

## COMPRES Multi-Anvil Facility at Beamline 6-BM-B of the Advanced Photon Source

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Beamline 6-BM-B is a bending magnet beamline at Sector 6 of APS. Currently a 250-ton hydraulic press (SAM85) equipped with a D-DIA module is installed and a Rotational Drickamer Apparatus from Yale University is routinely hosted. 6-BM-B operates in white beam mode with an effective energy range of 20-100 keV. Energy dispersive X-ray diffraction data is collected using a 10-element solid state Ge array detector arranged in a circular geometry to allow for the real time assessment of stress. Direct radiographic imaging using Prosillica CCD camera and scintillating YAG crystals gives sample strain and strain rate. This setup makes this beamline a workhorse for mineral physics and rock mechanics. This beamline is also equipped with hardware and specialized software controls allows for both steady state and dynamic deformation experiments, thermal diffusivity measurements, and acoustic wave velocity measurements using ultrasonic interferometry. In each APS run, 6-BM-B has 55% of beamtime. You are welcome to discuss your research needs with a beamline staff and submit a proposal.