

David L. MacAdam receives 1985 Newton Medal

The Color Group of Great Britain has presented the 1985 Newton Medal to David L. MacAdam of the University of Rochester for his contributions to color science. MacAdam received his PhD under Arthur C. Hardy at the Massachusetts Institute of Technology in 1936. That same year he joined the research laboratories of Eastman Kodak, where he remained until his retirement in 1975. In 1976 he became a member of the faculty of the University of Rochester. His research interests have included color photography and color television, colorimetry and color perception, camouflage detection and color standardization. He has served as the editor of the *Journal of the Optical Society of America* (1964-75) and on a number of standards and advisory committees.

In 1936, MacAdam and Hardy compiled the MIT *Handbook of Colorimetry*, and MacAdam proposed a modification to the standard chromaticity

diagram to improve the representation of colors. The chromaticity diagram standardized by the Commission Internationale de l'Eclairage presents colors as linear superpositions of standard illuminants; one of MacAdam's continuing interests has been the relationship between the CIE representation and the perception of colors. In 1942 he showed that the just-perceptibly different colors lie on ellipses (the "MacAdam ellipses"), whose sizes differ in different parts of the chromaticity diagram. For more than a decade, one of MacAdam's major interests has been a system of "uniform color scales," which represents colors in such a way that those perceived to be equally different are separated by equal distances in the space. All MacAdam ellipses, for example, have the same size. MacAdam and his colleagues have prepared a set of 424 color cards and a set of color charts to illustrate this system of uniform color scales. He notes: "Many



MAC ADAM

people, including some artists, find these scales and assemblies interesting, useful and even beautiful."

AAS Chretien Awards to Diaz, Rodriguez

The American Astronomical Society presented the 1984 Henri Chretien Award to Angeles I. Diaz of the Royal Greenwich Observatory, UK, and Luis F. Rodriguez of Universidad Nacional Autonoma de Mexico, Instituto de Astronomia. The AAS grants up to \$20 000 a year to further international observational astronomy under the Chretien Awards program.

Diaz received her undergraduate degree in astrophysics from the Universidad Complutense de Madrid and her MSc from Yale (1981). She recently received her DPhil from the University of Sussex for a thesis concerning the ionization mechanisms and stellar populations of emission-line galactic nuclei. By making a long-slit spectrophotometric study of the nuclear regions of active galaxies, Diaz hopes to establish whether connections exist between star formation and activity in galactic nuclei, as indicated by the radial behavior of their emission lines and star populations. Diaz was awarded \$12 000 for her proposal. Although affiliated with

the Royal Greenwich Observatory, she will be using the Anglo Australian Telescope (Anglo Australian Observatory, Australia) and the Isaac Newton Telescope (Observatorio del Roque de los Muchachos, Spain) for her research.

Rodriguez received his BA from UNAM, and his MA and PhD from Harvard. He was awarded \$7000 for his proposal to make radio and infrared observations of radio variable early-type stars, which he hopes will yield information on the nature of stellar winds from very hot, young stars and on the causes of their variation.

Shionoya receives 1984 luminescence prize

The organizing committee of the International Conference on Luminescence awarded the ICL '84 Prize to Shigeo Shionoya, recently retired from the University of Tokyo, in recognition of his "many contributions to our under-

standing of physical processes that affect the luminescence properties of solids and for his long and continuing services rendered to the luminescence community."

Shionoya was a member of the engineering department faculty at the University of Tokyo from 1951-59. He then joined the Institute for Solid State Physics of the University of Tokyo, where he was made full professor in 1967, and where he remained until his

SHIONOYA



VUV

NOW... All the features you expect to find in a **MODERN** High Performance Vacuum Monochromator. The **VM-521-SG** from **ACTON RESEARCH CORPORATION**

FEATURES

- 1.0 meter focal length
- Patented Multi-Slit Design for 15° or 180° operation from one instrument.
- Dual Indexable Gratings.
- RS-232 Digital Wavelength Scan Drive System.
- Superior Performance.
- Maximum Versatility.
- Applications include Synchrotron, Tokamak and Laser Plasma Diagnostics. VUV Fluorescence Studies.
- For complete information please contact.

ACTON RESEARCH CORP.

P.O. Box 215
525 Main Street
Acton, MA 01720
Tel. (617) 263-3584
Telex. 94-0787 ARC ACTO



Circle number 73 on Reader Service Card

charged particle detection

channelplate charged particle detectors



Our versatile channelplate electron or ion detectors have many advantages. They feature high gain, high saturation levels, rugged construction and easy disassembly, a bakeable divider network, and a range of sizes, mounts, and entrance aperture configurations. They will operate in particle counting or current modes. Shown above are the CP-602A, CP-603, and CP-604 channelplate detectors with 18, 25, and 40mm diameter sensitive areas and gain of 10^6 or better.

comstock

P.O. BOX 199 OAK RIDGE, TENNESSEE 37831 (615)483-7690

Circle number 74 on Reader Service Card

retirement in 1984. In addition to elucidating the properties of zinc sulfide phosphors, Shionoya was the codiscoverer of cooperative luminescence in rare-earth solids. He pioneered the application of laser-spectroscopic methods to the study of the dynamics of impurity-activated glasses. Recently he has employed picosecond and coherent techniques in his studies of highly excited systems and ultrafast relaxation phenomena.

Lusztig receives Frank Nelson Cole Prize in Algebra

At its January meeting in Anaheim, California, the American Mathematical Society presented the 1985 Cole Prize in Algebra to George Lusztig of the Massachusetts Institute of Technology for "his fundamental work on the representation theory of finite groups of the Lie type." Lusztig has classified the complex irreducible representations of a reductive group $G(F_q)$ over a finite field F_q ; based on his work, he says, one can now hope that the full character table of G can be determined in the near future. Much of the cited work appeared in his book *Characters of Reductive Groups Over Finite Fields*, published in 1984.

A native of Rumania, Lusztig received his PhD in 1968 from Princeton University. He worked as a visiting member of the Institute for Advanced Study in Princeton (1969-71) and as a research fellow and professor at the University of Warwick in Coventry, England (1971-78) before joining the faculty of MIT in 1978. The Cole Prize is awarded every five years for a notable research memoir in algebra published in the previous five years.

obituaries

Heinz Pick

Heinz Pick, emeritus professor of the University of Stuttgart, died on 20 September 1983. He was born in 1912, and studied physics in Cologne, Munich and Göttingen, carrying out his thesis research under Robert Pohl at Göttingen and obtaining a PhD in 1937. His thesis, "On the influence of temperature on the excitation of color centers," was one of the landmark publications of the work on color centers in the alkali halides in Pohl's laboratory.

World War II took him into industrial research but he returned to Göttingen after the war and did much to reestablish the tempo and quality of