Abstract:
X-Ray Fluorescence Microscopy (XFM) experiments require attention and time to properly set up and analyze the results. The accurate analysis of XRF data involves multiple parameters and deep knowledge of the scanning equipment. While simple fast approaches exist (e.g., ‘spectral ROIs’), these tend not to work well with more complex data (e.g., overlapping peaks). We have implemented several different fast and more accurate analysis methods with the XRF-Maps software.

To streamline the analysis, and make optimum use of dedicated analysis computers, we created a web interface to submit XRF analysis jobs that provides feedback on processing status and the results of specific jobs. The interface significantly simplifies the analysis process and can be expanded to pass jobs from one technique to another. We will also show the latest collaboration with the MONA Project where we are streaming the analyzed results as the scan is running to give a live view to users.