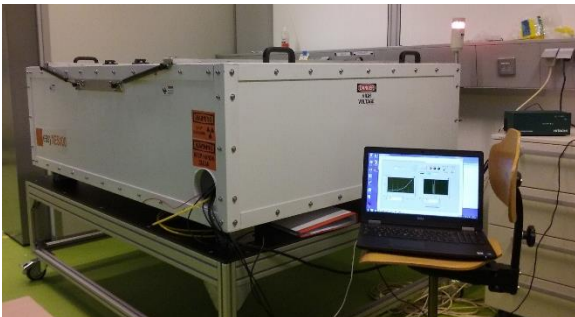
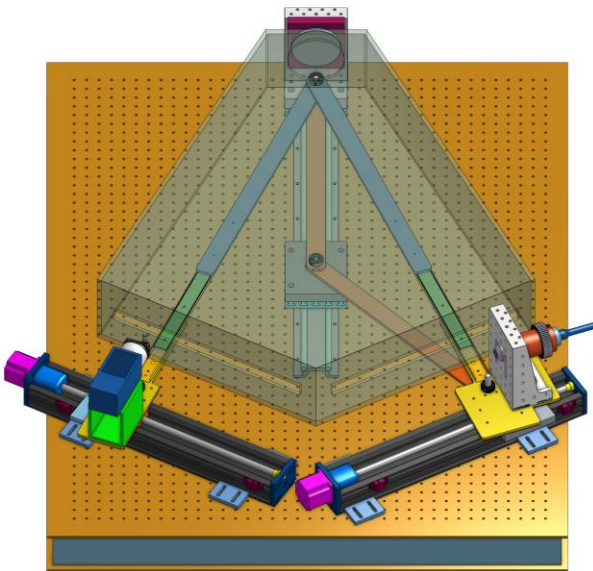




## THE easyXES100™

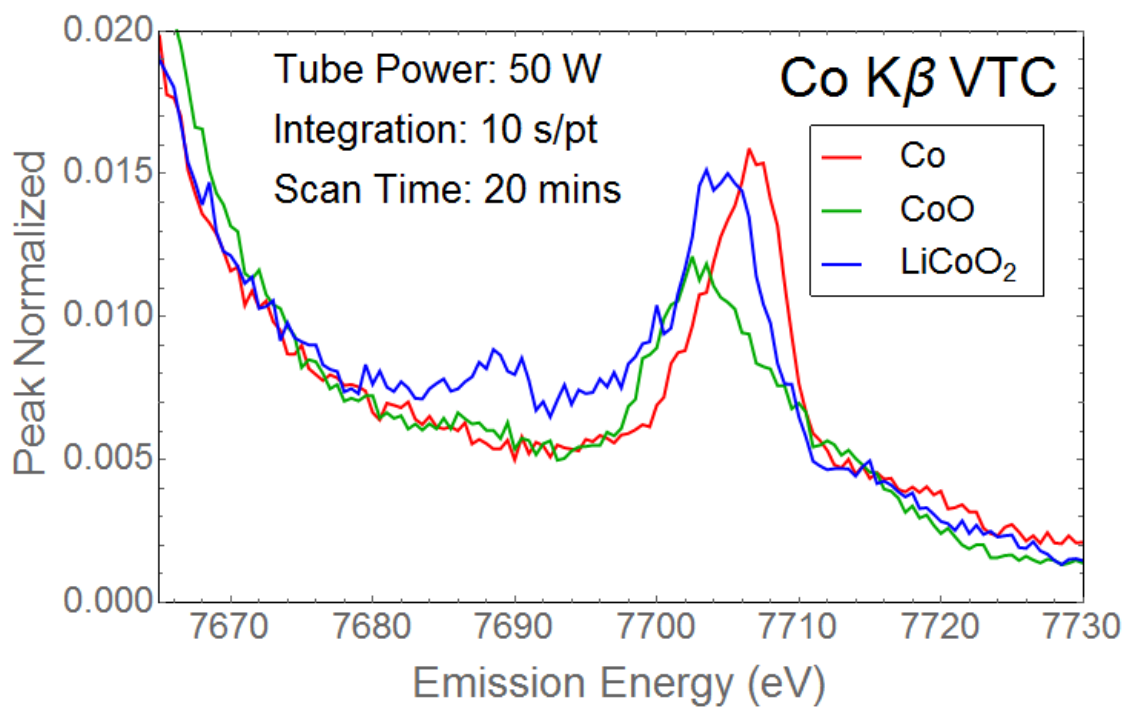
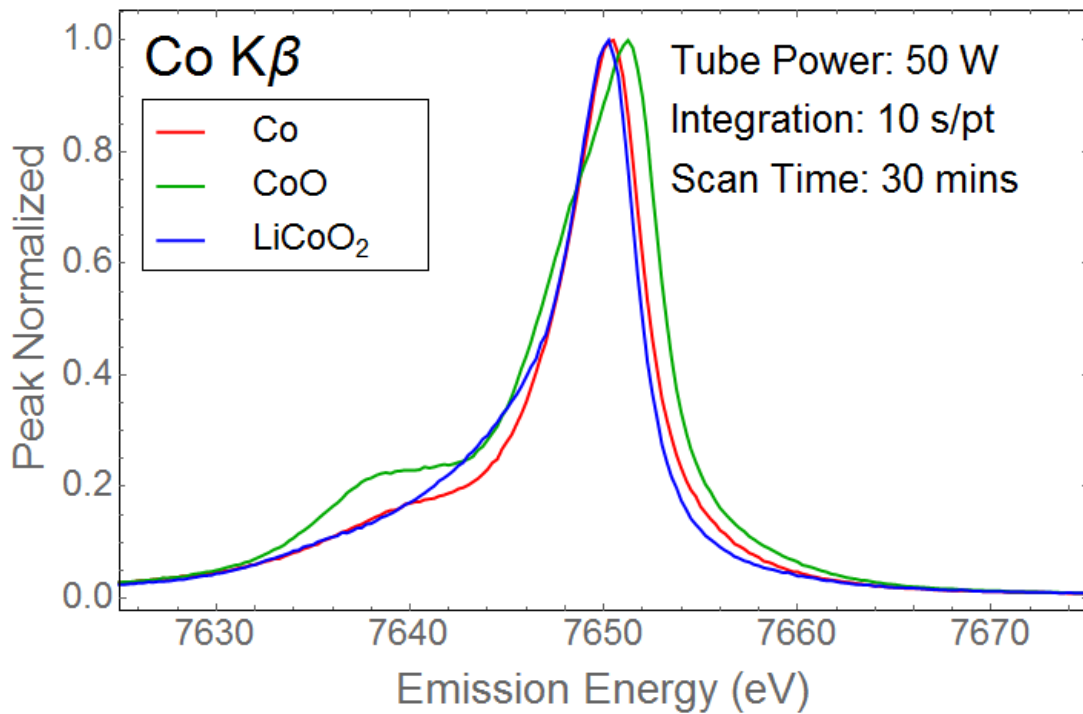
is a simply-operated, but exceptionally powerful x-ray spectrometer. Using a robust “scissors drive” monochromator and a conventional x-ray tube source, this system gives fully research-quality XES (high resolution XRF) performance in measurement times comparable to those at many synchrotron beamlines. The system can be also be quickly user-reconfigured for transmission-mode XAFS, suitable for many research purposes in addition to rapid, ‘analytical’ XANES for industrial product testing or for undergraduate instructional labs.

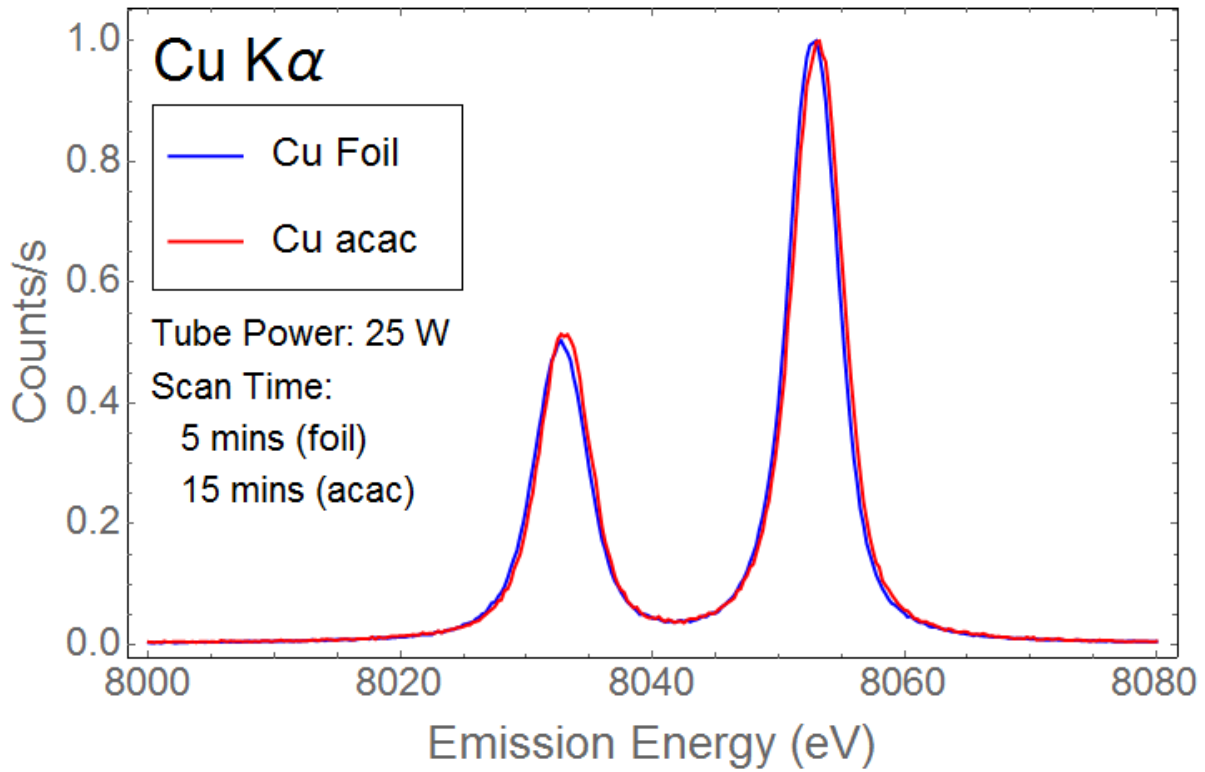
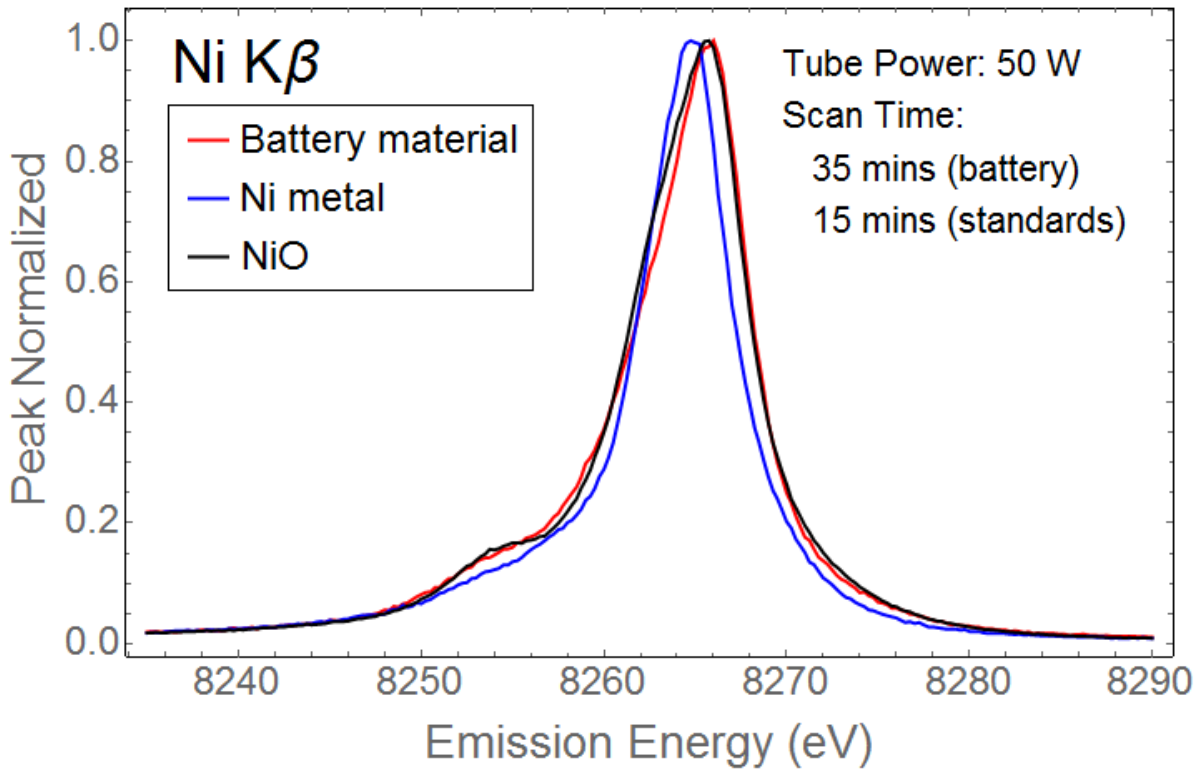


## PRODUCT SPECIFICATIONS

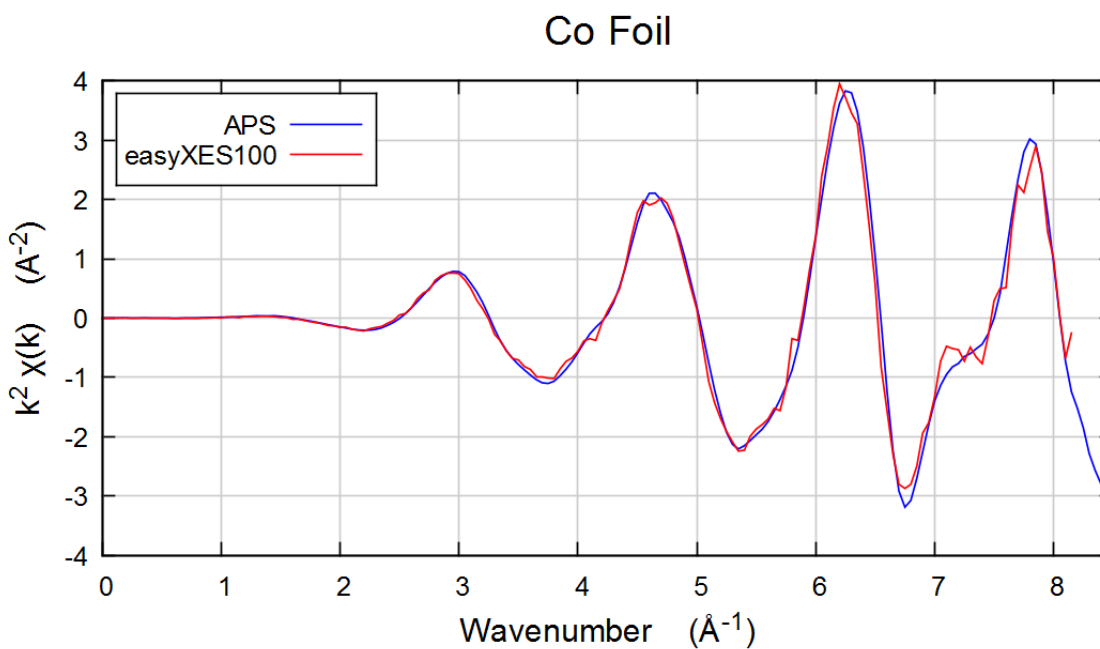
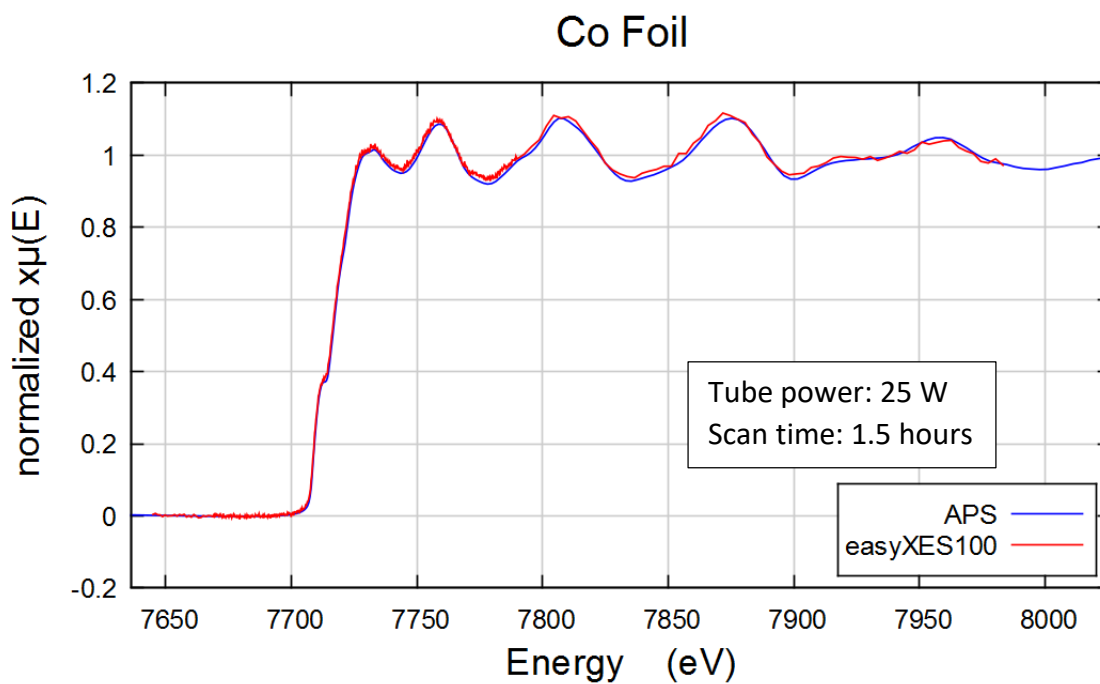
|                        |   |
|------------------------|---|
| Energy range           | Standard operations from 5-12 keV.  |
| Energy resolution      | Typically 0.5 – 1.5 eV.   |
| Energy scale stability | Measurement across a series of samples has <25 meV energy scale drift with no monochromator realignment. (Pat. Pend.) |
| XES mode, flux         | Core-hole generation rate of ~10 <sup>12</sup> /s for concentrated samples.   |
| XAFS mode, flux        | 50,000-100,000/s (100,000-200,000/s) at sample location with 50-W (100-W) tube.                                       |
| Bragg angle range      | Standard operations 65 – 85 deg. Upgradeable to 55 – 85 deg.  |
| X-ray tube             | 50- or 100-W XRF-style, air-cooled tube with choice of anode materials. 25 kV maximum accelerating potential.         |
| X-ray optics           | Spherically-bent crystal analyzers (SBCAs) with 10-cm wafer diameter and 100-cm radius of curvature.                  |
| Optic alignment        | “Clock Angle Protocol” (Pat. Pend.) for pre-alignment and rapid, reproducible installation.                           |
| Detector               | Several commercial detectors available for integration.   |
| Sample turret          | 7-position sample wheel available for programmable XAFS studies.  |
| Software               | LabVIEW, includes calibration and regular operations.   |
| Timeline               | Delivery 15 weeks ARO, rush orders possible on a case-by-case basis.  |

# XES RESULTS

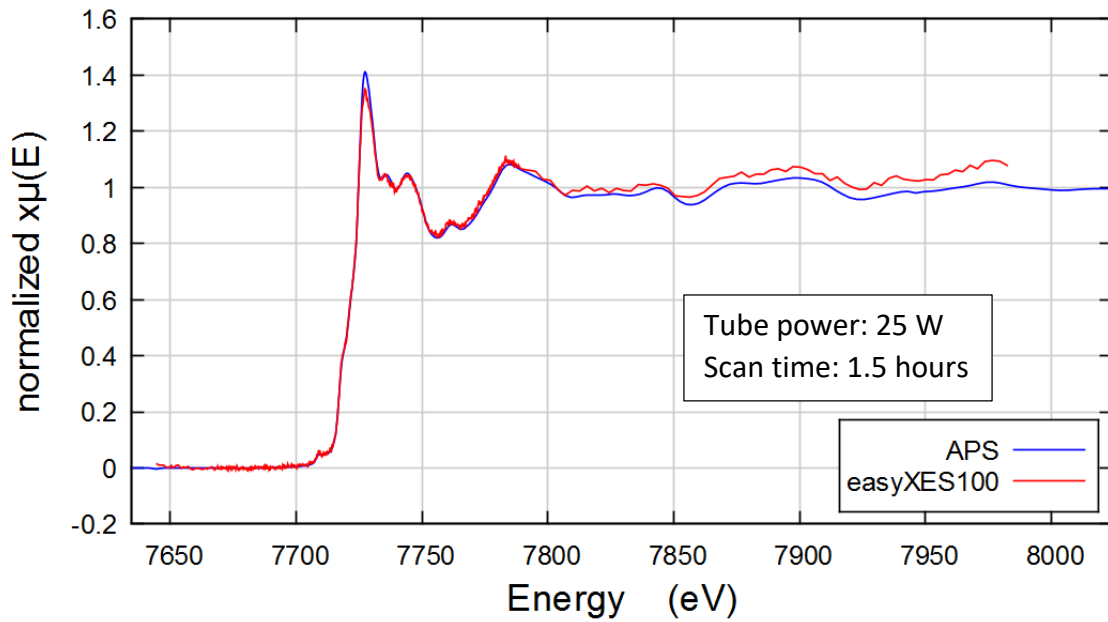




# XAFS RESULTS



# LiCoO2 Battery Material



# LiCoO2 Battery Material

