



Distinguished Professor Chandrashekhar Joshi

was Elected to National Academy of Engineering

Distinguished Professor Chandrashekhar Joshi from the UCLA Henry Samueli School of Engineering and Applied Science has been elected to the National Academy of Engineering, regarded as among the highest professional distinctions that can be awarded to an engineer in the U.S.

Dr. Joshi, who is currently a distinguished professor of electrical engineering, was among 67 new members elected to the NAE for their outstanding contributions to engineering research, practice or education, the academy announced today. The academy also named 11 new foreign associates. Joshi was recognized by the academy for "contributions to the development of laser and beam-driven plasma accelerators."

"Chan has been at the forefront of this field for decades, and is most deserving of this most prestigious recognition from the National Academy of Engineering," said UCLA Engineering Dean Vijay K. Dhir.

Professor Joshi is known as the founder of the experimental field of plasma accelerators. At UCLA in the 1980s, he established the first group that proposed to significantly shrink the size and cost of particle accelerators by using charged density waves in plasmas (or ionized gas) using powerful laser pulses or particle beams. Since that time the research on particle acceleration using plasma waves has spread worldwide. Joshi's UCLA group remains at the forefront of its field, and the lab has nurtured many students and researchers who have gone on to form their own research teams. In addition to plasma accelerators, Joshi has advanced the understanding of nonlinear optics of plasmas, laser fusion and basic plasma physics.

The ultimate goal of Joshi's research is to provide a paradigm-changing technology for building particle accelerators for fundamental research, as well as for medical and industrial applications.

"This is a great honor," Joshi said. "I have been fortunate to have spent my research career at UCLA with supportive colleagues and staff and to have had continuous support from the Department of Energy. I have worked with many generations of brilliant

students and researchers whose effort is being recognized by this election to the National Academy of Engineering."

Joshi, who received his Ph.D. from Hull University in the United Kingdom, came to UCLA in 1980 as a researcher after a postdoctoral appointment at the National Research Council Canada. He has been a full professor in the electrical engineering department since 1989.

Joshi has received numerous previous awards for his work, including the American Physical Society's James Clerk Maxwell Prize and Excellence in Plasma Physics Award, the IEEE's Particle Accelerator Science and Technology Award, the USPAS Prize for Accelerator Physics and Technology, and the AAC Prize for Advanced Accelerator Concepts. He is a fellow of the American Physical Society, IEEE and the Institute of Physics. He is also the recipient of the Distinguished Engineering Educator Award from the Engineers' Council.

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For more information, please visit <http://www.seas.ucla.edu/plasma>

or contact joshi@ee.ucla.edu.