

the potential influences that major terrestrial impacts may have had on the evolution of life on Earth.

Stevenson received the Urey Prize for his "broad achievement in planetary physics, especially concerned with planetary formation and planetary interiors." The Urey Prize is awarded annually to recognize outstanding achievement in planetary research by a young scientist. Stevenson received his PhD in theoretical physics from Cornell University in 1976, and

has held academic posts at the Australian National University and the University of California at Los Angeles. He pioneered studies of the chemistry of multicomponent materials at the high pressures characteristic of planetary interiors; he has developed a new conceptual framework for understanding atmospheric abundances in the Jovian planets. Stevenson's studies of planetary interiors have provided new insights into tidal dissipation effects, heat transport, mixing, core formation

and the generation of magnetic fields in the solar system. In addition, he has studied the geophysics and topography of icy satellites.

ASP Bruce Medal to Wilson; Trumpler Award to Hunter

The Astronomical Society of the Pacific has presented the Catherine Wolfe Bruce Medal to Olin C. Wilson and the 1984 Robert J. Trumpler Award to Deidre Hunter, both of the Carnegie Institution of Washington.

Wilson, staff member emeritus of the Mount Wilson and Las Campanas Observatories, received the Bruce Medal in recognition of his pioneering contributions in stellar spectroscopy. Much of his research has concerned certain spectral emission lines arising in the chromospheres of stars, and his studies have resulted in the development of methods both to determine the absolute magnitudes, and thereby the distances, of certain stars and to estimate stellar ages. Systematic investigations Wilson initiated at Mt. Wilson in 1966 have demonstrated that sunlike stars exhibit activity cycles similar to those of our own Sun; these studies continue to yield information on stellar rotation and other properties. Wilson joined the Mount Wilson Observatory in 1931 as a research assistant, becoming a staff member in 1936. He holds the first PhD in astronomy awarded by Caltech and served as president of the Astronomical Society of the Pacific in the 1950s. Since his official retirement in 1974, he has continued his professional work as staff member emeritus of Carnegie's Mount Wilson and Las Campanas Observatories.

Deidre Hunter is the first woman to receive the Trumpler Award, which is presented annually for a PhD thesis of unusual importance to the field of astronomy. She received her doctorate in 1982 from the University of Illinois at Champaign-Urbana, where she worked under the guidance of Jay Gallagher. For her thesis, she investigated in detail the formation of stars in irregular galaxies. She and her colleagues found that giant irregulars produced stars at rates equaling or exceeding those of spiral galaxies; thus the wave pattern thought to compress raw material into new stars in spirals is evidently not everywhere necessary for extensive star formation. At the same time, Hunter found that smaller irregulars were less successful in making new stars. Before coming to Carnegie, Hunter served for two years as a research associate at the Kitt Peak National Observatories (now the National Optical Astronomy Observatories.)



EAGER TO FIND THE MOST EFFECTIVE ABSORPTION TECHNIQUE?

No other technique even comes close to Laser Analytics' TDL in tracing absorptions! Now, identify molecules and radicals unambiguously in very complicated gas mixtures at low pressure. With fast-time, high spatial resolution! By adding our cost-efficient TDL probe to your present system, you will also realize full data potential and improve spectral resolution 10,000-fold over fluorescence methods. Plus, our IR TDL enables you to measure absolute vibrational populations (as low as 10^{-10} /CO₂), relaxation rates, and gain co-efficients with an accuracy unattainable by more conventional methods. And no other technique pays off faster! Laser Analytics' Advanced IR TDL Systems: unmatched in speed, range, resolution and sensitivity. To take a closer look, phone 617/275-2650.



The Laser Analytics Letter.

Please write or send business card to receive copies of "THE LASER ANALYTICS LETTER" reporting new developments in IR Tunable Diode Laser technology, R&D applications, industrial case histories, and other informative data.

Laser Analytics Division
SCIENTIST-MANUFACTURERS
OF ADVANCED
IR TUNABLE DIODE LASER SYSTEMS
A Spectra-Physics Company
25 Wiggins Avenue
Bedford, MA 01730
617/275-2650/Telex 92-3324



Circle number 39 on Reader Service Card