

Announcement: The 2006 James Clerk Maxwell Prize for Plasma Physics

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The recipient of the 2006 **James Clerk Maxwell** Prize of the American Physical Society is Professor Chandrashekhar Joshi of the University of California, Los Angeles (UCLA). He received his prize on 1 November 2006 at the annual meeting of the American Physical Society (APS) Division of Plasma Physics (DPP) in Philadelphia, Pennsylvania.

The prize consists of \$5000 and a certificate bearing the following citation:

For his insight and leadership in applying plasma concepts to high energy electron and positron acceleration, and for his creative exploration of related aspects of plasma physics.

The purpose of the prize is to recognize outstanding contributions to the advancement and diffusion of the knowledge of the properties of highly ionized gases of natural and laboratory origin. It was established by Maxwell Laboratories, Incorporated in 1975 and is currently sponsored by General Atomics. Selection is made by a committee appointed by the President of the American Physical Society.



Professor Joshi's Plasma Accelerators group at the University of California, Los Angeles (UCLA) is known worldwide for developing the field of laser and electron beam-driven plasma-based particle accelerators over the past two decades. Joshi and his colleagues were first to conclusively demonstrate the acceleration of electrons using relativistically propagating laser plasma waves. Initially, such waves were excited using a laser beam employing two different schemes: the Laser Beat Wave Accelerator and the Self-Modulated Laser Wakefield Accelerator. This was followed by a series of elegant beam-driven plasma particle acceleration experiments using high-energy electron and positron

beams at the Stanford Linear Accelerator Center (SLAC), in collaboration with two other research groups from SLAC and the University of Southern California (USC). In addition to plasma-based accelerator research, Professor Joshi has done pioneering work in the areas of laser-plasma instabilities, plasma-based light sources, laser fusion, and basic plasma experiments

Chandrashekhar Joshi is a Distinguished Professor of Electrical Engineering at UCLA. He is also the Director of the Center for High Frequency Electronics and heads the Neptune Laboratory for Advanced Accelerator Research at UCLA. He received his B.Sc. (1974) from London University and Ph.D. (1978) from Hull University, both in the United Kingdom. Following a two-year appointment as a research associate at the National Research Council of Canada, where he worked on laser-plasma interactions, he joined UCLA first as a researcher and since 1988 as a faculty member.

Professor Joshi is a Fellow of the APS (1990), the Institute of Electrical and Electronics Engineers (1993) and the Institute of Physics (U.K., 1998). He is also the recipient of the APS Excellence in Plasma Physics Award (1996) and the US Particle Accelerator School prize for Achievement Physics and Technology (1997). He served as an APS Centennial Speaker (1999) and as a Distinguished Lecturer in Plasma Physics (2001).