

**Position Title:** Development of Small Molecule Serial Crystallography  
**Position Type:** Postdoctoral  
**Position Location:** Lemont, Illinois 60439, United States  
**Subject Areas:** [Chemical Engineering](#)  
[Physics / Accelerator and Beam Physics](#)  
[molecular engineering](#)

**Appl Deadline:** 2020/07/31 (posted 2020/03/27)

**Position Description:**

Post-Doctoral Position in Development of Small Molecule Serial Crystallography NSF's Chemistry and Materials Science Center for Advanced Radiation Sources (NSF's ChemMatCARS), University of Chicago

Applications are invited for a post-doctoral scholar position with NSF's ChemMatCARS in the area of development of small molecule serial crystallography. Synchrotron x-ray techniques have been used widely and successfully in Advanced Crystallography spanning Charge Density, Resonant Diffraction, and Diamond Anvil Cell High Pressure single crystal diffraction. The development of Small Molecule Serial Crystallography techniques with combined time-resolved experiments is being pursued to study irreversible processes, where precise understanding of radiation damage of the crystalline material is required. This experimental program will utilize NSF's ChemMatCARS advanced crystallography facility at Sector 15 of the Advanced Photon Source (APS), Argonne National Laboratory (ANL). The successful applicant will also participate in supporting the general user program in advanced crystallography at NSF's ChemMatCARS. Applicants should have obtained (or be about to obtain) a Ph.D. in experimental studies of chemical, physical, or materials science, or a closely related field. Prior experience with synchrotron x-ray scattering, strong programming skills in Python, Fortran, Linux OS, a background in crystallography, excellent communication skills, and the ability to work well with others are preferred. The ability to satisfy requirements to work at Argonne National Laboratory is required.

The anticipated duration of this position is two to three years, though extension beyond the first year will be by mutual consent. Review of applications will begin on May 1, 2020, and will continue until the position is filled. Interested individuals should send a resume and arrange to have three letters of reference sent to Dr. Yu-Sheng Chen ([yschen@cars.uchicago.edu](mailto:yschen@cars.uchicago.edu)) of the University of Chicago.

NSF's ChemMatCARS, funded by the NSF and operated by the University of Chicago, is a national synchrotron facility at APS (ANL) to investigate dynamic and structural properties of interest to chemical, materials, and physical scientists (see <https://chemmatcars.uchicago.edu>). The University of Chicago is an affirmative action/equal opportunity employer.

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