



# FLEET

ARC CENTRE OF EXCELLENCE IN  
FUTURE LOW-ENERGY  
ELECTRONICS TECHNOLOGIES

Friday 17th January

12:00-13:00

## FLEET SEMINAR

### The Integrated Photonics and Applications Centre (InPAC) at RMIT

Distinguished Professor Arnan Mitchell,  
RMIT

#### Abstract

This presentation will give an overview of the research of Dist. Prof. Arnan Mitchell's team on integrated photonics platforms and applications across a range of disciplines. Prof. Mitchell will introduce the comprehensive fabrication capabilities at RMIT's Micro Nano Research Facility (MNRF), a member of the Australian National Fabrication Facility (ANFF), with particular emphasis on the capabilities for fabricating, packaging and interfacing photonic chips.

Prof. Mitchell will then outline the integrated photonic chip capabilities of his team – including rapid prototyping of foundry compatible silicon photonics, their capability in high speed photonics using lithium niobate and their recent capabilities in silicon nitride with ultra-low loss and operation spanning visible to mid-infrared.

He will also outline the applications that drive their research into photonic chip platforms including the most recent results in data communications, analogue photonics for sensing and metrology and integrated optofluidic platforms for biomedical sensing applications.

For this particular presentation, a specific emphasis is placed on Prof. Mitchell's work with integrating novel nano-materials with their photonic platforms and explore the current status, prospects and opportunities for collaboration with FLEET.

#### BIO

Arnan Mitchell is a Distinguished Professor in the School of Engineering at RMIT University and is Director of the RMIT Micro Nano Research Facility. He is a highly multidisciplinary researcher working in micro-chip technologies combining light, sound, fluids and electronics with applications spanning radar systems for defence, high speed fibre optic communications and point of care diagnostic systems for biomedicine. He is enthusiastic about translating technology into the hands of end users and has dedicated much of his career to building diverse teams and comprehensive micro and nanotechnology infrastructure to enable breakthrough discoveries to achieve real world impact.



**DATE:** Friday 17th January  
**TIME:** 12:00-13:00  
**VENUE:** G59 School of Physics  
OLD MAIN BUILDING K15  
UNSW  
**EMAIL** [unswnode@fleet.org.au](mailto:unswnode@fleet.org.au)



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