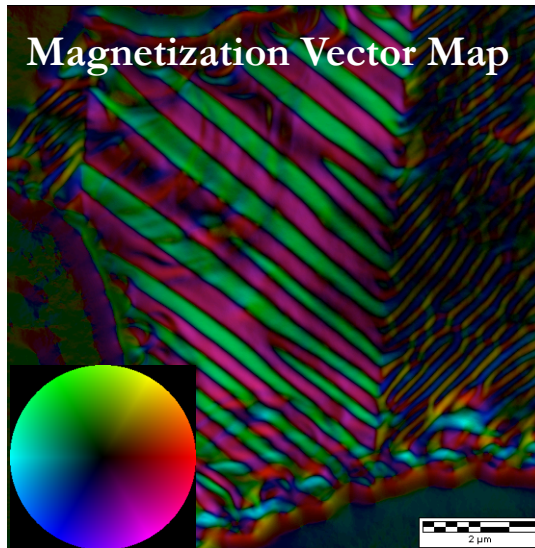


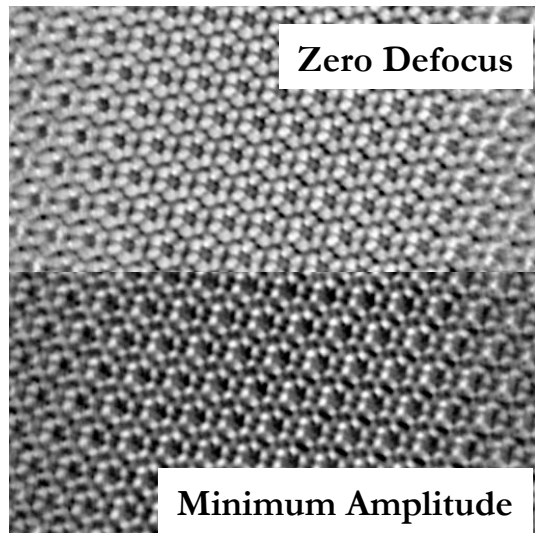
QPt

DigitalMicrograph Plug-in

Quantitative Phase Technology



Magnetic Field of (PrCaSr)Mn₃O



Atomic Resolution Phase Image of Si₃N₄

QPt Derives a phase image at the middle plane (in-focus) only from *three* ordinary bright-field images, and thus eliminates artifacts generally apparent in a defocused image.

QPt is based on IATIA's Quantitative Phase Imaging (QPI) technology, and provides a digital solution to phase contrast electron microscopy.



IATIA: www.iatia.com.au

Key Features

- ◆ (*QPt Basic*) Derives a phase image at the middle plane (*in-focus*).
- ◆ (*QPt Lite*) Generates a microscopic magnetic/electric field from the phase image (the top example)
- ◆ (*QPt Full*) Emulates optical phase modalities such as Differential Interference Contrast, Zernike Phase Contrast, Hoffman Modulation Contrast and Dark-field images
- ◆ (*HREM module*) Reconstructs a *spherical-aberration-corrected* atomic-resolution exit-wave (the bottom example)

Reference: [1] K. Ishizuka and B. Allman, J. of Electron Microsc. 54 (2005) 191-197.
[2] K. Ishizuka and B. Allman, Microscopy Today 13 (2005) 22-24.

Credits: (PrCaSr)Mn₃O: courtesy Masaya Uchida. MINS, Tsukuba;
Silicon Nitride: courtesy of Christian Kisielowski, NCEM, Berkeley.