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NEBRASKA CENTER FOR MATERIALS AND NANOSCIENCE
2010 SEMINAR SERIES PRESENTS

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Co-Sponsored by Electrical Engineering

PROF. BENXIN WU

Department of Mechanical, Materials & Aerospace Engineering
Illinois Institute of Technology (IIT)

The Study of Laser-induced Plasma, Laser-Water Interaction, Laser Micromachining and Shock Peening Processes

Lasers are unique energy sources that can realize localized, non-contact, flexible and rapid energy delivery. In particular, short and ultrashort pulsed lasers have many competitive current or potential applications in manufacturing, materials processing and other areas, due to their high precision and achievable intensities. In this talk, we present some of our previous and current studies on laser-induced plasma, laser-water interaction, laser micromachining and shock peening processes using short or ultrashort pulsed lasers. The study is realized through time-resolved experimental measurements (e.g., fast photography) and/or physics-based modeling.

Prof. Wu received his Ph.D. degree from the School of Mechanical Engineering, Purdue University in 2007, after which he joined Illinois Institute of Technology (IIT) as a tenure-track assistant professor in the Department of Mechanical, Materials, and Aerospace Engineering (MMAE). His research focuses on laser-material interactions, laser-induced plasma, and laser applications in materials processing, manufacturing and other areas. Dr. Wu is the recipient of the 2010 MMAE Excellence in Research Award at IIT.

Tuesday, August 31, 2010
2:00 p.m.
237 SEC

Host:
Prof. Yongfeng Lu
Electrical Engineering

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