

SOCIETY ACTIVITIES AND AWARDS

Smithsonian honor

Three scientists who played prominent roles in the 1957-58 International Geophysical Year have been awarded the Thomas Hodgkins Prize for atmospheric research of the Smithsonian Astrophysical Observatory. Gold medals and \$3000 honoraria were presented to Joseph Kaplan, professor of physics at the University of California at Los Angeles and Sydney Chapman of the University of Alaska, during the Smithsonian Observatory's 75th anniversary celebration, held in Cambridge, Mass., in August. Marcel Nicolet, head of the National Center for Space Research in Brussels, received the prize in absentia. This was the first Hodgkins Gold Medal award in 63 years, the earlier ones having been conferred upon James Dewar in 1899 and upon J. J. Thomson in 1902.

Professor Kaplan, who has been associated with UCLA for almost forty years, has been active in many organizations devoted to geophysics and meteorology. Among these are the US National Committee for the IGY, International Association of Geomagnetism and Aeronomy, and the International Union of Geodesy and Geophysics, all of which he served as president. His research activities have been principally concerned with the spectra of diatomic molecules, and in particular with afterglows in nitrogen, oxygen, and their mixtures.

Dr. Nicolet, who served as secretary general of the IGY's special committee, and as member of the COSPAR directorate, is well known for his researches in the fields of aeronomy and planetary atmospheres. He is credited with being the first to point out correctly the effect of sunlight and diffusion in modifying the composition of the upper atmospheres of the earth and planets. This work enabled him to predict the existence of a helium belt in the upper planetary atmospheres, which was later verified by space probes. In 1963, Dr. Nicolet received the Guggenheim International Astronautics Award for his researches.

Dr. Chapman is former head of the

IGY's central organizing committee and has also served as president of several international bodies in solar-terrestrial physics. In research, he has won recognition for his work on the kinetic theory of gases and his studies of solar and lunar geomagnetic variations and solar and lunar tides. His numerous honors include the Royal and Copley Awards of the British Royal Society, and the American Geophysical Union's Bowie Medal.

Einstein Medal

John A. Wheeler of Princeton University has received the 1965 Albert Einstein Medal of the Lewis and Rosa Strauss Memorial Fund for his "outstanding achievement in the natural sciences". The award, which was announced last spring on the 86th anniversary of the birth of Dr. Einstein and presented to Professor Wheeler on September 23rd, comprises a gold medal bearing the profile of Einstein and an honorarium of \$5000. Previous recipients include Kurt Gödel, Julian Schwinger, Richard Feynman, Willard Libby, Edward Teller, Luis Alvarez, Shields Warren, and Leo Szilard.

Dr. Wheeler, who has served as professor of physics at Princeton since

1917, has been an important contributor to many areas of physics, notably nuclear structure and reactor theory, muon interactions, and geometrodynamics. One of the first American scientists to work on fission phenomena, he studied with Niels Bohr in 1934 at the University of Copenhagen and later coauthored with Bohr a paper on the mechanism of nuclear fission. Throughout World War II he was associated with nuclear-energy projects, first at Princeton and the University of Chicago, and subsequently in the DuPont Design Center in Wilmington and the Hanford plutonium plant in Richland, Wash. Following the war, he worked on nuclear-model theory and also did research on the interactions of mu mesons with nuclei. During the early 1950's, Dr. Wheeler headed a Princeton research team that performed much of the mathematical analysis that led to the first successful H-bomb test at Eniwetok in 1952. In recent years he has concerned himself with elucidating the geometry of space-time, particularly the extent to which all physical phenomena can be interpreted as manifestations of that geometry. In this field, known as geometrodynamics, not only has Dr. Wheeler contributed greatly to its understanding and encouraged others himself, but he has also been primarily responsible for assembling all the various ideas that make up the subject.

Dr. Wheeler has also held official posts with many professional scientific organizations, including the International Union of Pure and Applied Physics and the National Academy of Sciences, and has, at various times, served as an editor for *The Physical Review*, *Reviews of Modern Physics*, and the *Journal of Mathematical Physics*. A fellow of the American Physical Society, he is currently the organization's vice president and chairman of the APS-American Philosophical Society Joint Committee on the History of Theoretical Physics in the Twentieth Century.



John A. Wheeler

—Ulli Steltzer