

The MAXIMUM scanning x-ray microscope at ALS

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The MAXIMUM scanning x-ray microscope, developed at the Synchrotron Radiation Center (SRC) at the University of Wisconsin, was implemented on the Advanced Light Source in August of 1995. The microscope's initial operation at SRC successfully demonstrated the use of multilayer coated Schwarzschild objective for focusing 130 eV x-rays to a spot size of better than 0.1 micron with an electron energy resolution of 250 eV. The performance of the microscope was severely limited because of the relatively low brightness of SRC, which limits the available flux at the focus of the microscope. The high brightness of the ALS is expected to increase the usable flux at the sample by a factor of 1000. We will report on the installation of the microscope on BL 6.3.2 at the ALS, and the initial measurement of optical performance on the new source will be described.