

NSF chooses Schopf as second Waterman Award recipient

The second Alan T. Waterman Award of the National Science Foundation has been presented to J. William Schopf, professor of geology and geophysics at the University of California, Los Angeles. The award, which was authorized by Congress in 1975, is composed of a medal and a grant of up to \$50 000 per year for each of three years for research or advanced study.

Schopf studied geology as an undergraduate at Oberlin College and earned his PhD in biology from Harvard University in 1968. That same year he joined the faculty at the University of California, Los Angeles. In 1973 he was promoted to the rank of full professor.

During the period 1968-71, Schopf was one of a small number of university-based scientists selected by the National Aeronautics and Space Administration to participate in the earliest stages of lunar-rock studies. His responsibility was to determine whether there was any

evidence of past or present life in lunar material returned by Apollo 11 and Apollo 12. After these early studies Schopf served in the Apollo program as principal investigator of lunar samples; he is now a member of a group charged by NASA to formulate plans and suggest priorities during the next 10 or 15 years for exploration of terrestrial planets and satellites.

Schopf was a Guggenheim Fellow in 1973 and a National Academy of Sciences visiting fellow to the Soviet Union in 1975.

The Waterman Award, which is named in honor of the NSF's first director, cited Schopf for his geochemical and micropaleontological analyses of Precambrian organic matter, his studies of delicate and ancient microorganisms and his development of techniques, such as transmission electron microscopy, used for the identification and examination of microorganisms.



SCHOPF

Goldman and Spear win European physics prizes

The (British) Institute of Physics has announced the winners of two 1977 prizes, of which it is a co-sponsor: the Holweck Medal and Prize has been presented to Maurice Goldman (Center for Nuclear Studies, Saclay, France), and the Max Born Medal and Prize has been awarded to Walter E. Spear (University of Dundee, Scotland). The French Physical Society and the German Physical Society co-sponsor the Holweck Medal and Prize and the Max Born Medal and Prize, respectively.

Goldman studied at the Ecole Supérieure de Physique et Chimie in Paris and joined the Center for Nuclear Studies in 1955; he now holds the position of senior physicist at Saclay and is also assistant director to Anatole Abragam at the College de France, Paris. Goldman's research specialties are nuclear magnetism, with an emphasis on nuclear magnetic resonance in solids, and spin temperature theory.

Spear, professor of physics at the University of Dundee, received his doctorate from the University of London. In 1953

he was appointed to a lectureship at the University of Leicester, where he began to study solid-state physics, particularly electron transport properties. Spear now holds the Harris Chair of Physics at the University of Dundee. Most recently, Spear has studied the electronic, optical and photoconductive properties of amorphous semiconductors.

Newly elected members of the American Academy of Arts and Sciences are these scientists of interest to physicists and astronomers: **Stephan Berko** (Brandeis University), **Hans G. Dehmelt** (University of Washington), **George Feher** (University of California, San Diego), **Jeffrey Goldstone** (MIT), **Lee Grodzins** (MIT), **Albert W. Overhauser** (Purdue University), **Peter P. Sorokin** (IBM, Yorktown Heights, N.Y.), **Tai Tsun Wu** (Harvard University), **Neil Bartlett** (University of California, Berkeley), **Bryce L. Crawford Jr** (University of Minnesota), **David Harker** (State University of New York, Buffalo), **F. Sherwood Rowland** (University of California, Irvine), **James E. Gunn** (California Institute of Technology), **P. James E. Peebles** (Princeton University), **Wallace L. W. Sargent** (Caltech),

Peter A. Strittmatter (University of Arizona) and **John B. Gunn** (IBM, Yorktown Heights, N.Y.).

The Gravity Research Foundation (Gloucester, Mass.) has announced the winners of its 1977 awards for essays. They are: **Abhay Ashtekar** (Enrico Fermi Institute, University of Chicago), **G. F. R. Ellis** (University of Cape Town, South Africa), **Robert M. Wald** (Enrico Fermi Institute, University of Chicago), **P. Candelas** (University of Texas, Austin, Center for Relativity), **Dennis W. Sciama** (Mount Holyoke College, South Hadley, Mass.), **Gregory A. Shields** and **J. Craig Wheeler** (both of the University of Texas, Austin).

Clive L. Dym, senior scientist at Bolt, Beranek and Newman Inc, has been appointed professor and head of the University of Massachusetts (Amherst) department of civil engineering.

The first P. W. Bridgman Award of the International Association for the Advancement of High Pressure Technology has been presented to **Harry G. Drickamer**, professor of chemical engineering and