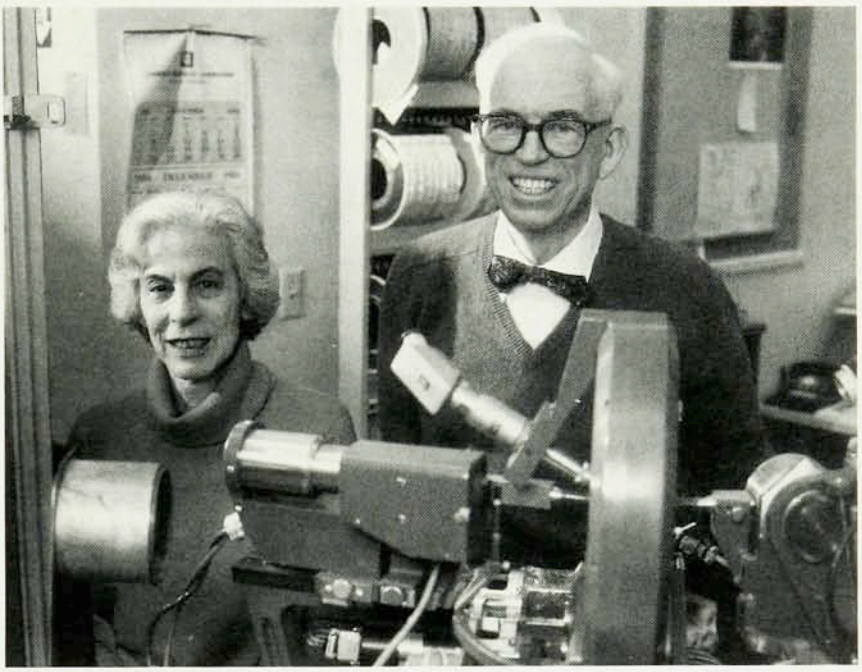
Templetons honored for work in crystallography

David H. and Lieselotte K. Templeton in March shared the third A. L. Patterson Award of the American Crystallographic Association for "their pioneering contributions to our understanding of anomalous scattering of x rays." David Templeton received his BS from Louisiana Tech University (then the Louisiana Polytechnic Institute, 1941), his MA from the University of Texas (Austin, 1943) and his PhD in chemistry from the University of California (Berkeley, 1947). He has been at Berkeley since 1946, becoming a full professor of chemistry in 1958 and serving as dean of the college of chemistry for 1970–75. Lieselotte received her BS (1946) and PhD (1950) from Berkeley. Since then she has been associated intermittently with Berkeley and with the Lawrence Berkeley Laboratory. She is currently a specialist in the chemistry department of the University of California. Over the last 10 years, the Templetons have used synchrotron radiation extensively to study anomalous scattering near absorption edges in materials such as the lanthanides. Using the polarized nature of synchrotron radiation they found x-ray dichroism and birefringence in bromate salts and other crystals, and measured changes in anomalous scattering with direction of polarization. They also studied applications of these properties to the phase problem of x-ray diffraction.



LIESELOTTE K. AND DAVID H. TEMPLETON

In March ACA presented the first annual Pauling Prize, which recognizes outstanding papers by students, to S. R. Ruberu and T. W. Panunto (both at the University of Minnesota chemistry department) for their paper "Physical and chemical properties of cyclamers."

ASP 1987 Bruce Medal to Salpeter; 1986 medal to Whipple

The Astronomical Society of the Pacific will present its 1987 awards to three individuals in July.

Edwin E. Salpeter (Cornell University) will receive the 1987 Catherine Bruce Medal for his lifelong contributions to astronomy, in particular for his elucidation of the fusion cycle that powers older stars. Salpeter received his MSc from Sydney University (Australia, 1945) and his PhD from Birmingham University (England, 1948). He went to Cornell in 1949 as a research associate; he is now the James Gilbert White Distinguished Professor in the Physical Sciences and director of Cornell's center for radiophysics and space research. In 1952 Salpeter proposed that older stars, which have exhausted much of their hydrogen, could be fueled by the fusion of three helium nuclei into a carbon nucleus (triple-alpha process). In addition, Salpeter has studied the structure of collapsed stars, energy production mechanisms in quasars (such as giant black holes), the formation rate of stars of different masses in the Galaxy, the theory of the growth of dust grains around and between the stars, and the interior layers of Jupiter.

Stephan E. Schneider (University of Virginia) will receive the Robert J. Trumpler Award for his PhD thesis "Galaxy groups: Neutral hydrogen and dynamics," which he completed at Cornell in 1985. While making radio observations of groups of galaxies, Schneider discovered an enormous cloud of hydrogen gas between the galaxies of a group in the constellation Leo; this was the first observation of intergalactic matter in a group of galaxies that is outside any member of the group.

Alan N. Stockton (University of Hawaii) will recieve the Muhlmann Prize for his detailed studies of redshifts of faint galaxies surrounding quasars. He observed that many of the galaxies he examined exhibited almost exactly