

sciences presented the following three awards:

▷ **Heidi B. Hammel**, a research scientist at MIT, received the 1996 Harold C. Urey Prize. She was recognized for "precision observing techniques and detailed analysis of the atmospheric structures of the outer planets" and for being "instrumental in utilizing Hubble Space Telescope observations of planets to continue monitoring the atmospheres of planets after spacecraft flybys."

▷ The 1996 Harold Masursky Meritorious Service Award went to **William Quaide**, who recently retired from NASA headquarters. Quaide worked "to promote and nurture the science programs of the Solar System Exploration Division of the NASA Office of Space Sciences" and fought "to protect and augment the programs that support planetary science research in the United States," the citation noted.

▷ **Barney J. Conrath**, who recently retired from NASA's Goddard Space Flight Center, was awarded the 1996 Gerard P. Kuiper Prize. Conrath was honored for "his leadership in infrared spectroscopy experiments on spacecraft missions, for theoretical and observational work on outer planet atmospheres, and for an overall record of substantial contribution to planetary science."

At the AAS meeting in Madison, Wisconsin, last June, **Raymond Davis**, a professor of astronomy at the University of Pennsylvania, received the George Ellery Hale Prize, given by the AAS solar physics division. Davis was recognized for his "monumental contribution to solar physics by conceiving, planning, constructing, operating, and analyzing data from an experiment to measure the solar neutrino flux."

IN BRIEF

The Russian Academy of Natural Sciences bestowed its Piotr L. Kapitsa Gold Medal last November on **James E. White**, an emeritus professor of geophysics at the Colorado School of Mines. As one of the first American geophysicists to visit Russia, beginning in 1965, White established close ties to the geophysical community there.

At its December meeting in San Francisco, the American Geophysical Union made **Fred Spilhaus** an honorary fellow, one of the few such awards it has accorded. Spilhaus, who has been AGU's executive director since 1970, was honored for "extraordinary and visionary leadership in nurturing the development and growth of the geophysi-

cal sciences, fostering international partnerships in geophysics, and working tirelessly for over a quarter of a century to ensure that the American Geophysical Union is the scientific home of choice of geophysicists."

Last August **Charles Doering** became a professor of mathematics at the University of Michigan in Ann Arbor. Until then he had been a deputy director of the Center for Nonlinear Studies at Los Alamos National Laboratory.

James Eisenstein moved to Caltech last July to assume a post as professor of physics there. Eisenstein had been a distinguished member of the technical staff at AT&T Bell Labs until his Caltech appointment became effective

in January 1996.

Art Nelson, who earned his PhD in applied physics from the Colorado School of Mines last year, has joined Rocky Mountain Laboratories in Genesee, Colorado, as a physicist.

Arthur L. Schawlow has been receiving lots of recognition lately for his role in developing the laser. In October, Schawlow, who is a professor emeritus at Stanford University, received the Ronald H. Brown American Innovator Award, created last year by the US Department of Commerce to commemorate the former secretary of commerce. A month earlier, Schawlow was inducted into the National Inventors Hall of Fame in Akron, Ohio.

OBITUARIES

Edward Purdy Ney

University of Minnesota Regents' Professor Emeritus Edward Purdy Ney, who died on 9 July 1996 at his home in Minneapolis, spent his life relentlessly searching for, and speaking, the truth.

Born on 28 October 1920 and raised in Waukon, Iowa, Ney brought a skeptical, small-town, pioneering spirit to his research and made seminal discoveries in physics, astronomy and geophysics. In 1940, as an undergraduate at the University of Minnesota, he helped Alfred O. C. Nier prepare the world's first samples of pure uranium-235. After earning a BS in physics in 1942, Ney entered the University of Virginia. For his PhD, earned there in 1946 under Jesse Beams, Ney measured the self-diffusion coefficient of UF_6 —an important parameter that showed that a gaseous thermal diffusion process could not be used to enrich uranium.

In 1947 the University of Minnesota invited Ney to return and help start a cosmic-ray research program. Together with Edward Lofgren, Frank Oppenheimer and Phyllis Freier, Ney pioneered the use of cloud chambers and nuclear emulsions, flown on high-altitude plastic balloons, for the study of cosmic rays. In 1948, they, with Bernard Peters and Helmut L. Bradt of the University of Rochester, discovered heavy nuclei in the cosmic radiation.

In the early 1950s, frustrated by a number of unexplained balloon failures, Ney, John R. Winckler and Charles L. Critchfield undertook a classified military project to improve the performance of high-altitude balloons and develop a system that could be used to



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photograph military installations in the USSR. Although the development of the U2 airplane eliminated the need for such a balloon system, a number of the techniques they developed continue to be used for cosmic-ray and atmospheric research. During the program, Ney and his graduate students studied aerosols, atmospheric dust, infrared radiation and the radiation balance in the atmosphere.

In the mid-1950s, Ney and Paul Kellogg proposed that synchrotron radiation from high-energy electrons could account for much of the visible radiation from the solar corona. They immediately set out on a series of memorable eclipse expeditions to measure the polarization and intensity of the coronal light. Although their measurements disproved their theory, this work led to the development of cameras and polarimeters that could be used to study dim, diffuse sources