

Multi-anvil High Pressure Synchrotron Facilities: Plans for Future

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The COMPRES sponsored multi-anvil synchrotron facilities have been in a state of flux since the National Synchrotron Light Source (NSLS) at Brookhaven National Laboratories closed in 2014. Since that time, a portion of the high pressure equipment has operated at the APS on beamline 6BMB (a bending magnet) that operates 50% of the time devoted to high pressure research. A second portion has recently opened at the XPD damping wiggler beamline at the NSLS II, where it has been operating at 25-30% of the time. In other presentations at this meeting, are descriptions of the current operations of these beamlines coupled with the success reflecting stable operational beamtime. However, we find that we are still in an era of synchrotron platform transitions that will impact this program. Around the year 2022, we anticipate that APS will shutdown for an upgrade and a new beamline, HEX, will come on line at the NSLS II. These transitions will impact the multi-anvil program, and most certainly require moving of at least some of the facilities one more time. While moving is tedious and exhausting, it is exciting by offering new opportunities. We are now in the planning stage of the vision. We will present the current state of this planning at the COMPRES meeting.