

Optimised Systems for Silver Data Collection

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For charge density work it is essential to obtain the highest possible quality data during an experiment. Every component of the diffractometer contributes to data quality, from high intensity sources to extremely low noise detectors.

Silver source technology allows for single-theta charge density measurements to be carried out, which is advantageous as frame scaling across different detector theta ranges is not necessary. The shorter wavelength, higher energy X-rays however are more difficult to detect, particularly for weaker data at high angle. High sensitivity, low noise detector technologies with high detective quantum efficiency (DQE) for silver wavelengths are needed. Rigaku Oxford Diffraction S2 CCD detectors with Smart Sensitivity Control (SSC) are a perfect fit for this type of work.