Advanced thin film x-ray diffraction techniques

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TOPICS COVERED:

Part 1:

Refresher on basics of x-ray diffraction (XRD). XRD for thin films: θ -2 θ scans, rocking curves, Φ -scans.

Part 2:

Advanced techniques: pole figures, reciprocal space mapping (RSM).

OUTCOMES

- Determine phase purity and lattice parameters of a thin film.
- Evaluate crystalline quality of an epitaxial thin film.
- Determine texturing and/or epitaxial relationship of a thin film.
- Identify film/substrate heterostructures from a set of data.

DATE: Thursday 12 September

TIME: 10:00-15:00 (includes breaks)

VENUE: M10, Chemical Sciences

Building, F10 UNSW

RSVP: UNSWnode@fleet.org.au

