we hear that

Thompson Products in 1958 to form TRW. He received a PhD from Caltech in 1936 and is considered an expert in microwaves and guided-missile technology.

The Franklin Institute is a non-profit organization which has been engaged in scientific and technological research and education since 1824.

Carl Sagan receives Washburn Award

Boston's Museum of Science has awarded Cornell University astronomer Carl Sagan its 1978 Bradford Washburn Award. The award, which carries a \$5000 honorarium and a gold medal, is given for outstanding contribution to the public understanding of science.

Sagan is David Duncan Professor of Astronomy and Space Sciences at Cornell, and director of the Laboratory for Planetary Studies. He received his degrees, including a PhD in astronomical astrophysics in 1960, from the University of Chicago. Associated with NASA from its beginnings, he has played a leading role in the Mariner, Viking and Voyager missions to the planets. He has written and lectured extensively and is author of The Cosmic Connection, which won the 1974 John W. Campbell Memorial Award for the best science book of the year, and The Dragons of Eden: Speculations on the Evolution of Human Intelligence, which won the 1978 Pulitzer Prize for nonfic-

Sagan is also known for his interest in exobiology, which deals with the existence and detection of extraterrestrial life. In 1971 he was leader of the US delegation to the Conference on Communication with Extraterrestrial Intelligence, organized jointly by the US National Academy of Sciences and the Soviet Union's Academy of Sciences. He had the principal responsibility for placing the first interstellar messages aboard the first US spacecraft to leave the solar system.

Chemical society to honor Raymond Davis

The American Chemical Society has named Raymond Davis Jr, senior chemist at Brookhaven National Laboratory, winner of the 1979 Award for Nuclear Applications in Chemistry. The \$2000 award is sponsored by G.D. Searle & Co. and was established in 1953 "to recognize, encourage and stimulate isotopic applications in the field of chemistry."

The prize is being given to Davis for his "pioneering study of neutrinos . . . and his major accomplishment in measuring the flux of neutrinos from the sun." He is further cited for "his unique contributions

to our knowledge about the way the sun produces energy, about particle fluxes of the solar wind, and about solar flares."

Davis began experiments in the 1960's to measure the nuclear energy cycle in the Sun (see PHYSICS TODAY, page 19, December 1978). It is believed that the thermonuclear reactions and accompanying radioactivity decay in the solar interior produce neutrinos which escape from the Sun into space, providing a means of studying solar energy produc-Using a very low-background counting technique, Davis measured the number of neutrinos that reach the Earth in order to test the existing theory of solar energy generation. He showed that the flux of energetic neutrinos from the Sun is just a small fraction of that predicted by theory, thus casting considerable doubt on existing models.

Davis received a BS in 1937 and an MS in 1940 from the University of Maryland. He received a PhD in physical chemistry from Yale University before joining the Air Force in 1942. In 1946 Davis accepted a position at the Mound Laboratories in Dayton, Ohio, and in 1948 joined the staff of the Brookhaven National Laboratory as an associate chemist. He was named chemist in 1953 and senior chemist in 1964. Davis will receive the award at the ACS/Chemical Society of Japan Chemical Congress in Honolulu next April.

Chandrasekhar delivers Jansky Lecture

Subrahmanyan Chandrasekhar, Morton D. Hull Distinguished Service Professor at the University of Chicago, delivered the 1978 Jansky Lecture of the National Radio Astronomy Observatory 8 November at the University of Virginia. The Jansky Lectureship, first awarded in 1966, is named in honor of Karl G. Jansky, who first detected radio waves from the Milky Way in 1931. Chandrasekhar's talk was entitled "General Relativity in Astronomy at Einstein's Centennial.' Chandrasekhar received his PhD from Cambridge University in 1933. In 1936 he came to the Yerkes Observatory of the University of Chicago, and has remained affiliated with the observatory ever since. From 1952 to 1971 he served as managing editor of The Astrophysical Journal.

Morton S. Roberts became director of the National Radio Astronomy Observatory 1 October, succeeding David S. Heeschen who served in the position since 1962.

Donald Krahn, of Ohio State University, was named assistant professor of physics at Southwestern Oklahoma State University, Weatherford.

Volker Soergel has been appointed direc-

torate member for experimental physics at CERN. The lab also named Michael Crowley-Milling as directorate member for accelerator programs and Giorgio Brianti to fill Crowley-Milling's prior position of leader of the Super Proton Synchrotron division. The new directorate member for staff policy and staff planning is Gunther Ullmann.

Joseph S. Heyman of NASA's Langley Research Center and James G. Miller and Lawrence J. Busse, both of Washington University's Laboratory for Ultrasonics, won an IR-100 award from Industrial Research magazine for developing one of the 100 most significant new technological products of 1978, an acoustic transducer. This is Heyman's third IR-100 award.

Marx Brook has become director of the Research and Development Division at New Mexico Institute of Mining and Technology. Brook was formerly chairman of the physics department there.

Ronald C. Davidson, former assistant director for applied plasma physics at the Department of Energy, has been appointed director of the MIT Plasma Fusion Center. He succeeds Lawrence Lidsky, who has held the post on an acting basis since last May, when Albert G. Hill retired after directing development of the Center.

David Finkelstein, former University Dean of Natural Sciences and Mathematics at Yeshiva University, became professor and Dean of the School of Physics at Georgia Institute of Technology on 1 January.

The following people have recently accepted appointments in the department of physics of the University of California, Berkeley: Steven Chu (assistant professor), formerly an NSF postdoctoral fellow; Edgar Knobloch (assistant professor), formerly a junior fellow at Harvard University; Richard A. Muller (associate professor), formerly of the Space Sciences Laboratory and the Lawrence Berkeley Laboratory; Peter Y. Yu (associate professor), formerly of the IBM Watson Research Center.

Robert R. Wilson, former director of the Fermi National Accelerator Laboratory has been named the first Peter B. Ritzman Professor in The College at The University of Chicago.

Edwin L. Goldwasser, former deputy director of the Fermi National Accelerator Laboratory, became the new vice-chancellor for research and dean of the Graduate College at the University of Illinois at Urbana-Champaign, effective 1 September.

The German Physical Society presented its annual prize for young physicists to