## we hear that

## National Medal of Science Awards presented

President Carter presented Medal of Science Awards to 15 scientists at a ceremony in Washington, D.C. on 22 November. The Awards, first presented in 1962 by President John Kennedy, recognize outstanding achievement in the sciences and engineering.

George E. Uhlenbeck of Rockefeller University and Samuel A. Goudsmit, emeritus deputy chairman of Brookhaven National Laboratory and now affiliated with the University of Nevada, both received recognition for their discovery, fifty years ago, of electron spin.

Erwin W. Mueller was posthumously awarded a medal for his invention of the field-emission microscope, the field-ion microscope and the atom-probe microscope. Mueller died 17 May 1977.

Morris Cohen, metallurgist at the Massachusetts Institute of Technology received recognition for his original research into the properties of steel.

Peter C. Goldmark, formerly of CBS Laboratory and most recently the president of Goldmark Communications Corporation, was given an award for contributions to the development of communications sciences for education, entertainment, culture and service. Goldmark, whose work has seen widespread application in aerospace and medicine, was killed in an automobile accident 15 days after the award ceremony.

Kurt Friedricks of New York University was recognized for his work in applying pure mathematics to the physical sciences, especially on problems involving flight and controlled nuclear fusion

Hassler Whitney, a mathematician from the Institute for Advanced Studies in Princeton, received the Medal of Science for advancing the art of differential topology and the application of this special geometry to complicated, biological structures.

Herbert S. Gutowsky, a pioneer in the field of nuclear magnetic resonance spectroscopy, was cited for his significant studies in the field in the last 25 years. Affiliated with the University of Illinois, Gutowsky has applied his expertise to research on solids, solutions, metals and biological substances.

Verner E. Suomi, meteorologist at the University of Wisconsin, was presented with a Medal for his advocacy and efforts in applying space systems for improved weather services.

Frederick D. Rossini, physical chemist at Rice University in Houston, was cited for his contributions to basic knowledge in the field of chemical thermodynamics. A major figure in the area of precision chemical measurement, Rossini has created the foundation for studying problems in optimal fossil-fuel use.

Medals of Science for work in biology and chemistry were presented to:

Roger Charles Lewis Guillemin of the Salk Institute for the discovery of a new class of endocrinal hormones; Keith Porter, University of Colorado, for his application of electron microscopy to studies of cellular life; Effraim Racker, Cornell University, for research in subcellular photosynthetic activities; Edward O. Wilson, Harvard University, for his field studies of the organization of insect societies, and Henry Taube of Stanford University for his contributions in the field of reactivity and reaction mechanisms in inorganic chemistry.

## Sagan and Elliot honored by NASA

James Elliot and Carl Sagan, both Cornell University astronomers, received awards from the National Aeronautics and Space Administration.

Elliot, assistant professor of astronomy, received the NASA Medal for Exceptional Scientific Achievement in recognition of his "outstanding contributions to space science, particularly in the field of planetary astronomy." His occultation experiments, utilizing the Kuiper Airborne Observatory, resulted in the observation of the rings of Uranus.

President Carter (second from right) applauds Medal of Science recipients at the presentation ceremony.

