

WE HEAR THAT

Fermi Award Given for Work in Nuclear Energy

President Clinton announced in June the three winners of the 1997 Enrico Fermi Award, which recognizes lifetime achievements in nuclear energy: **Richard Garwin**, a fellow emeritus of IBM's Thomas J. Watson Research Center in Yorktown Heights, New York, and a consultant to Sandia National Laboratories; **Mortimer Elkind**, a cell biologist at Colorado State University; and **H. Rodney Withers**, an oncologist at the Jonsson Comprehensive Cancer Center at the University of California, Los Angeles.

Garwin is being honored for "his contributions to a wide range of problems in science, technology and national security policy. These achievements have been as diverse as fundamental physics of condensed matter, elementary particles and fields; nuclear weaponry, gun and bomb sights; and practical applications such as laser printers, computer touch screens, medical imaging equipment, the global positioning system and superconductors." The award citation also takes note of Garwin's "participation in the formulation of national security policy."

Elkind and Withers are being given a joint award for "describing the response of normal and malignant cells to ionizing radiation, thus establishing a scientific basis for radiation therapy of cancer."

AGU Presents Awards in Baltimore

At the spring meeting of the American Geophysical Union, held in Baltimore, Maryland, in May, seven individuals were recognized for their contributions to geophysics.

The William Bowie Medal, AGU's top honor, was presented to **Raymond Hide**, a professor of physics at Oxford University in England. The citation that accompanied the medal noted that "over more than forty years, Ray has provided the geophysical community with a steady flow of new ideas and fundamental advances on a broad spectrum of topics, including, among others, basic hydrodynamics and magnetohydrodynamics of spinning fluids, the dynamics of the atmospheres of the Earth and other planets, geomagnetism and the magnetohydrodynamics



RAYMOND HIDE

of the Earth's core, the magnetism of other planets and the dynamics of their interiors, the magnetism of the Moon and other small bodies in the solar system and fluctuations in Earth rotation."

Marc B. Parlange, a professor in the department of geography and environmental engineering at Johns Hopkins University, garnered the James B. Macelwane Medal. Parlange was cited for his work in hydrology, including studies of evaporation, the atmospheric boundary layer, turbulence theory and flow in porous media and groundwater. Also mentioned was his and Rick Katz's construction of "stochastic precipitation generators, a major advance over conventional approaches."

The Maurice Ewing Medal, presented jointly by AGU and the US Navy, was given to **Karl K. Turekian**, the Benjamin Silliman Professor of Geology and Geophysics and director of the Center for the Study of Global Change at Yale University. Turekian "has laid the foundation for a vast array of geochemical topics in the Earth and ocean sciences," the medal citation stated, noting his research on the fundamental distribution of chemical properties in the ocean, his studies of the coastal ocean and his most recent work involving "the use of $^{187}\text{Os}/^{186}\text{Os}$ isotopic ratios to uncover extraterrestrial influences, from the Cretaceous-Tertiary boundary to interplanetary dust fluxes to the oceans."

Stanley R. Hart, a senior scientist and holder of the Iselin Chair of Oceanography at Woods Hole Oceanographic Institution, accepted the Harry H. Hess Medal. In the late 1960s, the medal citation noted, Hart "was one of the few

geochemists to realize the potential of the field opened by plate tectonics and how it was important to study basalts of the ocean floor." The citation also praised Hart's efforts in "the development of models of the structure and evolution of the Earth's mantle."

The Charles A. Whitten Medal was presented to **Gordon H. Pettengill**, a professor of planetary physics at MIT. Pettengill's research career has been based on the use of radar, the medal citation noted, including his use of the Arecibo Observatory to make "the spectacular discovery that Mercury's spin period was about 59 Earth days, not the 88 days that had been widely believed for nearly a century." His work on the Pioneer Venus Orbiter and Magellan spacecraft has led Pettengill to become known as "the one individual many planetary scientists feel is most responsible for our present knowledge of Venus," the citation stated.

Hans A. Oeschger, a professor of physics at the University of Bern in Switzerland, received the Roger Revelle Medal. According to the accompanying citation, Oeschger, together with his colleagues and students, "has pioneered many innovations which have led to a better understanding of how the carbon cycle currently operates, how it might have differed during glacial time and how human activity might alter it in the future."

This year's Edward A. Flinn III Award was given to **Jack D. Fellows**, branch chief for science and space programs at the Office of Management and Budget. During Fellows's 13 years at OMB, the citation stated, he helped establish the Committee on Earth Sciences within the Federal Coordinating Council for Science, Engineering and Technology and was "the critical keystone in the Executive Offices of the President that led to the establishment of the US Global Change Research Program."

Astrophysicists Selected to Receive 1997 Crafoord Prize

This fall the Royal Swedish Academy of Sciences will present the 1997 Crafoord Prize to **Fred Hoyle** and **Edwin E. Salpeter**. The annual prize, worth \$500,000 this year, recognizes achievements in scientific fields not covered by the Nobel Prizes—specifically, mathematics, biosciences, geosciences and astronomy. It is given for astronomy only once every seven years.