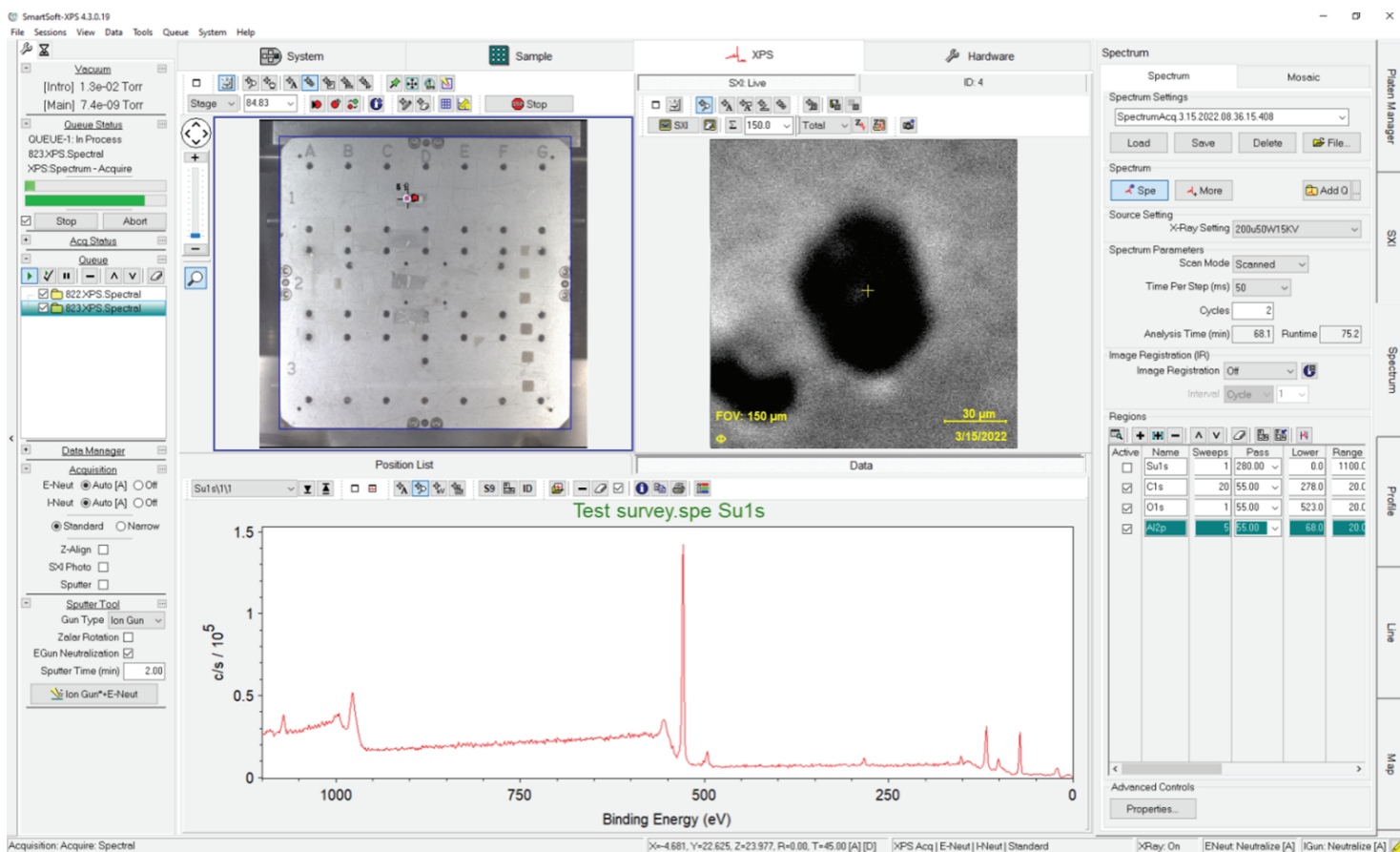


SmartSoft-XPS 4.3.1

Improved Queue and Sidebar Dashboard

SmartSoft-XPS 4.3.1 is the latest Windows 10 release of PHI's software for *Quanterra II*, *Quanterra Hybrid*, and *Quantes*. It includes an improved queue editor for enhanced control and flexibility of automated data acquisition and a new sidebar dashboard. New software features include large-area mosaic of SXI and photoelectron maps, a faster Z-align and an improved algorithm for detector channel signature removal in the snapshot mode. It also includes the ability to enable SEE (System Evaluation Environment), a new service utility built into *SmartSoft* which periodically records all system parameters while *SmartSoft* is running. SEE can be extremely helpful in diagnosing system hardware issues and minimizing instrument downtime.



Advanced Queue

- Create automated analysis queues combining surveys, high-res scans, depth profiles, maps, and more!
- View and modify existing queue items while the queue is running.
- Easily enable features like Z-align, pre-sputter, and use of neutralization in the queue.
- Setup advanced experiments with queue tools such as loops, pauses, system pressure setpoints, and more!
- Use MORE function to continue acquisition of spectra maps for improved signal-to-noise and depth profiles for reaching deeper layers.
- Use and schedule service tasks for outgassing, startup and shutdown sequences.
- Tasks can be copied and pasted, or entire queues can be saved, loaded, and modified for routine repeated analysis.
- Queue validation feature allows users to identify and correct possible errors before starting the queue.

New Sidebar Dashboard

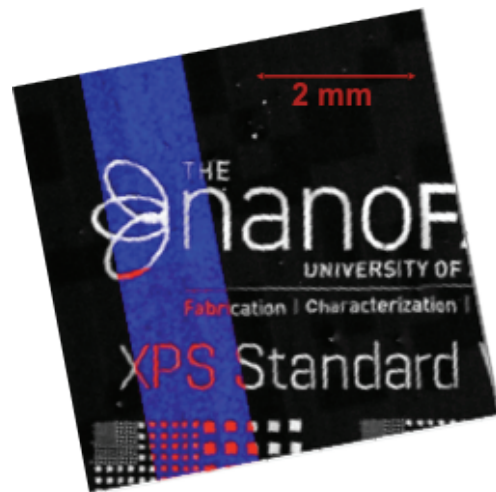
- Easy access to common acquisition control functions and settings.
- Acquisition status can now be viewed in the dashboard to reduce the number of open windows.
- Sputter Tool allows quick access to all ion gun settings.
- Display of chamber pressure.
- Sidebar view can be customized to minimize screen clutter.

Smart Mosaic Imaging

- Fast, easy to use method to extend the capabilities of SXI and photoelectron maps over large areas.
- Easy method to locate features of interest or investigate the homogeneity of the sample across much larger areas than available in a single SXI image.
- Multispectral chemical maps can be acquired from areas of any size and stitched into a single large area chemical map.
- Overlays with a variety of color maps and transparency display options can be used to highlight areas that are spatially and chemically distinct.



144 individual images stitched to produce
5x5 mm secondary electron image



~ 2.7 x 1.4 mm Ti 2p (red) and 5.5 x 1.4
mm Si 2p (blue) chemical map
overlayed with SXI image