NSF’s ChemMatCARS - Advanced Crystallography Program A Dedicate Advanced Small Molecule Crystallography Beamline

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NSF's ChemMatCARS is a synchrotron user facility located at the Advanced Photon Source(APS), Argonne National Laboratory (ANL), and founded by the National Science Foundation(NSF) in 1994. In 2019, the APS announced the APS Upgrade Project (APS-U) that will start in June of 2022. In the meantime, NSF's ChemMatCARS was awarded to build a canted undulator beamline (2019-2024) by the NSF, along with the original straight line, which will also have a major upgrade after the APS Upgrade Project (APS-U). This results in the NSF's ChemMatCARS Advanced Crystallography Program (ACP) becoming 100% dedicated to a small molecule beamline after the APS-U is complete in 2024.

This presentation will show the expansion of the current techniques, new initiative cutting edge experimentation, as well as open the discussion to the community as to what the cutting edge crystallography experimentation is that can take advantage of the APS-U and also benefit the user community.