

Frank E. Osterloh

Associate Professor
University of California
Department of Chemistry
One Shields Avenue, Davis, CA 95616

Phone (530) 754-6242
Fax (530) 752-8995
osterloh@chem.ucdavis.edu
<http://chemgroups.ucdavis.edu/~osterloh/bio/index.htm>

RESEARCH INTERESTS

Synthesis of multicomponent nanostructures from inorganic nanoparticles and analysis of their physical and catalytic properties. Emphasis is on materials applicable to chemical sensing and energy conversion technologies.

PROFESSIONAL PREPARATION

- 1997 – 2000** Postdoctoral Fellow in Chemistry, Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA
- 1997** Ph.D. in Chemistry (*summa cum laude*), Department of Chemistry, Carl von Ossietzky Universität, Oldenburg, Germany;
Thesis title: *Synthesis and Characterization of novel Fe- and Ni-Complexes as Model Compounds for the Active Sites of NiFe-Hydrogenase and Ni-CO-Dehydrogenase*
- 1994** Diploma (M.S.) in Chemistry, Department of Chemistry, Carl von Ossietzky Universität, Oldenburg, Germany

APPOINTMENTS

- 2006 –** Associate Professor, Department of Chemistry, University of California, Davis, CA.
- 2000 – 2005** Assistant Professor, Department of Chemistry, University of California, Davis, CA.
- 1997 – 2000** Postdoctoral Research Assistant, Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA.
- 1994 – 1997** Teaching Assistant, Department of Chemistry, Carl von Ossietzky University, Oldenburg, Germany

AWARDS AND FELLOWSHIPS

- 1997 – 1999** Postdoctoral fellowship of the Deutsche Forschungsgemeinschaft (DFG)

MEMBERSHIPS

Gesellschaft Deutscher Chemiker (GDCh); American Chemical Society (ACS)

GRADUATE ADVISORS

Dr. Siegfried Pohl (deceased 1996), Department of Chemistry, Carl von Ossietzky Universität, Oldenburg, Germany

POSTGRADUATE ADVISOR

Dr. Richard Holm, Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA

SELECTED PUBLICATIONS

1. Akl, N.; Trofymlyuk, O.; Qi, X.; Kim, J. Y.; Osterloh, F. E.; Navrotsky, A., A Nanowire-Nanoparticle Crosslinking Approach to Highly Porous Electrically Conducting Solids. *Angew. Chem. Int. Ed. Engl.* **2006**, *45*, (22), 3653-3656.
2. Osterloh, F. E.; Kim, J. Y., Planar Gold Nanoparticle Clusters as Microscale Mirrors. *J. Am. Chem. Soc.* **2006**, *128*, (12), 3868-3869.
3. Qi, X.; Osterloh, Frank E.; Barriga, S. A.; Giacomo, J. A.; Chiang, S., Molecular Adsorption to LiMo₃Se₃ Nanowire Film Chemiresistors. *Anal. Chem.* **2006**, *78*, (4), 1306-1311.
4. Qi, X. B.; Osterloh, F. E., Chemical sensing with LiMo₃Se₃ nanowire films. *J. Am. Chem. Soc.* **2005**, *127*, (21), 7666-7667.
5. Kim, J. Y.; Osterloh, F. E.; Hiramatsu, H.; Dumas, R. K.; Liu, K., Synthesis and real-time magnetic manipulation of a biaxial superparamagnetic colloid. *J. Phys. Chem. B* **2005**, *109*, (22), 11151-11157.
6. Kim, J. Y.; Osterloh, F. E., ZnO-CdSe nanoparticle clusters as directional photoemitters with tunable wavelength. *J. Am. Chem. Soc.* **2005**, *127*, (29), 10152-10153.
7. Osterloh, F. E.; Hiramatsu, H.; Dumas, R. K.; Liu, K., Fe₃O₄-LiMo₃Se₃ nanoparticle clusters as superparamagnetic nanocompasses. *Langmuir* **2005**, *21*, (21), 9709-9713.
8. Kim, J. Y.; Hiramatsu, H.; Osterloh, F. E., Planar polarized light emission from CdSe nanoparticle clusters. *J. Am. Chem. Soc.* **2005**, *127*, (44), 15556-15561.