

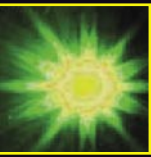
**THE ELECTRON MICROSCOPE UNIT (EMU) at UNSW is a state-of-the-art ELECTRON and ION BEAM research facility with more than \$7 MILLION of analytical equipment, EXPERIENCED STAFF and a wide range of ancillary processing and preparation EQUIPMENT.**

# THE ELECTRON MICROSCOPE UNIT

*state-of-the-art microscopy*



**AS A CORE MEMBER** of the Nanostructural Analysis Network Organisation, this Major National Research Facility offers access to this instrumentation across five leading Australian universities for performing structural and chemical analysis of a wide range of materials from metals and ceramics, to polymers and biological samples.



**REGULAR USERS OF THE EMU** include university research staff working in the fields of semiconductors, biomedical, membranes and water purification and photonics; staff from CSIRO,

ANSTO and Defence; research-based companies like Sirtex Medical and Cochlear; industry including Tristar Steering and Suspension, Pasminco, Boral and BRI-bread; and legal firms for legal forensic work.

**EMU CAN PROVIDE IMAGES** at magnifications of up to 1,000,000 times and at the atomic level. Our instruments also offer rapid, sensitive and accurate chemical analysis from areas as small as one nanometre.

**EMU FACILITIES INCLUDE**

- A range of Scanning and Transmission Electron

Microscopes, including those with field emission guns and chemical analysis facilities

- Electron Microprobe
  - Cameca SX50 Microprobe
- Atomic Force Microscopes
  - Digital Instruments Dimension 3000 SPM and Digital Instruments MultiMode SPM
- Focused Ion Beam Mill
  - FEI 200xP FIB

**New**

- Analytical Field Emission Dual Beam Focused Ion Beam Mill.
- Skyscan MicroCT for 3D imaging of specimens (X-ray microscopy).