

both in their accurate experimental measurement and in the development of theory for their interpolation. One of his major insights was the realization that the invariants of the electric-dipole matrix could be analyzed in terms of effective atomic charges and anisotropies. At the time of his death he was working to establish the effective atomic charge as a transferable parameter useful in the analysis of infrared intensities. He was also working to establish atomic "polar tensors" as transferable parameters which could be used to calculate infrared intensities of molecules, either for comparison with experimentally determined values or for quantitative estimation of concentration in the case of short-lived species that cannot be studied in the laboratory but that are important in the upper atmosphere and in interstellar space.

He was a superb teacher, whose lectures were unfailingly interesting. In his profession and out, his interests were far-ranging and his skills versatile.

GENE B. CARPENTER
JAMES C. BAIRD
Brown University
JOHN OVEREND
University of Minnesota

James D. Stranathan



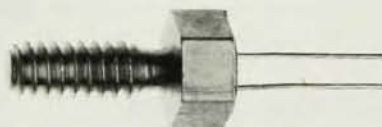
James D. Stranathan, former chairman of the Department of Physics and Astronomy at the University of Kansas, died 22 May 1981. He was born in Kansas City, Missouri, in 1898, and earned from the University of Kansas a BS in electrical engineering in 1921 and an MS in 1924. He earned his doctorate at the University of Chicago, studying with A. J. Dempster (his research director), A. H. Compton, K. T. Compton and A. A. Michelson. Accepting a position as assistant professor, Jim returned to the University of Kansas in 1925 where he was to remain until his retirement 44 years later.

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EXHIBITORS

(as of 9/1/81)

Addison-Wesley	Nuclear Data
A.I.P.	The Nucleus
Austin Scientific	Oriel Corp. of America
Cambridge Univ. Press	PASCO Scientific
Canberra Industries	Pergamon Press
Conference Book Service	Phillips
Daedalon	Prentice Hall
Elsevier North-Holland	RCA
Harper & Row	Saunders/HRW
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matter phenomena, mostly related to dielectric polarization of liquid and solid systems. His research was distinguished by clever design of equipment, thorough understanding of the physics involved, and insightful attention to important details.

In 1941 he completed the work for which he is most widely known, a pioneering textbook on atomic, nuclear and particle physics that with characteristic foresight he entitled *The Particles of Modern Physics*. This extremely well-documented and timely textbook became widely used by young physicists throughout the country. Because he was an excellent writer and perceptive critic, he was called upon to serve as associate editor of the *American Journal of Physics*. For his achievements in physics, he was designated fellow of the American Physical Society and of the American Association for the Advancement of Science.

At the outbreak of World War II, he became a leader in providing basic scientific education to large groups of students sent by the US Signal Corps, Army and Navy.

In addition to his administrative duties, teaching and research, Strathan served as a consultant to the petroleum industry, using his experience with electronics to develop ultra-sensitive electrometers and ionization chambers rugged enough to measure radioactivity in the oil fields. He also served as the leader of a group of physicists, chemists, engineers and mathematicians from the University of Kansas to fulfill the need to the US Navy in the early 1950s for a comprehensive analysis of all conceivable methods for launching and landing carrier aircraft.

GORDON G. WISEMAN
University of Kansas

Jean-Pierre Jan

Jean-Pierre Jan died on 23 March 1981, after a seven-year fight with leukemia. He was born in Lausanne, Switzerland, in 1925 and received his doctorate from the University of Lausanne in 1952. After spending three years in the US and Canada he returned to Switzerland, where he worked in the Laboratoire Suisse de Recherches Horlogères, in Neuchâtel, for seven years. In 1962 he returned to Canada, rejoining what was then the Low Temperature and Solid State Physics Group in the Pure Physics Division of the National Research Council. There he became involved with Fermi-surface studies in intermetallic compounds and ordered alloys, which was his main area of interest for the next eighteen years. □