

Biographical Sketch

Aihua Xie

Associate Professor of Physics
Oklahoma State University
Stillwater, OK 74078

Education:

Zhejiang University, China, Physics, B.S., 1981
Carnegie Mellon University, Physics/Biophysics, Ph.D., 1987
University of Illinois at Urbana-Champaign, Biological Physics, Postdoctoral research, 1987-1991

Appointments:

Assistant to Associate Professor of Physics, Oklahoma State University, 1997 – present
Instructor of Physiology and Biophysics, Albert Einstein College of Medicine, 1993 – 1997
Research Assistant Professor of Physics, University of Illinois at Urbana-Champaign, 1992

Honors and Awards:

Fellow of the American Physical Society, 2003
Junior Faculty Award for Scholarly Excellence (A & S, Oklahoma State University), 2000

Synergistic Activities:

Member, Committee on the Status of Women in Physics (CSWP) (American Physical Society), 2003-2005
Program co-chair, 2005 American Physical Society (APS) March Meeting, CSWP
Organizer, APS CSWP Workshops on “Professional Skill Developments for Women Physicists”, 2003-2005
Member, Nomination Committee of the APS Division of Biological Physics (DBP), 2004
Member, Steering Committee for the 2004 APS DBP workshop “Opportunities in Biology for Physicists II”
Member, Search Committee for the OSU Vice President for Research, 2003

Current Research Group:

2 Ph.D. students, 1 postdoctoral associate

Selected Publications:

Xie, A., W.D. Hoff, A.R. Kroon, & K.J. Hellingwerf. Glu46 Donates a Proton to the 4-Hydroxycinnamate Anion Chromophore during the Photocycle of Photoactive Yellow Protein. 1996. *Biochemistry* 35:14671-14678 (accelerated publication).

Hoff, W.D., **A. Xie**, I.H.M. Van Stokkum, X-J Tang, J. Gural, A. R. Kroon, & K.J. Hellingwerf. Global Conformational Changes upon Receptor Stimulation in Photoactive Yellow Protein. 1999. *Biochemistry* 38: 1009-1017.

Xie, A., A. van der Meer, W.D. Hoff, R.H. Austin. Long-lived Amide I Vibrational Modes in Myoglobin. 2000. *Phys. Rev. Lett.* 84:5435-5438.

Xie, A., L. Kelemen, J. Hendriks, B.J. White, K.J. Hellingwerf, & W.D. Hoff. Formation of a New Buried Charge Drives a Large-amplitude Protein Quake in Photoreceptor Activation. 2001. *Biochemistry* 40:1510-1517 (accelerated publication).

Xie, A., A. van der Meer, R.H. Austin. Excited State Lifetimes of Far-infrared Collective Modes in Proteins. 2002. *Phys. Rev. Lett.* 88: 018102-1-4.

COLLABORATORS & OTHER AFFILIATIONS

Collaborators

R.H. Austin, Princeton University
W.D. Hoff, University of Chicago
Steve Kent, University of Chicago
K.J. Hellingwerf, University of Amsterdam, the Netherlands
B. McMahon, Los Alamos National Laboratory

Ph.D. Advisor: J.F. Nagle, Carnegie Mellon University

Postdoctoral Advisor: H. Frauenfelder, University of Illinois at Urbana-Champaign

Graduate Students and Postdoctoral Associates Advised

W.D. Hoff, University of Chicago
L. Kelemen, Institute of Biophysics, the Hungarian Biological Research Center
J. Hendriks, Free University, Amsterdam, the Netherlands
B. White, B. Nie, J. Wang, A. Bao, P. Vendeenter, Oklahoma State University

Professional Affiliations

American Physical Society
Biophysical Society