

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 Liebmman 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, plastic-transfer 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.

Kick the CO₂ and LN₂ habit.

Think what dry ice and liquid nitrogen cost you. Plus the time spent replenishing them... the cost of storage... and the handling hazards.

Instead, get a convenient, bother-free CryoCool unit. It often pays for itself in months and operates care-free for years. Kick the CO₂ and LN₂ habit.

NEW CRYOCOOL II
Temperature controllable
refrigeration units

NESLAB
INSTRUMENTS, INC.



871 Islington St., Portsmouth, N.H. 03801
Tel. (603) 436-9444

Circle No. 52 on Reader Service Card



**SPECTRO
RADIOMETER
SYSTEM**
IL 780/760/700

Low cost spectroradiometer system for the spectral characterization of visible and ultraviolet sources of radiant energy.

Features:

- * UV-visible response from 240nm to 800nm.
- * Motor drive available.
- * Flash or DC measurement capability, 5 nanoseconds response time.
- * Built-in rechargeable battery for field operation up to four (4) hours.
- * Direct digital readout in watts/cm² or joules/cm² at each wavelength.
- * Price \$3836.00. Includes: Radiometer, high voltage power supply, photomultiplier tube, monochromator, tripod and calibration traceable to N.B.S.
- * Complete system. No other accessories required.
- * Sensitive to 1 x 10⁻¹² W/cm²·nm at peak response.

international light
Specialists in Light Measurement

Dexter Industrial Green
Newburyport, Ma. 01950 / 617-465-5923

Circle No. 53 on Reader Service Card

we hear that

The new head of the Laser Research and Technology Division at Los Alamos Scientific Laboratory is **Roger B. Perkins**, who has been a staff member since 1959.

The 1976 Marlowe Medal of the (British) Chemical Society has been presented to **James J. Burton**, a senior research physicist in the surface physics group of Exxon Research and Engineering Co. Burton received the award for his theoretical and mathematical studies on the fundamental physics, structure and thermodynamics of microclusters.

L. L. Marton, honorary research associate of the Smithsonian Institution and editor-in-chief of *Methods in Experimental Physics* and of *Advances in Electronics and Electron Physics*, was honored by the Electron Microscope Society of America with its 1976 annual award for distin-

guished contributions to electron microscopy.

F. Karl Willenbrock, formerly the director of the Institute for Applied Technology in the National Bureau of Standards, has taken up a post as dean of the school of engineering and applied sciences at Southern Methodist University.

In the University of Michigan-Dearborn department of physics, **Victor K. Wong** (University of Michigan-Ann Arbor) has been appointed associate professor and **John F. Devlin** (Battelle-Columbus Laboratories) has become assistant professor.

At the State University of New York at Albany, **C. Luther Andrews** has been appointed distinguished teaching professor and **Walter Gibson**, formerly of Bell Laboratories, has been appointed chairman of the physics department.

obituaries

Earle K. Plyler

Earle K. Plyler died 8 May in Tallahassee, Florida. He will be remembered as an internationally respected infrared spectroscopist, an effective teacher and an able administrator.

He was born near Traveler's Rest, South Carolina, 26 April 1897. At The Johns Hopkins University, where he earned his MA in 1923, he was introduced to infrared by August H. Pfund. He then studied at Cornell University under J. R. Collins; in a single year, 1924, he completed his PhD and published his first paper.

That fall he joined the University of North Carolina, where there were three other staff members and almost no research facilities. He taught all of the graduate courses and initiated infrared research. In 1929, his student J. F. Daugherty received the first doctorate in physics from the University. By 1936 Arthur E. Ruark, James B. Fisk and John A. Wheeler had joined the department and it was then possibly the best in the Southeast. Two years later he had published 33 papers and directed a dozen PhD's during his tenure there.

In 1941 Plyler decided to turn to full-time research and worked with Harald H. Nielsen at Ohio State University and Ernest F. Barker at the University of Michigan. He was selected in 1945 as the successor of William W. Coblentz at the National Bureau of Standards.

At the Bureau he specialized in the development of infrared instrumentation. He was the first to use CsBr and CsI prisms to extend the range of infrared-prism instruments from 25 to 55 microns.



PLYLER

He carried out studies on infrared refractive indices, flame spectra and the vibrational spectra of molecules. Plyler was responsible for the construction of several high-resolution infrared spectrometers that, at the time of their fabrication, were equal to the best available. He was perhaps best known for his exacting studies on the high-resolution spectra of small polyatomic molecules. By 1961 he had published some 150 papers.

After leaving the Bureau, he decided to return to the academic world and became head of the department of physics at