X-Ray Fluorescence Detectors

The bio-spectroscopy beamlines at SSRL are equipped with several different detector systems. All beamlines have dedicated ion-chambers for transmission measurements. The SMB group supports and operates a number of Canberra multi-element germanium detector arrays, one 4-element and two single-element Vortex Si-drift detectors, and several Stern-Heald-Lytle detectors.

Beam line 9-3 is equipped with a 100-element Ge monolith detector system. One 30-element Ge detector is used on line 7-3 with a backup detector available during maintenance. The three 13 element Ge detectors are mobile and are available on all XAS compatible beam lines. In cases where the ambulatory 13-element detectors are oversubscribed, they are allocated to experiments according to experimental need and to proposal rating.

The single element Vortex detectors are used for imaging experiments on 10-2 and for imaging and advanced spectroscopy experiments on BL6-2. The 4-element Vortex is used for XAS in the 2-5 keV range on BL 4-3.

Here is a list of Lytle filters available for use. More information on the Stern-Heald-Lytle detectors can be found at the EXAFS Company website.