



# Australian National Fabrication Facility

**APMC 10 / ICONN 2012 / ACMM 22 short course:**

## **Nanofabrication Technologies**

Sunday 5 February 2012, 1.30pm – 5.00pm

University of Western Australia

Weatherburn Lecture theatre (G.40),

Mathematics Building (#223) @ UWA, Fairway Entrance #2

Crawley

Cost: Free – subsidised by the Australian Nanotechnology Network

Registration: Please email [info@eecw.com.au](mailto:info@eecw.com.au)

Afternoon tea provided

This short-course is aimed at graduate students, post-docs or industry users who require nanofabrication for their research or who are interested to learn how nanostructures are fabricated in practice.

The course will be presented by a group of experts in their respective fields of nanofabrication with case studies given by users of the ANFF network. It will assist post-graduate, post-doctoral and early career researchers in academia or industry understand the basic principles of nano-fabrication and the range of facilities and expertise they have at their disposal through the Australian National Fabrication Facility (ANFF).

## Program: Nanofabrication Technologies

<b>Introduction</b>	<ul style="list-style-type: none"> <li>• Introduction (ANFF Ltd)</li> <li>• What is the Australian National Fabrication Facility?</li> </ul>
<b>Module 1:</b> <b>Lithography:</b> <b>Micro and nano-patterning; lithography, deposition and etching</b>	<ul style="list-style-type: none"> <li>• Photolithography (Lien Chau, Qld Node)</li> <li>• Direct Write Optical, and Electron Beam Lithography (NSW Node)</li> <li>• Deposition Techniques (Elfi Van Zeijl, NSW Node)</li> <li>• Etching Techniques (Elfi Van Zeijl, NSW Node)</li> </ul>
<i>Break</i>	
<b>Module 3:</b> Nano and nano-bio materials and device fabrication	<ul style="list-style-type: none"> <li>• Organic Nanomaterials Processing Techniques (Glenn Byrant, Materials Node)</li> <li>• Device fabrication by soft-lithography and hot embossing (Lien Chau, Qld Node)</li> <li>• Micro-bio devices (Lien Chau, Qld Node)</li> </ul>
<b>Module 4:</b> <b>Case studies</b>	<ul style="list-style-type: none"> <li>• Lithography-based fabrication of Atom Probe posts (Andrew Breen, University of Sydney)</li> <li>• Nanofabrication of plasmonic structures for control of light at the nanoscale (Tim Davis, CSIRO/MCN)</li> <li>• Open discussion</li> </ul>