## we hear that

## Optical Society presents annual awards for 1976

The Optical Society of America has presented its three highest awards to Arthur L. Schawlow, Theodore H. Maiman and Marc D. Levenson. Annual awards of the Society have also been given to John H. McLeod, Floyd Ratliff and William R. S. Garton. The awards were conferred at the Optical Society meeting in Tucson, Arizona, 18–22 October.

Schawlow, professor of physics at Stanford University, was honored with the Frederic Ives Medal for his research in the field of lasers and optical and microwave spectroscopy. He received his PhD from the University of Toronto and was a research physicist at Bell Laboratories. He has held his current position since 1961; from 1966 to 1970 he was chairperson of the department. Previous awards to Schawlow include the Franklin Institute's Ballentine Medal and the Liebmann Memorial Award of the Institute of Electrical and Electronics Engineers. He is a former president of the Optical Society.

The R. W. Wood Prize, including \$1000, was presented to Maiman for the development of the first laser. He earned his doctorate in physics from Stanford University and was a research physicist at Hughes Research Laboratories, where he developed the ruby laser. Maiman was then a founder of Korad Corp and vice-president of Laser Video. He is currently



SCHAWLOW



MAIMAN



LEVENSON

the director of Maiman Associates Inc.

Levenson, assistant professor of physics at the University of Southern California, received the Adolph Lomb Medal. The Lomb Medal is presented biennially to a person who has made noteworthy contributions to optics before the age of 30. Levenson was honored for his contributions to laser spectroscopy, including the development of two-photon absorption spectroscopy without Doppler broadening and the development of the spectroscopic technique known as "three-wave mixing." He received his doctorate from Stanford University in 1972.

For his contributions to allied optics, McLeod received the David Richardson Medal. McLeod, who is with the Eastman Kodak Co, was the inventor of the axicon, which has been adapted to a number of optical instruments. His other contributions include the development of optical-production machinery, plastictransfer molding techniques and unique equal-path interferometers.

The Edgar D. Tillyer Award was given to Ratliff, a professor at Rockefeller University since 1954, for his work on spatial and temporal interactions among the various receptors of the eye of the horseshoe crab. He received his PhD from Brown University in 1950.

Garton, professor of spectroscopy at Imperial College, London, was honored with the William F. Meggers Award for his studies of absorption spectra in high Rydberg-series members and his work on autoionization effects in many elements.

## Astronomers honor Strom and Angel

The American Astronomical Society has named J. Roger Angel and Stephen E. Strom as 1976 recipients of the Newton Lacy Pierce Prize and the Helen B. Warner Prize, respectively. Both prizes are given annually by the Society to astronomers under 35 years of age.

A native of England, Angel received his PhD from Oxford University in 1967. He was then affiliated in turn with Columbia University, 1967–74, and the University of Texas at Austin in 1973. Later that year he joined the University of Arizona Steward Observatory and became professor of astronomy in 1975. He is known for his interpretations of radiation from degenerate stars based on optical-polar-

ization measures. Most recently Angel has developed techniques in precision spectropolarimetry that have been used to explore the angular structure of Seyfert galaxies and to study cool stars and dust-shrouded stars.

Strom, the 1976 Warner Prize Winner, is an astronomer at the Kitt Peak National Observatory. He earned his doctorate at Harvard University in 1964 and took up a post as astrophysicist with the Smithsonian Astrophysical Observatory. He served on the faculty of the State University of New York at Stony Brook from 1969 to 1972, at which time he accepted his current position at Kitt Peak. Among his contributions to astronomy are observational studies of young stellar objects associated with circumstellar and interstellar dust and gas clouds. At

present he is studying the chemical composition and evolution of galaxies.

At the California State University, Fullerton, Stephen M. Bakanowski has been appointed assistant professor in the department of physics.

M. R. VanderLind has been named manager of physical sciences research at Battelle-Columbus Laboratories.

Herbert Gursky, who holds the position of staff scientist at the Smithsonian Astrophysical Laboratory and a professorial appointment at the Harvard College Observatory, has been appointed associate director for optical and infrared astronomy at the Center for Astrophysics.