There exists a variety of X-ray optics which enables micro X-ray fluorescence. While these X-ray optics offer different approaches to spatially manipulating the X-ray beam, two X-ray optics are currently utilized in experimental and commercial instrumentation. Monolithic polycapillary optics are the most mature in technical development. The polycapillary optic offers high flux of 3 orders of magnitude over a simple aperture. In addition, spatial resolution down to 10 micrometers can be achieved. The doubly curved crystal (DCC) optics provide high flux, spectral resolution and point-to-point focusing. While the X-ray flux is better than the polycapillary, the minimum spot size is limited to the input spot size from the source. The polycapillary optics are the most mature commercially and can be found in a myriad of applications both in experimental research and commercial instrumentation. The doubly curved crystals are newer and are not as widely implemented. This is most likely due to the single element application of the doubly curved crystal which restricts its wide application in a high resolution X-ray (hiRX) context. However, each optic provides spatially resolved elemental spectra which can be utilized for single point data acquisition, line scans for elemental gradient characterization or elemental mapping using either region-of-interest or full spectrum mapping. Each optic offers unique aspects when used to spatially form the excitation beam or used in the collection of the emitted X-ray fluorescence. The latter application creates unique 3-dimensional information within a confocal arrangement between the excitation optic and the collection optic. The confocal X-ray optical arrangement is of particular interest since it provides non-destructive elemental information both at the surface of a specimen and below the surface. The extent of the subsurface elemental mapping is dependent upon both the analyte of interest, which determines the emission energy to be monitored, as well as the matrix, which will determine the maximum information depth of the analyte of interest. Examples of both polycapillary optic and doubly curved crystal elemental imaging will be presented. The advantages and disadvantages of each optic will be discussed as well as applications for materials characterization using elemental imaging along with confocal applications. This work was supported in part by the Next Generation Safeguards Initiative, Office of Nuclear Safeguards and Security, National Nuclear Security Administration.