

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING

Website: <https://cde.nus.edu.sg/ece>

Area: *Microelectronics Technology and Devices (MTD)*

Host: *Assoc Prof Aaron James Danner*

TOPIC	:	Centre of Excellence in Optical Microcombs for Breakthrough Science: microcomb technology to unlock a new wave of photonic solutions
SPEAKER	:	Prof Arnan Mitchell Professor, ARC Centre of Excellence in Optical Microcombs for Breakthrough Science (COMBS), School of Engineering, RMIT University, Melbourne, Australia
DATE	:	Friday, 5 September 2025
TIME	:	4:00 pm – 5:00 pm
VENUE	:	E5-03-20

ABSTRACT

This talk will present an overview of the ARC Centre of Excellence in Optical Microcombs for Breakthrough Science (COMBS). The Centre sees a future where optical frequency combs can be as compact, low-cost and accessible as today's consumer electronics. We are exploring the applications of integrated microcombs and where they might have impact on society in fields spanning high-speed communications, machine learning, seismology, biomedical imaging, environmental monitoring, and even searching for life on other planets. Along with these applications, we are exploring the global microchip manufacturing ecosystem that will help bring the optical frequency comb out of the lab and into the real world.

BIOGRAPHY

Professor Arnan Mitchell is a Distinguished Professor in the School of Engineering at RMIT University, Director of the RMIT Micro Nano Research Facility (MNRF) and is Director of the recently Announced ARC Centre of Excellence for Optical Microcombs for Breakthrough Science (COMBS). He is a highly multidisciplinary researcher working in micro-chip technologies combining light, sound, fluids and electronics with applications spanning radar systems for defense, high speed fiber optic communications and point of care diagnostic systems for biomedicine.



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