Diamond Jubilee of Australia's first Microscopy Core Facility - the EMU/ACMM/SMM at 60

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The Electron Microscopy Service at Sydney University was set up in 1958, reporting directly to the Vice-Chancellor. It was a bio-medical facility, running a single Siemens Elmiskop 1 TEM. The inaugural Director, with the rank of Reader, was D. Gordon Drummond. The Service was immediately popular and soon became the Electron Microscope Unit, a name that endured for 50 years. More TEMs, an SEM, and more staff were soon taken on. By 1973 there were 14 staff, 4 of them academics.

Drummond retired in 1973, and in 1974 David Cockayne became Director. He came from the Metallurgy Department at Oxford, and added materials science to our repertoire. A dedicated Electron Probe Microanalyser was acquired, bringing geologists into our user base - we now covered all disciplines.

By 1979 the Unit was bursting at the seams. Fortunately in 1980 the National Standards Lab vacated their building on campus and we were given space there. The move took place over the summer break 1981 - 1982. The building had been designed for maximum stability so was ideal for our instruments. Our capabilities grew rapidly. We expanded into into advanced optical microscopy and image analysis, and scanning probe microscopy. In 1994, in conjunction with the School of Physics, the Unit was awarded an ARC Key Centre. This enabled many new initiatives, including teaching courses and outreach into schools.

David Cockayne departed in 2000 to take up a chair at his old department in Oxford. Simon Ringer became the new Director in 2001. He brought in the new technique of Atom Probe Tomography which (destructively) maps the composition of a sample atom by atom. He also set up NANO to combines the expertise of microscopy facilities around Australia. NANO became the Australian Microscopy and Microanalysis Research Facility (AMMRF) in 2006, supported by the National Collaborative Research Infrastructure Strategy. The ACMM remains the headquarters of this national microscopy facility.

In 2012 the University ordered a review of the Centre. Under its recommendations the Director and 2 Deputy Directors were 50% employed within the Centre and thus reported directly to the Deputy Vice-Chancellor, Research. All other academics, while they retained their connection to the Centre, were wholly employed by academic departments. Post-review a new structure was set up: Sydney Microscopy and Microanalysis became the service provider, and the Australian Centre for Microscopy and Microanalysis became the umbrella body. Simon Ringer was promoted to a post overseeing all the University's Core Facilities in 2015 and in 2016 Julie Cairney (who had joined the Centre in 2005) became the 4th Director, now full-time.

The Charles Perkins Centre researches "lifestyle" diseases. The microscopy facility, opened in 2015, is part of SMM and includes the Centre's optical super-resolution instruments. The Brain and Mind Research Centre handed over its microscopy facilities to SMM in 2016. The new Nanoscience Hub (behind the Physics building) houses a THEMIS aberration-corrected TEM, operated by SMM. So from having one location for its first 50 years, the Centre is now running facilities in four different buildings.

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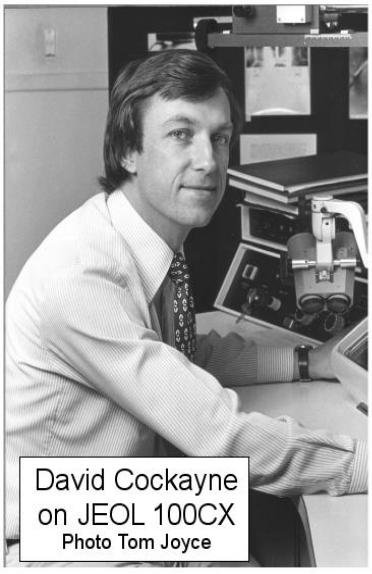
Elmiskop 1
Science Museum,
London

THEMIS
being installed
Photo Takanori Sato



David Cockayne
on JEOL 100CX
Photo Tom Joyce

Simon Ringer
(right) with IMAGO
Atom Probe
Photo ACMM