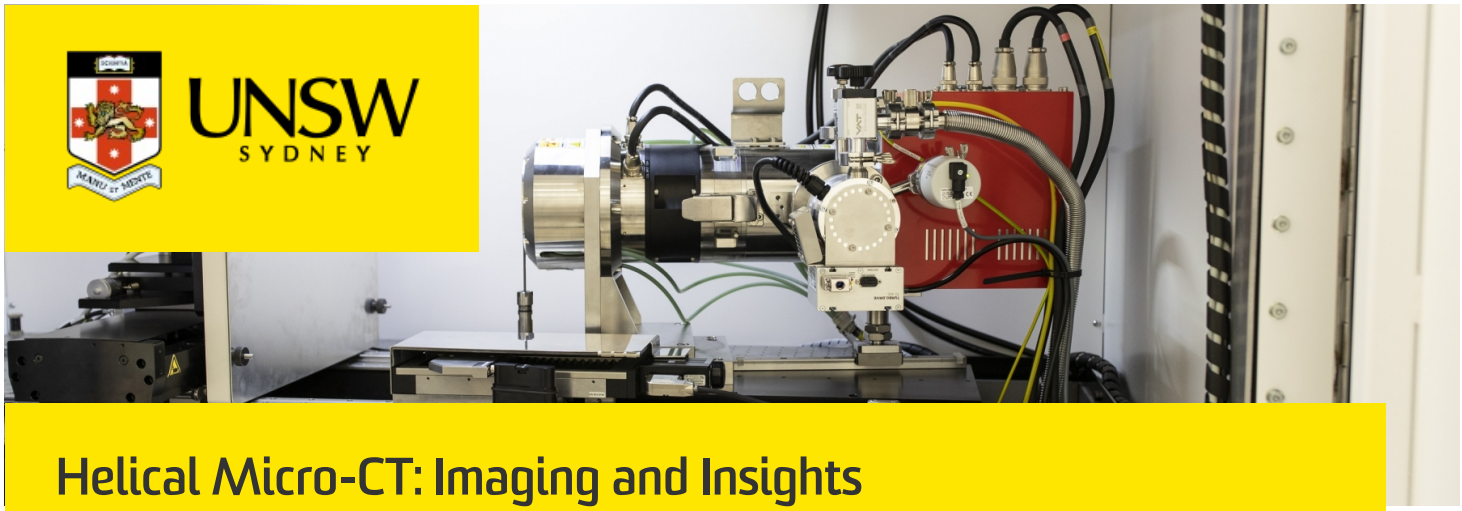

Helical Micro-CT: Imaging and Insights

High-resolution imaging combined with image analysis, physical property calculations and measurements. A rare combination of instrument capacity and people skills provide unparalleled insights into microstructural behaviour.

Competitive advantage

- Award-winning analysis outperforms conventional X-ray computed tomography
- Very high resolution allows imaging at submicron scale
- High speed method allows dynamic imaging; e.g. tracking of multicomponent fluid flows

Impact

- Imaging of battery materials for degradation studies
- Imaging of flow in 3-dimensional electrode materials
- More efficient oil and gas recovery
- High resolution biomedical imaging

More Information

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Successful applications

- Technology commercialised through spin-off company Digital Core, which merged with Numerical Rocks AS to form Lithicon. In 2014, Lithicon was acquired by FEI for A$76 million.

Capabilities and facilities

- Facility housed in a dedicated, temperature-stabilised, lead-lined room
- X-ray source (180 kV/20 W) with diamond windows
- High quality flatbed detector (3072 × 3072 pixels, 3.75 fps readout rate)
- Helical and circular scanning mode
- Pressure and flow cells for various sample sizes