

# Challenges of a growing photovoltaic industry



Joint Electrical Institutions Sydney - Engineers Australia, IEEE, IET

## Public Lecture

<b>Date:</b>	Thursday, March 13, 2014
<b>Time:</b>	5:30 pm for 6:00 pm start
<b>Venue:</b>	Engineers Australia Auditorium, Ground Floor, 8 Thomas Street, Chatswood
<b>Speaker:</b>	Ted Spooner University of New South Wales
<b>Contact:</b>	Trevor Blackburn - <a href="mailto:t.blackburn@unsw.edu.au">t.blackburn@unsw.edu.au</a>
<b>RSVP:</b>	Register online at <a href="https://engineersaustralia.wufoo.com/forms/m1s4yixu1s8h2us/">https://engineersaustralia.wufoo.com/forms/m1s4yixu1s8h2us/</a>

**ABSTRACT:** Photovoltaic (PV) systems have been around for some considerable time and the industry has been growing at a very rapid rate (greater than 30% /year). In the early days installed PV capacity did not contribute greatly to world energy but many years down the track there is now an installed base of greater than 100GW of PV and the industry is still growing at an amazing rate.

With this growth come significant technical challenges. PV is different to many other generation sources in that it is a d.c. electrical current source which is exposed to the elements and distributed over a significant area, often on residential and commercial buildings. In the case of grid-connected systems it is a distributed generation source feeding energy back into a network originally designed only to feed energy in one direction. All these factors create significant safety and management issues particularly as the installed base of generation increases to provide much-needed sustainable generation.

This seminar explores the current state of the industry with a close look at many of the technical and systemic challenges facing the industry moving forward.

**THE SPEAKER :** Ted Spooner is a Senior Visiting Fellow in the School of Electrical Engineering & Telecommunications at the University of NSW, having previously been on the staff there for many years teaching and researching in power electronics and renewable energy systems.

He is the current Chair of the Standards Australia committee EL42 "Renewable Energy Systems" which has produced the Australian Standard AS/NZS 5033: 2012 "**Installation and Safety Requirements for Photovoltaic (PV) Arrays**".

He is also Co-convener of the IEC Technical Committee TC82's International Working Group on **PV Systems**.

