Stanford

Amy Cordones-Hahn

Staff Scientist, SLAC National Accelerator Laboratory

Bio

BIO

I am a staff scientist in the Stanford PULSE Institute at SLAC National Accelerator Laboratory, where I work in the Solution Phase Chemistry Group. I am interested in understanding the excited state processes that drive photochemical reactions of transition metal complexes relevant for solar energy conversion and catalysis. My research takes advantage of the atomic specificity of ultrafast x-ray methods at the Linac Coherent Light Source (LCLS), coupled with complementary ultrafast optical spectroscopy methods, to resolve the dynamics and reaction mechanisms of transition metal complexes acting as photosensitizers and photocatalysts.

Research website: https://ultrafast.stanford.edu/spc-solution-phase-chemistry

EDUCATION AND CERTIFICATIONS

- PhD, University of California Berkeley , Chemistry (2012)
- B.A./M.S., Brandeis University , Chemistry (2007)

LINKS

- Research Group Website: https://ultrafast.stanford.edu/spc-solution-phase-chemistry

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Principal Investigator, Stanford PULSE Institute (2015 - present)

Publications

PUBLICATIONS

- **Simple Preparation and Characterization of Hybrid Cobalt Phthalocyanine on Multiwalled Carbon Nanotube Electrodes** *ACS APPLIED ENERGY MATERIALS*
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- **Reduction of Electron Repulsion in Highly Covalent Fe-Amido Complexes Counteracts the Impact of a Weak Ligand Field on Excited-State Ordering.** *Journal of the American Chemical Society*
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- **Direct observation of ultrafast hydrogen bond strengthening in liquid water.** *Nature*
  Yang, J., Dettori, R., Nunes, J. P., List, N. H., Biasin, E., Centurion, M., Chen, Z., Cordones, A. A., Deponte, D. P., Heinz, T. F., Kozina, M. E., Ledbetter, K., Lin, et al
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- **Generation and characterization of ultrathin free-flowing liquid sheets** *NATURE COMMUNICATIONS*

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