

guished contributions in the field of rare-earth science and technology.

Busch founded the Laboratory of Solid State Physics at the Eidgenössische Technische Hochschule in Zurich in 1956 and was its director until 1977. His efforts have been concentrated, since 1957, on the synthesis of rare-earth compounds with the objective of finding a ferro-magnetic semiconductor. His laboratory prepared rare-earth doped semiconductors and elucidated the chemistry of the III/V and II/VI compounds (EuS, GdN, GdP, CeP, TmSe, ScP, USb).

Based on this work, Busch and his coworkers were felt to have contributed to fundamental and applied physics in the area of electromagnetic and magneto-optic phenomena in solids and liquids.

Norwegian physicists receive awards

Three Norwegian physicists received awards for outstanding work in their fields at the annual meeting of the Norwegian Physical Society held recently at the University of Trondheim.

Kjell Johnsen was awarded the particle physics prize by the computer firm Norsk Data for heading the team that constructed the Intersecting Storage Rings at CERN. Countercirculating beams of protons have been colliding at the ISR since 1971, with center-of-mass energies up to 62 GeV. Johnsen, previously with CERN and the University of Bergen, has been the technical director of the Isabelle project at Brookhaven National Laboratory (PHYSICS TODAY, April 1981, page 17).

Jakob Stamnes and Halvor Heier, both of the Central Institute for Industrial Research in Oslo, were awarded the Simrad prize in electro-optics for their contribution to the design of various kinds of lenses. Their research led them to a flexible system of lens design based on geometrical optics and diffraction theory that has already had an impact on the electro-optical industry in Norway.

in brief

Edward A. Frieman, until recently Director of the Office of Energy Research of DOE, has joined Science Applications, Inc., La Jolla, as Vice-president.

Donald R. Dobrott has become the Director of the Laboratory for Applied Plasma Studies of Science Applications. He was formerly at General Atomic, San Diego.

William Oliver Baker, retired Chairman of the Board of Bell Telephone Labora-

tories, has been selected to be the second recipient of the National Science Board's Vannevar Bush Award.

The 1981-83 president of the Australian Institute of Physics will be **Neville H. Fletcher**, professor of physics in the University of New England at Armidale, New South Wales.

Joseph J. Loferski, professor of engineering at Brown University, has received the second William R. Cherry Award for Outstanding Contributions to Photovoltaic Science and Technology for his work in solar energy conversion.

obituaries

Vladimir Rojansky

Vladimir Rojansky died in Claremont, California on 4 March 1981 at the age of 80. He was born in Bologole, Russia. As a member of the Russian White Army during the Revolution, he escaped across Siberia and immigrated to the United States in 1921. Graduating with a BS from Whitman College in 1924, he was a member of a group that also included Walter Brattain, Walker Bleakney and E. J. Workman. He received an MA from the University of Oregon in 1926 and in 1928 his PhD at the University of Minnesota, where he was one of John H. Van Vleck's early students.

Although Rojansky was first and foremost a superb teacher, he was also an excellent research worker in theoretical physics, a textbook writer, a translator and an editor (associate editor of the *Physical Review*, 1944-46). He started his teaching career in 1928 at Washington University in St. Louis, but left there in 1930 to join the faculty of Union College in Schenectady, New York, as an associate professor of physics. In 1937 he was made a full professor there, and held the Frank and Marie Louis Bailey professorship in physics from 1949 to 1955. During World War II he taught temporarily at Princeton and served as consultant in Division 2 (bomb damage assessment) of the National Defense Research Committee.

As chairman of the department of physics for three years after the war, he recruited a group of excellent teachers at Union and set a special tone of lively interest in physics and its teaching and a comradeship that has persisted to this day. He cooperated with Saul Dushman to initiate a program of summer study for high school teachers sponsored by the General Electric Company, which was the prototype for the Summer Science Fellowship of the NSF.

James Hartle has been named professor in the department of physics and in the Enrico Fermi Institute of the University of Chicago.

The 1981 winners of the Pittsburgh Conference awards have been chosen. **John D. Strong**, post-retirement adjunct professor at the University of Massachusetts, is the recipient of the Hasler Award. The Williams-Wright Award will go to **N. J. Harrick**, President of Harrick Scientific Corporation, and **Paul Wilks**, President of General Analysis corporation.



ROJANSKY

While at Union he wrote the book *Introductory Quantum Mechanics*, for which he is known throughout the world. One of the early expositions of quantum theory, it enabled many a young theoretician to understand the fundamentals of the new theory. The numerous journal articles he wrote ranged from an attempt to explain the difference in mass between electron and proton, to a proposal that cometary material might be "contraterrene" and to an engineering article written jointly with Richard Beth on a graphical technique for determining the stresses in beams.

In 1955 the ill health of his first wife, Betty, led to a decision to go to California to the Ramo-Wooldridge Corporation and subsequently to the Space Technology Laboratories of TRW, where he worked on ICBM problems and later on communication satellites.

Retirement from industrial physics in 1965 brought him back to academic life, to Harvey Mudd College in Claremont, California. While at Harvey Mudd he wrote a second textbook, *Electromagnetic Fields and Waves*.

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