

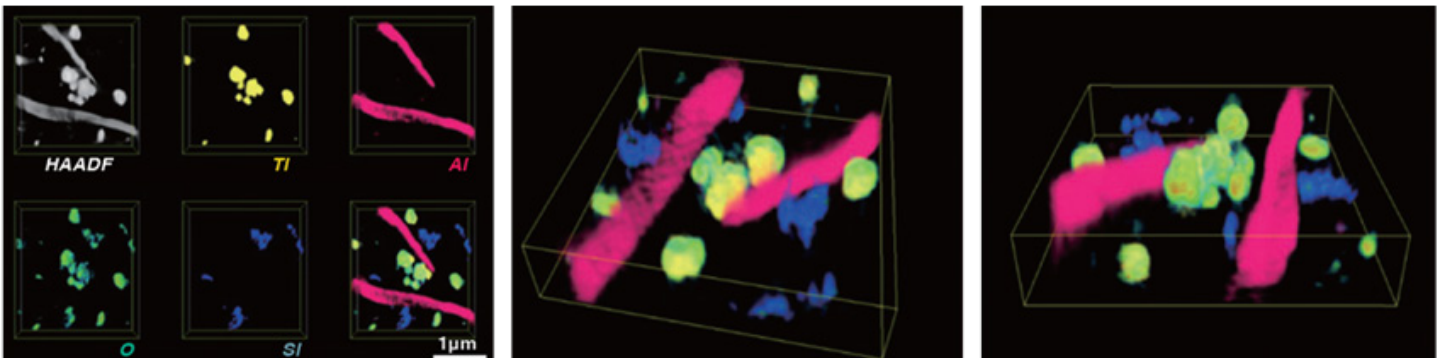
# F2: 3D Tomography



The F2 is a new concept of 20-200kV TEM equipped with a Cold FEG. This new generation of multi-purpose electron microscope is designed specifically to meet today's diversified needs.

Transmission electron microscopy gives access to two-dimensional information coming from the sample. The third dimension is available thanks to the tomography technique. The sample is tilted and for each step, an image (TEM, STEM, EDS) is acquired. Then the 3D volume of the sample can be reconstructed.

The F2 has a "Dual SDD system", which is composed of two silicon drift detectors (SDD) with large sensor areas, resulting in a total solid angle of 1.7 sr. The combination of two detectors and their placement around the sample, allows the ability to record EDS information throughout the full tilt series (from  $-80^\circ$  to  $+80^\circ$ ).



3D tomography on paint thin section