

Engineering and Entrepreneurship

Friday 4th January 2019 3:00 pm – 5:30 pm

**The Singapore Theatre, Architecture Building
The University of Melbourne, Parkville.**

Technology entrepreneurs drive tomorrow's innovations that are integral to advancing technology for humanity. Entrepreneurial engineers play a critical role in this process by combining a vision for a better future with the technical expertise needed to achieve the outcomes.

The Industrial Initiatives Committee (IIC) of the IEEE Antennas and Propagation Society (AP-S) is organizing a series of Industry Presentation events around the world to promote the antenna, electromagnetics, and microwave industrial community and encourage entrepreneurship. This event will feature several talks by engineers who will reflect on their unique entrepreneurial journeys including pivotal experiences and lessons learned. They will highlight personal experiences related to founding a company, working in VC funded start-ups, the challenges of growing and nurturing a business as an owner, as well as strategies for success in the global entrepreneurship space. The important role of the University sector in enabling and supporting the successful transition of engineers to entrepreneurs, will also be featured.

Featured Speakers:



Dr John Ness
EM Solutions
Brisbane, Australia



Dr Rod Waterhouse
Pharad, LLC
Maryland, USA



Professor Thas Nirmalathas
The University of Melbourne
Melbourne, Australia

Agenda:

- 3:00 pm Introduction (Moderator: Dr Dalma Novak)
- 3:10 pm Dr John Ness, *EM Solutions*, 'Making Money from Antennas?'
- 3:30 pm Dr Rod Waterhouse, *Pharad*, 'Building an Antenna Small Business in the USA'
- 3:45 pm Prof. Thas Nirmalathas, *University of Melbourne*, 'Transitioning Engineers to Entrepreneurs'
- 4:00 pm Speaker Q&A
- 4:30 pm Reception and Networking

Registration:

This is free event and visitors are welcome. Please register for catering purposes:

<https://www.eventbrite.com.au/e/engineering-and-entrepreneurship-tickets-53760416854>

For further details contact Enn Vinnal (e.vinnal@ieee.org) or Les Davey (les.j.davey@gmail.com)

Biographies of Speakers:

John Ness, *EM Solutions*

John Ness helped found EM Solutions in 1998 and is the Chair of both EM Solutions and EMClarity. John has a B.E. (Electrical), B.A. and PhD from the University of Queensland and has been involved in the telecommunications industry since the 1970s. John's specialist expertise is in electromagnetic analysis applied to products such as high power amplifiers, antennas, filters and feed networks. John helped set up Mitec as a public company in 1987, which became the basis for the RF/microwave industry in Queensland, Australia. John also worked on the Interscan microwave landing system for the Australian aviation industry, which brought together the expertise of CSIRO, the Australian government and industry to create new technology and eventually companies. From Interscan through to EM Solutions he has developed products for radar, telecommunications and radio astronomy satellites, ground station equipment for miniature to large-scale earth stations, remote sensing equipment and microwave links. John has taken out patents in antennas and microwave heating applications. In 2010 John was awarded the prestigious Clunies Ross Award by the Academy of Technological Scientists and Engineers for excellence in innovation.

Rod Waterhouse, *Pharad*

Rod Waterhouse received his BEng, MS, and PhD in Electrical Engineering from the University of Queensland, Australia, in 1987, 1989 and 1994, respectively. In 1994 he joined RMIT University as a lecturer, became a Senior Lecturer in 1997 and an Associate Professor in 2002. From 2001 – 2003 Dr Waterhouse was with the venture-backed Dorsal Networks which was later acquired by Corvis Corporation. In 2004 he co-founded Pharad, located in Maryland, USA, to develop high performance antenna and RF-over-fiber technologies. He is the Chief Technology Officer of Pharad. Dr Waterhouse's research interests include antennas, electromagnetics and microwave photonics engineering. He is an IEEE Fellow and in 2018 was elected to the IEEE Antennas and Propagation Society AdCom. He is the current Chair of the IEEE AP-S Industrial Initiatives Committee and also serves on the IEEE AP-S Future Directions and Strategic Planning Committees.

Thas Nirmalathas, *The University of Melbourne*

Professor Thas Nirmalathas is the Director of the Melbourne Networked Society Institute which is an interdisciplinary research institute focusing on challenges and opportunities arising from society's transition to a networked society. He also provides the academic leadership to the Melbourne Accelerator Programs (MAP) which he co-founded to support entrepreneurial activities of the University Community through business acceleration models. Professor Nirmalathas obtained his BEng and PhD in Electrical and Electronic Engineering from the University of Melbourne in 1993 and 1998, respectively. Between 2000 and 2004, he was the Director of the Photonics Research Laboratory (Melbourne Node of the Australian Photonics CRC) and also the Program Leader of the Telecommunications Technologies Program. From 2004 to 2006, he was the Program Leader for the Network Technologies Research Program at the National ICT Australia (NICTA), a premier Australian research centre of excellence in ICT. Between 2006 and 2008, he was the Research Group Manager of the Networked Systems Group of the Victoria Research Laboratory (VRL) of NICTA. He was also the acting Lab Director of VRL in 2007. Between 2010 and 2012, he was the Head of the Department of Electrical and Electronic Engineering at the University of Melbourne. He is a Senior Member of IEEE, a member of Optical Society of America and a Fellow of the Institution of Engineers Australia.