kins University. Before joining the Polaroid Corp in 1969, he was a US Army officer and a faculty member of the University of Massachusetts. He is now manager of the optical engineering department at Polaroid.

Weeks holds a BA in physics from Princeton University and a PhD in optics from the University of Rochester. In 1959 he joined Richard D. Brew & Co as director of research. Also previous to his employment at Polaroid, Weeks held positions at Schlumberger-Doll and Carson Laboratories. He currently manages Polaroid's technical polarizer division.

The Wood Prize, consisting of a scroll and \$1000 (the latter donated by the Xerox Corp), is presented to recognize an outstanding discovery, scientific or technological achievement, or invention in the field of optics. This year's prize will go to Siegman "in recognition of his invention, analysis and development of the unstable optical resonator" now widely used in high-power laser systems for efficient extraction of power in near-diffraction-limited beams.

Siegman received his education at Harvard University, where he earned a BA in applied physics, at the University of California at Los Angeles, where he took a MA in applied physics, and at Stanford University, where he was awarded a PhD in electrical engineering in 1957. He has remained at Stanford since that time as a professor of electrical engineering and director of the Edward L. Ginzton Laboratory.

The Lomb Medal will be given to Bloom in honor of "his contributions to the use of nonlinear optical processes to achieve real-time, conjugated wavefront generation and image reconstruction." The Lomb Medal is awarded biennially to a person who has made a noteworthy contribution to optics before reaching the age of 30.

Bloom received his undergraduate training in electrical engineering at the University of California at Santa Barbara and completed his graduate studies at Stanford in 1976. Following the award of his doctoral degree, he joined Bell Laboratories, staying until 1979. He is now a staff scientist at Hewlett-Packard Co.

Campbell won the Tillyer Award for "his contributions to basic biophysics through studies of neural mechanisms for vision as well as his clinical studies." The Tillyer Award is presented biennially "to honor distinguished work in the field of vision, including (but not limited to) the optics, physiology, anatomy, or psychology of the visual system."

Campbell's scientific career began at the Institute of Physiology of the University of Glasgow where he earned doctoral degrees in medicine and philosophy. After a year as a research associate at Oxford University, he joined the faculty of Cambridge University in 1954. Campbell currently works at the Kenneth Craik Laboratory of the Department of Physiology at Cambridge.

Peale, Cassen, Reynolds awarded AAAS prize

Stanton J. Peale of the University of California, Santa Barbara, and Patrick M. Cassen and Ray T. Reynolds, both of NASA-Ames Research Center, Mountain View, Cal. have won the AAAS-Newcomb-Cleveland Prize for 1979 for predicting the existence of vulcanism on Jupiter's moon, Io. Each received a bronze medal and a share of the \$5000 prize at the American Association for the Advancement of Science January meeting in San Francisco.

Peale's field of research is solar system physics. He was educated at Purdue and Cornell Universities. Before becoming a professor at Santa Barbara in 1976, Peale worked at the University of California, Los Angeles and at Cornell.

Cassen's principal areas of research are geophysical and astrophysical hydrodynamics, and planetary formation and evolution. Cassen did his undergraduate and graduate studies at the University of Michigan. He has been a research scientist at the NASA-Ames Research Center since 1967.

Reynolds has concentrated on problems of planetary structure, composition and evolution. The University of Kentucky has granted him BS and MS degrees. Reynolds has been chief of the theoretical studies branch of NASA-Ames since 1970.

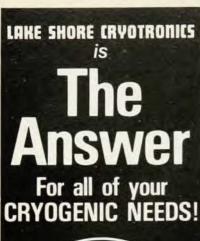
Harvard University has named theoretical astrophysicist, **David Layzer**, to be the first Donald H. Menzel Professor of Astronomy.

TRW Communications Group has chosen Michael K. Barnowski to be director of its Technology Research Center. Before joining TRW, Barnowski was with Hughes Research Laboratories.

Harold O. Wyckoff has been selected by the National Council on Radiation Protection and Measurements to present the fourth Lauriston S. Taylor Lecture. Wyckoff is currently chairman of the International Commission on Radiation Units and Measurements.

John Cumalat, of Fermilab, and David Neuffer, of Lawrence Berkeley Laboratory, have been selected the first two Robert R. Wilson Fellows by a Fermilab committee. Cumalat will work on experiments using photon beams and will help design a new, higher energy, higher intensity photon beam; Neuffer will concentrate on problems involving accelerator beam extraction and colliding beams.







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Ibrahim B. Syed was recently appointed professor of medicine (medical physics) at the University of Louisville School of Medicine.

Robert W. Selden is the new division leader of Los Alamos Scientific Laboratory's X-division. His prior post was assistant associate director for nuclear explosive technology at Lawrence Livermore Laboratory.

obituaries

Lauriston C. Marshall

Lauriston C. Marshall died on 9 November at his home on the Mendocino Coast of California ending an active and varied career. His graduate years were spent at the University of California at Berkeley, where he was involved in research dealing with gaseous conduction as a student of Leonard Loeb. The two remained lifelong friends.

On receiving a PhD in 1929, he was awarded a National Research Council Fellowship which he spent at Princeton University in collaboration with Karl T. Compton, who was in his last years at Princeton before becoming president of MIT. In 1931 Marshall received an appointment as Physicist in the US Department of Agriculture. Marshall pioneered a dry-lands research program at the Experimental Research Station in La Jolla, in the course of which he developed the first climate-controlled greenhouse. This experience gave him an unusually broad perception of the opportunities for putting physics to practical use—a perception that remained a part of his makeup throughout his career.

He returned to Berkeley as a member of the Department of Electrical Engineering in 1937 and accepted a position as director of the high-voltage laboratory. One of the very significant consequences of this period of research was the development, with D. H. Sloan, of the "Resnatron," a powerful vacuum tube for producing microwaves. All work on the device, which appeared just at the start of World War II, was classified by the gov-

Marshall accepted Lee DuBridge's invitation to join the Radiation Laboratory at MIT in 1940 as the Laboratory was being formed. He served as Head of Division 10 until 1943, when he was appointed Chief of the British branch of the Laboratory. A year later the Office of Scientific Research and Development requested that he be made chief of its Operational Research Section in the Pacific Ocean areas. It is hardly necessary to add that the period spent in wartime research provided him with an almost unlimited scope to use his many talents-as was true for many of the scientists in his generation.

The years immediately following World War II were spent in Berkeley as professor of electrical engineering, director of the



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Microwave Power Laboratory and a member of the Radiation Laboratory. In this role Marshall worked in close cooperation with E. O. Lawrence, Luis W. Alvarez, Wolfgang K. H. Panofsky and their colleagues in the development of highenergy accelerators. During this period, he was the recipient of two Guggenheim Awards which he devoted to cooperative research with the composer, Harry Partch. His research focused on the development of unusual musical instruments and the techniques of recording music.

In 1952 he became director of research for the Link Belt Company in Indianapolis, where he devoted his attention to the development of a variety of sophisticated equipment and their application to metallurgical problems.

In 1961 Lloyd Berkner asked Marshall to join in the establishment of the Graduate Center of the Southwest in Dallas, Texas-an institution that has since grown to be the University of Texas at Dallas. During the Dallas years, he and Berkner, amid many other activities, studied the origin of Earth's oxygen and together published a very important sequence of papers linking this process to the development of multi-celled plants and animals and their spread to land. One of the many legacies of his work in these years was the founding of the now famous Texas Symposia in Astrophysics.

On reaching the mandatory retirement age at the Graduate Center of the South-