Amy Cordones-Hahn

Stanford PULSE Institute
SLAC National Accelerator Laboratory
2575 Sand Hill Road
Menlo Park, CA, 94025

Phone: 650-926-4125
Email: acordon@slac.stanford.edu

Current Position

Associate Staff Scientist, Stanford PULSE Institute, SLAC National Accelerator Laboratory

Background

- 2015-present: Associate Staff Scientist, SLAC National Accelerator Laboratory
- 2013-2015: Postdoctoral Researcher, Chemical Science Division, Lawrence Berkeley National Laboratory
- 2012: PhD in Chemistry, University of California Berkeley
- 2007: MS and BA in Chemistry, Brandeis University

Activities

- Conference organization related to time-resolved x-ray methods:
  - Ultrafast X-ray Summer Seminar (chair 2018 and co-chair 2017)
  - Research Opportunities in Photochemistry, Solar Energy & Advanced X-ray Methods (2016, co chair Molecular materials breakout session)
  - Scientific Opportunities for Ultrafast Hard X-rays at High Repetition Rate: An Energy Upgrade of LCLS-II (2016, co-chair Coupled dynamics of energy flow breakout session).
- Frequent user of the APS and of other synchrotron (ALS and SSRL) and FEL (LCLS) sources since 2013.
- Served on an APS beamline review committee, 2018.

Interests

My research interests are focused on understanding how photoexcitation of electronic excited states drives chemical reactions of functional transition metal complexes, such as molecular photocatalysts. I apply time-resolved x-ray methods to study these problems because they provide unique sensitivity to the local electronic state and chemical structure over the course of a reaction, allowing us to uncover the detailed reaction mechanism. I have worked as a user at both synchrotron (including APS) and FEL sources since 2013 to study the solution phase reactions of transition metal complexes in real-time, using time-resolved x-ray absorption and emission spectroscopies.

Goals

I would like to help facilitate communication between the APS management and the user community, especially those involved in time-resolved research and reliant on APS operation modes consisting of well-separated bunches (24 bunch mode). My goal is to advocate for the continuation and advancement of time-resolved x-ray methods at APS-U, so it continues to be a leading facility in x-ray studies of chemical and material dynamics.