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NorthEastern Collaborative Access Team (NE-CAT) Beam Lines at the Advanced Photon Source. Craig M. Ogata, Steven E. Ealick, Malcolm Capel, Igor Kourinov, Ed Lynch, K. Rajashankar, Narayanasami Sukumar, John P. Unik, Jun Wang, James Withrow, X. Yang, NE-CAT, Argonne, IL, Dept. of Chem. & Chemical Biology, Cornell Univ., Ithaca, NY.

The Northeastern Collaborative Access Team (NE-CAT) facility at the Advanced Photon Source will consist of four beamlines. Three of the beamlines will come off of a novel canted undulator source. The novel source consists of two undulators in a single straight section. A bend magnet beamline completes the set of four beamlines. At the present time, there are two operational beamlines, one of the undulator beamlines (24ID Phase I) and the bend magnet beamline 8BM. A third beamline using the second undulator is scheduled for commissioning this summer. This beamline will have the ability to cover the selenium edge and a single high energy remote position. The bend magnet beamline (8BM) has been open for general users since Oct of 2004, it routinely covers the energy range from 7 – 13.5 keV. The operational undulator beamline (24ID Phase I) will open to general users later this year, it covers a range from 5 – 25 keV.

NE-CAT is a consortium of scientists organized to develop a structural biology sector at the Advanced Photon Source (APS). This facility will be used to focus on NE-CAT research on structural studies involving technically challenging crystallographic projects. In order to meet these needs, an ALS robot for screening a large number of sample crystals is now being commissioned and a microfocus diffractometer is scheduled for installation on the insertion device beamline in the near future.

Funding for NE-CAT is provided through grant P41 RR015301 from the National Center for Research Resources of the NIH and from the NE-CAT member institutions.