T8: X-ray nano-tomography

X-ray nano-tomography is a phase contrast imaging technique that provides 3D high spatial resolution structural information within a sample. Using the same principles as medical scanners coupled with the high flux and high energy of synchrotron X-ray source, it allows advanced materials and complex devices to be characterized in a very short time at the nano-scale.

It is possible to image post-mortem battery materials with voxel size from 25^3 nm to 150 nm^3, on small samples: typically few hundreds micrometer diameter. Complex devices can also be discussed to perform operando measurements to follow, as example, cracks formation into electrodes.