

Multidisciplinary (mission directed) research in nanotechnology at the University of Sydney

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11:00am, 27/09/2022 At the Melbourne Centre for Nanofabrication boardroom 151 Wellington Road, Clayton, 3168 Zoom link: <u>here</u> Meeting ID: 827 9337 9565 and passcode: 557617



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Abstract:

Sydney Nano is a multidisciplinary initiative at the University of Sydney headquartered in the state-of-the-art Sydney Nanoscience Hub. Professor Eggleton will introduce the Sydney Nano research framework, which emphasise collaborative mission directed projects that address major societal grand challenges with examples from the life sciences, and sustainability. In the second part of the presentation Professor Eggleton will review research from his research group on the topic of photonic sensor fusion, with emphasis on recent development of novel photonic radar sensors for vital sign detection.



Eggleton is a Professor of Physics at the University of Sydney. He is the Director of the University of Sydney Nano Institute and co-Director of the NSW Smart Sensing Network (NSSN). Eggleton was founding Director of CUDOS, the ARC Centre of Excellence for Ultrahigh bandwidth Devices for Optical Systems and served as Director from 2003-2017 and of Sydney's Institute of Photonics and Optical Science (IPOS), serving as Director from 2009-2018. He is a Fellow of the Australian Academy of Science, the Australian Academy of Engineering and Technology, the Optical Society of America (OSA), IEEE and SPIE. Eggleton received the 2020 W.H. (Beattie) Steel Medal which is the most prestigious award of the Australian and New Zealand Optical Society, for outstanding career contribution to the field of optics in Australia or New Zealand. His team won the 2020 Defence Science and Technology Eureka Prize for Outstanding Science in Safeguarding Australia. Eggleton was President of the Australian Optical Society (2008-2010), Editor-in-Chief for Optics Communications (2007-2015), served on the Board for IEEE Photonics Society (2015-2017) and is Editor-in-Chief for APL Photonics. Eggleton secured more than \$65M in competitive research funding. Eggleton published 500 journal publications (24,000 citations, h-index of 81- Webofscience and 44,000 citations, h-number of 112 - google scholar).