Texas at Austin. New members of the department are **Bryce S. DeWitt** and **Cecile DeWitt,** both from the University of North Carolina, as professors and **Charles B. Chiu,** from the California Institute of Technology, **Douglas J. Klein,** from Princeton University and **Jack B. Swift,** from Harvard University as assistant professors.

John A. Brinkman has been appointed deputy director, research, development and engineering directorate of the US Army Weapons Command at the Rock Island Arsenal in Illinois. Previously he was director of the North American Rockwell Science Center in Thousand Oaks, Calif.

New members of the Los Alamos Scientific Laboratory include **Patrick A. Thompson** in the medium-energy physics division, **John C. Goldstein** in the theoretical division and **Joe L. Cortez** in the testing division.

Science Spectrum, Inc has named **V. Robert Stull** as vice-president for advanced technology.

Alan F. Haught has been named to the new position of senior principal scientist, atomic and plasma physics laboratory at United Aircraft Research Laboratories.

Appointed as head of the office of polar programs at the National Science Foundation is **Joseph O. Fletcher.** He is currently research professor of oceanography and atmospheric sciences at the University of Washington.

Fr Andrew J. Dufner, formerly a visiting professor at the Institute of Theoretical Physics at the University of Louvain, Belgium, was named dean of the Jesuit School of Theology at Berkeley.

The new editor of the *IBM Journal of Research and Development* is **Rudy Joenk,** who has been associate editor of the journal since 1968.

R. C. Hansen, formerly head of the electronics division of the KNS Technology Center, is now a consulting engineer in Encino, Calif.

Robert S. Cohen, chairman of the physics department at Boston University, has been appointed as acting dean of the college of liberal arts there.

R. B. Goldman has been promoted to director, research and development, for the Magnavox government-electronics division.

At the University of Missouri at Rolla **Walter Kauppila** has been appointed as assistant professor. He was previously a postdoctoral research associate at the Joint Institute for Laboratory Astrophysics at Boulder, Colo.

obituaries

Wallace J. Eckert

Wallace J. Eckert, formerly of IBM Corp and Columbia University, died on 24 August. He was 69 years old.

Associated with IBM since 1933 and director of the IBM Watson Laboratory since 1945, Eckert retired as an IBM fellow in 1966. Four years later he retired as professor of celestial mechanics at Columbia University, with which he had been associated since 1926.

Eckert was an authority on numerical calculations of the lunar and planetary orbits and had pioneered the use of automatic computation for scientific problems. His work on lunar theory was honored by the National Academy of Sciences in 1966 with the James Craig Watson medal.

Paul D. Foote

With the death of Paul D. Foote on 2 August at the age of 83, US physicists have lost one of their most important and creative links with the early history of the profession.

Among the many roles he played in generating the organizations of physicists from which we benefit today, was that of chairman of the small committee that created the American Institute of Physics in 1931. Thus he was a farsighted colleague of Karl Compton's at a critical stage in the development of new institutions for the physics community. Foote also served the physics community as president of the American Physical Society in 1933, and as a member of the original organizing committee of the Optical Society of America in 1916. He continued to play an important role in the early days of the OSA as secretary for one year in 1920 and as the second editor of the *Journal* of OSA.

Foote began his career at the National Bureau of Standards in 1911, a decade after it opened its doors. He had a brilliant career there, working creatively in a variety of areas. He was, for example, deeply involved in measurements and standards in the fields of atomic spec-

troscopy, x-ray analysis and radioactivity. He was also an innovator in the development of optical glasses and thermocontrols. During his years at NBS he formed a close relationship with Fred Mohler, one of his colleagues there. Together they wrote a book on the origins of atomic spectra, which became a classic of its day and inspired many young Americans to pursue a career in atomic physics. He founded *The Review of Scientific Instruments* in 1922, and served as its editor for ten years, elevating that journal to one of the leading instrument journals in the world.

In 1916 he left NBS briefly to serve the Fisher Scientific Co in Pittsburgh, but he returned after a year and remained there until 1927 when he became a senior industrial fellow at the Mellon Institute, under the sponsorship of the Gulf Oil Corp. Five years later he assumed the post of director of research

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and executive vice-president of the Gulf Research and Development Co. During the early years at Gulf he was exceedingly active in promoting interdisciplinary organizations that would bring the research-minded leadership of many organizations together. His guiding role in the creation of AIP took place as part of this group of endeavors. Ultimately, in 1945, he was elected a vice-president of the Gulf Oil Corp and the Gulf Refining Co.

Although Foote did not follow an academic career, he was a brilliant lecturer. Henry Barton recalls a summer class in modern physics that Foote taught at Columbia in the mid 1920's, and which was so stimulating that it convinced Barton to return to graduate school and pursue a research career.

On retirement in 1953, Foote returned to Washington as Assistant Secretary of Defense for Research and Development. After leaving this post he became active as an advisor in the Washington area, serving many organizations, such as the Atomic Energy Commission, the National Academy of Sciences (of which he was a member), and, of course, NBS, his first love.

I first came to know Foote well when I joined the staff of the Carnegie Institute of Technology in 1942. He was then at the peak of his career and a greatly admired leader of the scientific community. It was a substantial privilege for me to extend this friendship into his Washington years, and to work with him in several of his capacities there. Few individuals in our time have been as dedicated as he was to the creation of relationships within the community of American physicists that would advance the role physics could play in our society. Our times call for more of the spirit that motivated Foote to explore new roles for the members of the physics profession.

Frederick Seitz
Rockefeller University

Lewi Tonks

Lewi Tonks, who collaborated with Irving Langmuir on plasma physics and later worked on the Princeton Stellarator, died last July at the age of 74.

His PhD from Columbia University included unusually good training in mathematical physics. After receiving this degree in 1923, he joined the General Electric Research Laboratory and during the pre-war period 1926-41 he published 29 papers, 22 of which were principally theoretical. These papers were mainly about electrical discharges in gases, but included five papers on the propagation of large magnetic Barkhausen discontinuities, for which K. J. Sixtus did the experimental work. During World War II he was head of a GE research group working on jamming magnetrons. After the war he joined the physics group at the Knolls Atomic Power Laboratory, working with Harvey Brooks and Henry Hurwitz, and later becoming head of the theoretical physics group for the design of the nuclear reactor for the Sea Wolf. In 1955 he was a consultant for the Stellarator project at Princeton University, and a year later he joined the GE Vallecitos Atomic Laboratory where, in addition to doing work on power reactor physics, he also worked actively with the controlled thermonuclear reactor group at Livermore. In 1961 he returned to GE in Schenectady, where he was involved in theoretical work on lasers and masers until his retirement.

Perhaps his most important work was in plasma physics, the result of a fortunate coupling of his mathematical-physics skills with the great physical