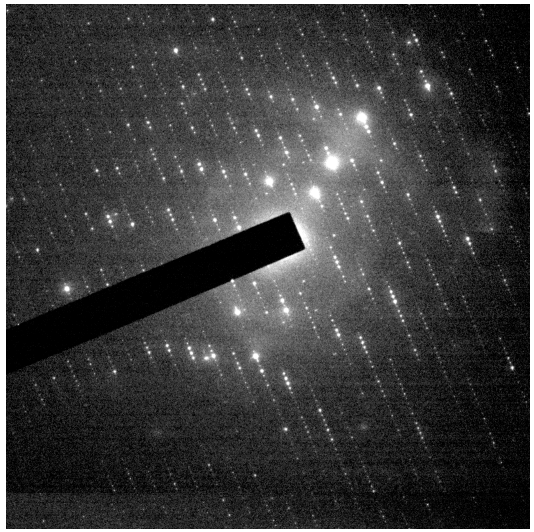
EDT

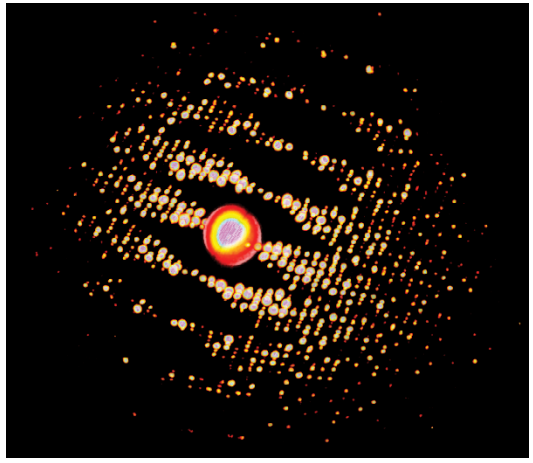
DigitalMicrograph Plug-in

Electron Diffraction Tomography/Collect

Data Collection Module for Electron Diffraction Tomography



Single Frame



Reconstructed 3D reciprocal space volume using EDT/Process

EDT/Collect scans reciprocal space for 3D Electron Diffraction Tomography (EDT) by controlling the electron beam and the goniometer of your TEM.

The acquired data can be analysed by using EDT/Process designed and developed by AnaliteX (http://www.edt3d.com).

Key Features

- Comprehensive calibration.
- Full software control of TEM for 3D data acquisition.
- Manual and automatic modes for data collection.
- Advanced reporting: automatically generates a report for the collected data.

References:

[1] P. Oleynikov. Automated Quantitative 3D Electron Diffraction Rotation Tomography. In: Uniting Electron Crystallography and Powder Diffraction, NATO Series B: Physics and Biophysics. 2012, XIII, 434 p.

[2] A. Mayence. Phase Identification and Structure Solution by Three-Dimensional Electron Diffraction Tomography: Gd-Phosphate Nanorods. Inorg Chem. 2014, 53, 5067-72

[3] A. Mayence et al. Probing planar defects in nanoparticle superlattices by 3D small-angle electron diffraction tomography and real space imaging. Nanoscale, 2014, 6, 13803-13808

[4] Q.M. Sun et al. High performance nano sheet-like silicoaluminophosphate molecular sieves: synthesis, 3D EDT structural analysis and MTO catalytic studies. J. Mater. Chem. A, 2014, 2, 17828-17839