

Benjamin J. Schwartz

Department of Chemistry and Biochemistry
University of California, Los Angeles Box 951569
Los Angeles, CA 90095-1569

Phone: (310) 206-4113

Fax: (310) 206-4038

E-mail: schwartz@chem.ucla.edu

Internet: <http://www.chem.ucla.edu/dept/Faculty/schwartz/index.html>

EDUCATION

University of California, Berkeley – Ph.D. in Chemical Physics, awarded in December 1992. Thesis: "Femtosecond Dynamics of Fundamental Reaction Processes in Liquids: Proton Transfer, Geminate Recombination, Isomerization and Vibrational Relaxation."

University of Michigan, Ann Arbor – B. S. in Physics and Chemistry with highest distinction and honors in chemistry, awarded in May 1986.

RESEARCH POSITIONS

Professor: Department of Chemistry and Biochemistry, UCLA (7/04–present)

- Femtosecond laser studies of the dynamics of charge-transfer-to-solvent reactions in solution
- Classical and quantum non-adiabatic computer simulations of charge transfer, solvation dynamics and the nature of linear response; development of multi-electron quantum simulation algorithms
- Relationship between photophysics, structure and charge transport in conjugated polymer films; optimization of interchain interactions for use in practical optoelectronic device applications
- Development of 3-D lithography via 2-photon absorption and applications to 3-D structures

Associate Professor: Department of Chemistry and Biochemistry, UCLA (7/02–6/04)

Assistant Professor: Department of Chemistry and Biochemistry, UCLA (1/97–6/02)

Postdoctoral: Polymer Institute, Univ. of Calif., Santa Barbara (10/95–12/96) Advisor: Alan J. Heeger

- Ultrafast and other photophysical studies of semiconducting polymers and polymeric devices
- Investigations of solid state polymer lasing and stimulated emission in various environments

Postdoctoral: Dept. of Chemistry, University of Texas at Austin (2/93–9/95) Advisor: Peter J. Rossky

- Microscopic analysis of solvation dynamics and quantum decoherence via computer simulation
- Extensive theoretical studies of transient hole-burning spectroscopy of the hydrated electron
- Construction of classical and quantum non-adiabatic molecular dynamics simulations

Graduate: Dept. of Chemistry, University of California, Berkeley (9/86–1/93) Advisor: Charles B. Harris

- Femtosecond laser studies of solvent effects on proton transfer and isomerization reactions
 - Ultrafast investigations of excimer formation dynamics, vibrational energy transfer and geminate recombination of small molecules in condensed phases
 - Design and construction of an amplified femtosecond laser and data acquisition electronics
-

SELECTED AWARDS and HONORS SINCE 1995

Hanson-Dow Award for Excellence in Teaching (10/02)

Camille Dreyfus Teacher-Scholar Award (5/01–4/05)

Alpha Chi Sigma Glenn T. Seaborg Award for Outstanding Research (4/01)

Research Corporation Cottrell Scholar Award (5/99–4/04)

Alfred P. Sloan Foundation Research Fellow (4/99–3/01)

National Science Foundation CAREER Award, Chemistry Division (3/98–2/03)

National Science Foundation Postdoctoral Fellowship in Chemistry (5/93–4/95)