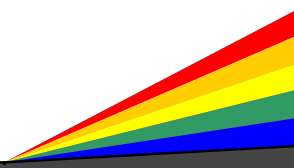


APS COLLOQUIUM SERIES



SPEAKER: Anant K. Ramdas
Purdue University

A. K. Ramdas is professor of physics at Purdue University. He obtained his Ph.D. in 1956 under the direction of Sir C. V. Raman at Raman Research Institute, India. His current research interests include: electronic band structure, collective and localized excitations, defects, impurities in diamond, Si, Ge, III-V and II-VI semiconductors, II-VI semiconductors and their quantum well structures. He is the recipient of many honors and awards including: Fellow, American Physical Society (1969); Fellow, Indian Academy of Sciences (1969); Fellow, Optical Society of America (1996); Associate Fellow, Third World Academy of Sciences (1996); Alexander von Humboldt Foundation Senior U.S. Scientist Award (1977-78); Raman Centenary Medal (1988) of the Indian Academy of Sciences; Honorary Member, Material Research Society of India (1990); Raman Professorship, Indian Academy of Sciences (1993-94); Frank Isakson Prize of the American Physical Society Award, Purdue University (1994).

TITLE: The Physics of Diamond: The Role of C. V. Raman and the Raman Effect

After a brief account of the events that led to the discovery of the Raman Effect and Raman's pioneering work on diamond, the talk will describe (1) the lattice vibrations of isotopically controlled specimens; and (2) the electronic excitations of an acceptor bound hole (a solid state analog of anti-hydrogen) addressed with Raman, Brillouin and Fourier Transform Infrared spectroscopy.

DATE: Wednesday, November 1, 2000

TIME: 4:15 p.m.

LOCATION: 402 Auditorium

Refreshments will be served at 4:00 p.m.