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 distinguished 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

Florida State University. During the time he held this position, 1962–67, the department grew both in size and standing. The faculty increased from 16 to 32, and the number of graduate students rose from 40 to over a hundred.

His research activity continued unabated despite his administrative responsibilities. Plyler again designed a spectrometer with resolution equalled by few in the world. It was built in the departmental shop and became the nucleus of his infrared laboratory, from which came 14 papers by him and his students between 1965 and 1972, and a stream of well trained physicists. He was appointed emeritus professor in 1970.

E. SCOTT BARR
University of Alabama
WALTER J. LAFFERTY
National Bureau of Standards
STEVE EDWARDS
Florida State University

Pierre-Michel Duffieux

Pierre-Michel Duffieux, who introduced Fourier techniques to the field of image formation in optics, died 3 June.

Duffieux was born near Bordeaux in 1891. A man of imagination, he became interested in theoretical physics at the lycée when hearing lectures by Pierre Duhem. He entered the Ecole Normale Supérieure in 1912 and, during World War I, he used a periodic signal to check the insulation of freezing equipment—an idea inspired directly by the original work of Fourier on the seasonal propagation of heat in the Earth's soil.

In 1920 Duffieux became assistant to Charles Fabry in Marseille and presented his thesis on band spectra. He earned his doctorate in 1925 and worked thereafter on interference spectroscopy. He was later professor at the Universities of Rennes and Besançon.

During World War II he wrote a very original book, *l'Intégrale de Fourier et ses Applications à l'Optique*. In it he pointed out the convolution relation between object and diffraction pattern to produce the image, the notion of spatial frequency, the notion of transfer function and its expression as the autocorrelation function of the pupilar amplitude, and the existence of a cut-off frequency in incoherent illumination.

Thus Duffieux had been at the origin of the development of modern techniques for the study of optical images, which replaced the old idea of resolving power. He was also brilliant in many other fields, including philosophy and music—all those who met him will remember his original views and stimulating discussions.

ANDRÉ MARÉCHAL
Institut d'Optique
Orsay, France □