



Harriet L. Dinerstein

(1982) from Cambridge University. He is an associate professor at the Canadian Institute for Theoretical Astrophysics and a fellow of the Canadian Institute for Advanced Research.

Harriet L. Dinerstein (University of Texas, Austin) is the 1989 winner of the Newton Lacy Pierce Prize, an annual honor given to a North American astronomer under the age of 36 for outstanding achievement in observational astronomical research over the five years preceding the award. Dinerstein is being recognized for her research on the chemical compositions of galactic and extragalactic gaseous nebulae, novae and supernovae. The citation highlights her observational creativity in combining optical and infrared spectroscopic techniques to measure radiation from several different ionization stages of an element in order to determine its relative abundance. The elements Dinerstein has studied

Nick Kaiser



include helium, oxygen, sulfur, neon and nitrogen. The elemental abundances in nebulae offer important clues to understanding the evolution of the universe.

Dinerstein received her BS (1975) from Yale University and her PhD (1980) from the University of California, Santa Cruz. She is an assistant professor in the University of Texas astronomy department.

IN BRIEF

Tom Witten, currently a research associate at the Exxon Corporate Research Laboratory in Annandale, New Jersey, will join the faculty of the University of Chicago in September. Witten will be a member of the James Franck Institute and a professor of physics.

George Gamota recently became chief scientist of the Mitre Corporation's Bedford, Massachusetts, operations. He was previously president of Thermo Electron Technologies Corp of Waltham, Massachusetts, the R&D subsidiary of Thermo Electron.

OBITUARIES

Taro Tamura

Taro Tamura died of a heart attack on 10 October 1988, at the age of 65. He was a distinguished theoretical nuclear physicist who made important contributions to the theory of nuclear reactions and nuclear structure.

Tamura was born in Akita, Japan, on 12 July 1923. He earned an undergraduate degree in naval architecture from the University of Tokyo in August 1945. He would later mention this period of his life only to his closest friends, and even then usually only to call it "the darkest days of my life." One of his assignments was apparently to design a kind of manned torpedo or kamikaze submarine! When the war was over, he returned to the University of Tokyo to study physics, receiving a bachelor's degree in March 1949 and a PhD in August 1955. He was a research assistant at the Tokyo University of Education (now Tsukuba University) from 1953 until 1955. He was a postdoctoral fellow at the Niels Bohr Institute in Copenhagen from 1955 until 1957 and held a similar position at UCLA from 1957 until 1959. He then returned to the Tokyo University of Education as an associ-



Taro Tamura

ate professor, but he left Tokyo in 1962 to become a staff physicist at Oak Ridge National Laboratory. He came to the University of Texas as a professor in 1968, and remained there until the end of his life.

During his 38-year career in physics, Tamura published about 200 papers. His early work (1950-55) was mainly in cosmic-ray physics, but shortly after he joined the Tokyo University of Education he became interested in theoretical nuclear physics. Tamura's nuclear theoretical work was initially rather formal and mathematical, dealing for instance with the relation of nuclear collective coordinates to individual nucleonic coordinates, and with the application of group-theoretical methods to nuclear spectroscopy. In Copenhagen and at UCLA, however, he became impressed with the power of a phenomenological approach that combined formal precision with experimentally guided insights into workable approximations.

Tamura immediately appreciated the importance of electronic computers for the future of theoretical nuclear physics. At UCLA he witnessed firsthand the impact on that field of early optical model calculations. His move from Japan to Oak Ridge was motivated almost entirely by the computational power to which he would thereby gain access. At Oak Ridge he completed Jupiter, his famous coupled-channels program for the description of inelastic scattering of nucleons leading to excitation of collective vibrational and rotational states of nuclei. Over the years the program has found widespread use, not only in nuclear physics and chemistry but also in nuclear engineering and elsewhere. His article in *Reviews of Modern Physics* (37, 678, 1965)