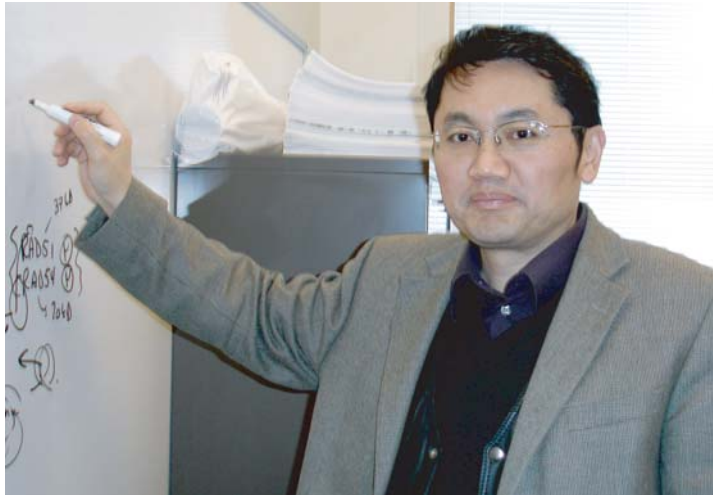


Photolyase: Photochemistry and Photobiology

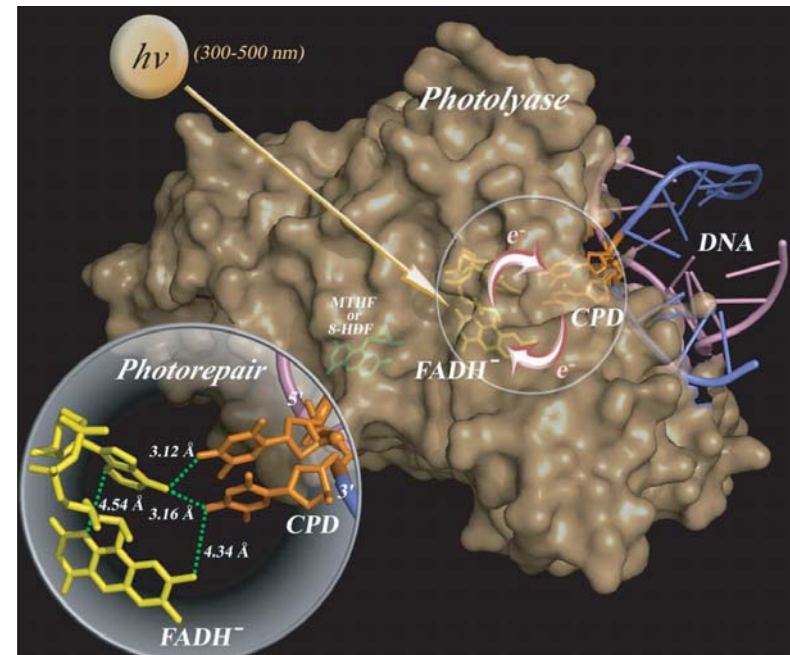


Dongping Zhong

**Robert Smith Associate Professor of Physics, and
Associate Professor of Chemistry and Biochemistry
The Ohio State University**

BS Laser Physics, Huazhong University of Science and Technology
PhD, Chemistry, Caltech

This talk will present our recent progress in ultrafast protein dynamics with a focus on direct mapping of complete dynamical evolution in UV-damaged DNA repair by photoenzyme with a blue-light photon..



3:00 pm, Monday

April 6, 2009

Sloan Auditorium, Goergen Building
Refreshments served

Photolyase: Photon, Photochemistry and Photobiology

Dongping Zhong

Departments of Physics, Chemistry and Biochemistry
The Ohio State University

Abstract

The applications of femtosecond laser spectroscopy in biology have provided molecular insights into various critical biological processes and facilitated our understanding of biological function at the most fundamental level, especially in photon-driven biological machinery. We will first summarize our recent progress in ultrafast biological dynamics by integrating with molecular biology methods and then focus on one particular system in nature using blue-light photon to repair UV-damaged DNA by photoenzyme photolyase.

Biography

Dongping Zhong received his B.S. in laser physics from Huazhong University of Science and Technology (China) and his Ph.D. in Chemistry from California Institute of Technology in 1999 under Prof. Ahmed H. Zewail. For his Ph.D. work, Dr. Zhong received The Herbert Newby McCoy Award and the Milton and Francis Clauser Doctoral Prize from Caltech. He continued his postdoctoral research in the same group with focus on protein dynamics. In 2002, he joined The Ohio State University as an Assistant Professor and currently he is Robert Smith Associate Professor of Physics and Associate Professor of Chemistry and Biochemistry. He is the Packard Fellow, Sloan Fellow, Camille Dreyfus Teacher-Scholar as well as the recipient of the NSF CAREER award. His research interests include biomolecular interactions and ultrafast protein dynamics.