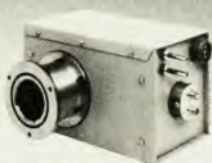


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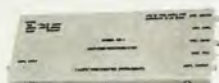
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promotion of public understanding of issues strongly involving both physics and society was presented to Theodore Taylor of Princeton University. Taylor was cited for his contribution to the appreciation by both the general public and policymakers of the security implications inherent in the nuclear fuel cycle. His book, *Nuclear Theft: Risks and Safeguards*, written in collaboration with Mason Willrich of the University of Virginia, was acclaimed as the first comprehensive statement of the potential for proliferation of nuclear weapons to be credible to a broad spectrum of the persons concerned with the future of nuclear energy.

Henry L. Friedman, a physical chemist formerly with Princeton University's aerospace and mechanical-sciences department, has joined the staff of the Textiles Research Institute as a senior scientist.

William A. Fowler, Institute Professor of Physics at the California Institute of Technology, was awarded the Eddington Medal of the Royal Astronomical Society for his outstanding contributions to nuclear astrophysics. The Medal, presented for investigations in theoretical astronomy, acknowledged Fowler's work on the origin of chemical elements in the "big-bang" fireball.

Clarence E. Lee, a staff researcher at Los Alamos Scientific Laboratory, was ap-

pointed full professor in the department of nuclear engineering at Texas A&M University.

Promotions at the Electric Power Research Institute include **Piet B. Bos**, who has been promoted to become the director of the new energy resources department, **John Cummings**, who is now the solar-programs manager and **Richard Balzhiser**, who has become the director of the fossil fuels and advanced-systems division.

Luis Walter Alvarez, physicist at the University of California, Berkeley, was inducted into the National Inventors Hall of Fame for his invention of basic radar systems.

James S. Owens, the former vice-president and general manager of the Champion Spark Plug Company's ceramic division received the Albert Victor Bleining Award presented by the Pittsburgh section of the American Ceramic Society. Owens, a physicist, received the award given to honor outstanding international leaders in the field of ceramics.

Richard M. Emberson has been named the general manager of the Institute of Electrical and Electronics Engineers. Emberson also serves as the executive director of the organization.

Lewis S. Salter, former professor of physics at Wabash College and dean of Knox College, has returned to Wabash as president of the college.

obituaries

Shirleigh Silverman

Shirleigh Silverman, an experimental physicist specializing in molecular spectroscopy, died after a long illness on 9 February 1978 at the age of 71, never having retired from the scientific community.

Silverman was born in Baltimore, Maryland and was educated at The Johns Hopkins University, where he received an AB in 1927 and the PhD in physics in 1930. He served as instructor of physics at Johns Hopkins until 1934. Subsequently he spent nine years as a research physicist with E.I. DuPont de Nemours & Co, working in the field of synthetic fibers, and then returned to Johns Hopkins as a supervisor and a research physicist at the Applied Physics Laboratory. In this position, he directed and participated in research in the fields of high-temperature physics and spectroscopy and also served as a supervisor in the Laboratory's World War II activities related to the development of the radio proximity fuse for ro-



SILVERMAN

tating projectiles and to guided missiles.

He joined the Office of Naval Research in 1955 where he served successively as Director of the Physical Sciences Division,

obituaries

Director of the Naval Research Group and finally as Director of the Office until leaving in 1964 to join the National Bureau of Standards in the capacity of Associate Director for Professional and Academic Liaison. Silverman retired from the National Bureau of Standards officially on 31 December 1974 but shortly thereafter returned as a reemployed annuitant and served in a variety of capacities until 11 February 1977. These efforts included serving as the adviser to the associate director of programs, adviser for postdoctoral academic liaison and scientific programs at NBS.

Shirleigh Silverman was a man of many parts. On the one hand he had a deep love for experimental physics and on the other a great sensitivity for the administration of research and development programs. He had a balanced view of the needs of the Navy, the NBS, universities and above all the scientific community. Silverman had a special affection for young scientists everywhere and guided them wisely both at the NBS and at the Catholic University of America where he held an appointment as research professor directing a graduate research program in infrared spectroscopy.

He wrote some fifty articles in scientific journals and had various patents to his credit. In 1970 he received the American Society for Testing and Materials Award for his paper "The National Measurement System—A Concept to Assist the Private Sector." In this article he developed his concept, a national measurement system, which embraced the entire complex of measurement activities within the US. He also received several awards in connection with his service to the Department of the Navy.

Silverman had an extremely wide acquaintanceship and an enormous fund of interesting anecdotal material about the scientific and technical community. While over the years he was involved in many things, the main thread of his own scientific research was in the field of molecular spectroscopy. Perhaps most noteworthy is that he had a deep and abiding interest in the manner in which science is done.

ROBERT HERMAN

General Motors Research Laboratories

Andrew W. Lawson

Andrew Werner Lawson Jr, professor of physics at the University of California at Riverside, died 27 February. He was 60 years old.

Lawson was a pioneer in the development of solid-state physics in the United States and an influential teacher. Perhaps his best-known endeavor was the construction and operation of a high-pressure laboratory at the University of

Chicago. There Lawson and his students invented many new ways of measuring the physical properties of solids under high hydrostatic pressure. The students trained in this laboratory spread across the country, establishing new centers of solid-state and high-pressure research.

Lawson was born in 1917 in San Francisco. He studied at Columbia University, receiving his PhD in 1940. He was a member of the faculty of the University of Pennsylvania from 1940 to 1944. In March 1944 he joined the Radiation Laboratory at MIT to work on the microwave problems that became important during the war. He received a Presidential Certificate of Merit in 1946 in recognition of his contributions to microwave radar.

After terminating his wartime activities, Lawson joined the physics department and the newly formed Institute for the Study of Metals at the University of Chicago. In addition to his research in solid-state physics at high pressure and in metallurgy and thermometry, Lawson played a major role in the university's administration of activities in the physical sciences as chairman of the physics department from 1950 to 1956, and Associate Director of the Institute for the Study of Metals from 1952 to 1956.

In 1947 Lawson foresaw the potential contributions that physical methods of research and the concepts of solid-state physics could make to the emerging polymer technology and become a consultant to E.I. duPont de Nemours and Company, a position that he held for twenty years. He led the duPont technical staff in assembling knowledge of the physics of polymers, and wrote a book with them entitled *The Physical Nature of Synthetic High Polymers*.

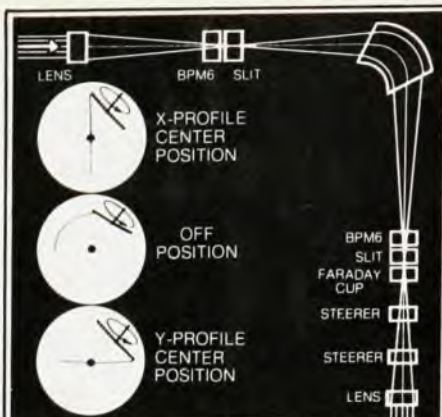
In 1961 Lawson left the University of Chicago and joined the faculty of the physics department of the University of California at Riverside as chairman of the department. He devoted his energies to building the department, serving as chairman from 1961 to 1964 and from 1967 to 1970. In 1965, he was honored as University of California Faculty Research Lecturer at Riverside. He participated in the formulation of an applied science program at Riverside and served as its first chairman, from 1971 to 1974.

Lawson was a gifted teacher, and his training of about fifty PhD students was a substantial contribution to the current state of physics. He continually emphasized the practical significance of solid-state science, and his students have had a major impact on industry and engineering as well as on academic physics. He will be remembered with affection by those of us who were privileged to enjoy his tutelage.

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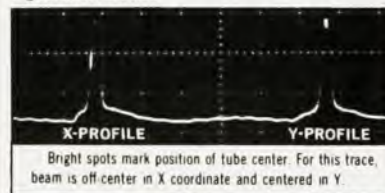


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