



# Solving Global Challenges

Start	End	Speaker	Organisation	Topic/Title
8:30	9:00	Tea & coffee		Event registration
9:00	9:10	Dr Scott Martin	CSIRO/AIP	Welcome & housekeeping
9:10	9:15	Dr Fred Osman	AIP	Welcome by AIP NSW President
9:15	9:40	Dr Adrian Murdock	CSIRO	GraphAIR water purifier
9:40	10:05	Dr Josh Toomey	Baraja	LiDAR for Autonomous Transport
10:05	10:30	Dr Simon Toze	CSIRO	What are CSIRO Urban Living Labs and why use them?
10:30	11:00	MORNING TEA		
11:00	11:25	Dr Emma Lovell	UNSW	Sustainable fuels
11:25	11:50	Dr Fiona Scholes	CSIRO	Powering the future with printed solar films
11:50	12:15	Dr Jinghua Fang	AloxiTec	A game changing packaging solution to extend shelf life and improve freshness of food
12:15	14:00	LUNCH		SITE TOURS AT 1pm
14:00	14:25	Dr George Hobbs	ATNF	Our Place in the Universe
14:25	14:50	Dr Phoebe Meagher	Taronga Zoo	Tackling Wildlife Conservation with Forensic Science
14:50	15:15	Mr Matthew Worsman	KIMIYA	Burden of Disease
15:15	15:30	Dr Scott Martin	CSIRO/AIP	Closing comments
15:30	-	AFTERNOON TEA		

Generously sponsored by:



*2018 AIP Industry Day*

# Elevating Australia's Industries in Space, Aerospace & Defence



**Thursday 8th November - 9:00am to 3:30pm**  
**CSIRO Lindfield**

The space, aerospace and defence industries are early adopters of science and technology - and with swelling national aspirations in these areas, it is a perfect time for the AIP Industry Day to explore their intersections with physics community and physics-based technology.

Our invited speakers will include:

- Technology pull from the three sectors - with guidance on partnering and funding
- Technology push - reflections from companies translating technology into products
- Partnership opportunities - large organisations/primes with an appetite to partner
- Government agencies - providing the initiative and funding to ignite collaboration

The AIP Industry Day is pitched to people looking to engage with experts and each other - it will include ample time for getting to know new people and catching up with old acquaintances.

Site tours of the Lindfield complex over lunch - CSIRO, the National Measurement Institute, and also the Lindfield Collaboration Hub - a "deep tech" start-up co-location.

Join us for an exhilarating, informative day where new connections are made.



2017 AIP Industry Day

# RETURN ON INVENTION

Thursday 9th November - CSIRO Lindfield 9am to 3:30pm

Transforming a brilliant technical invention into a successful business is an exciting and challenging journey. Speakers will relate their experiences - past and continuing - in their adventures taking device-based technology products into the market. We will also hear from sources of assistance - both investment and technical. If you are in a tech start-up, have an interest in them or in participating in one, helping one or starting one, this event is for you!

CSIRO has developed its Lindfield site as a start-up friendly hub, with 15 companies and >100 site inductees. The NSW Department of Industry supported the construction of our tech device Maker Space and a vibrant community has developed - visit and see!


*Come and enjoy the program, friendly delegates and lunchtime site tours.  
\$55 including catering, \$35 AIP members, \$15 concession  
Proceeds support the AIP's student excellence awards*

## SPEAKERS

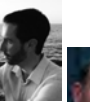
 Thomas Maschmeyer, USYD, Gelion

 David James, Oncosil


 David Burt, CSIRO ON

 Katie Green, CSIRO


 Richard Savoie, Fledge


 Mike Zimmerman, Main Sequence

 Mick Withford, Modular Photonics

 Daniel Clarke, MQ & Fledge

 Puya Abolfathi, VisoSpace

 Russell Connally, Fluro4

 Hajime Suzuki, Data61

 Stephan Wagner, AusIndustry

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WRAYS

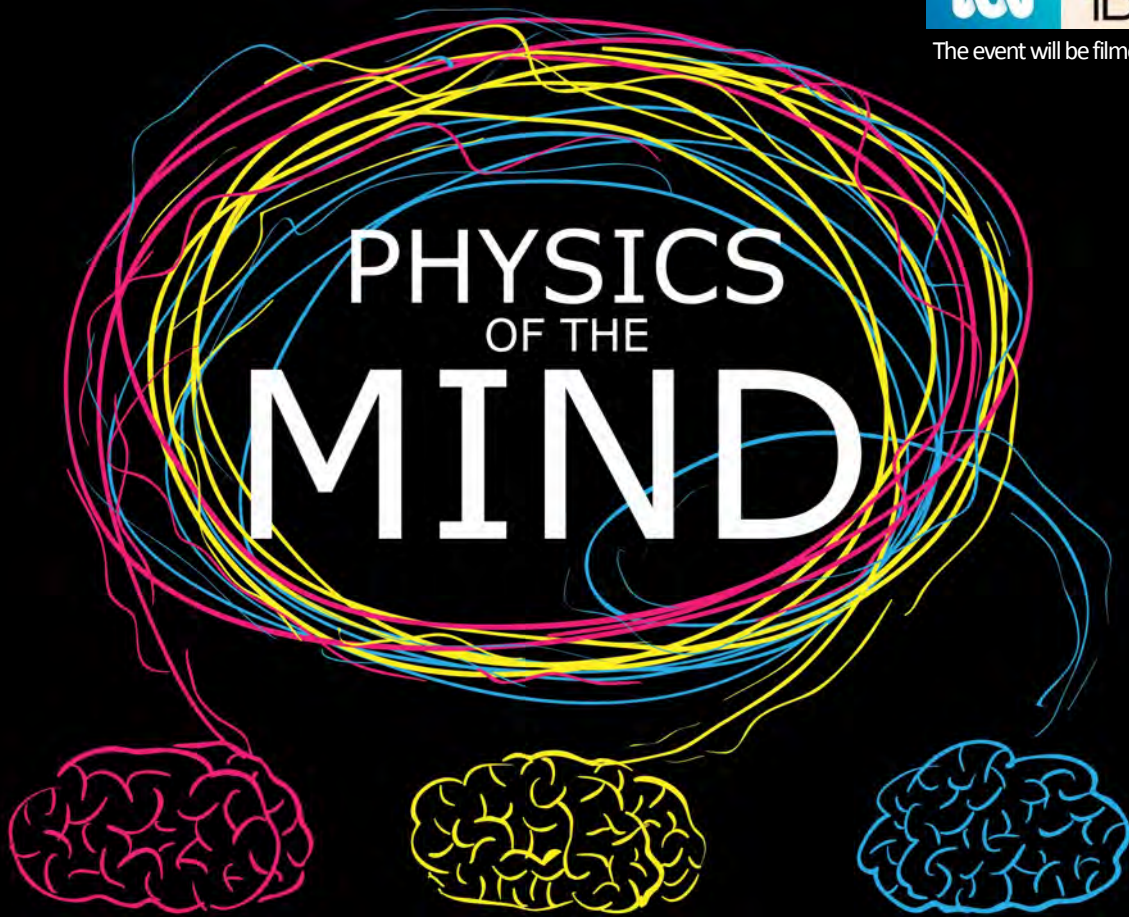


Find us and register at [events.csiro.au](http://events.csiro.au)

The Australian Institute of Physics presents



The event will be filmed by the ABC



PRE-REGISTRATION ESSENTIAL



Thursday 6th November  
CSIRO Lindfield  
36 Bradfield Road, Lindfield West NSW 2070

*An exploration of what is known, being learned, being researched and being built  
A glimpse of future society, future minds & future machines  
Pitched for general public - let the guest speakers give you a piece of their minds!*

**Six speakers with six views of the mind:**

The View from the Inside - **AJAHN BRAHM**, *Buddhist Society of WA*

The Machine View - **DR JÜRIG VON KÄNEL** - *IBM Research - Australia*

The Future Industry View - **DR NICO ADAMS** - *CSIRO Manufacturing Flagship*

The Quantum Physics View - **DR KIRSTY KITTO** - *Queensland University of Technology*

The Connected Society View - **RICHARD WATSON** - *Author of Future Minds*

The Neurologic Futurist View - **DR ANDREW DUGGINS** - *Westmead Hospital*

physics-industry.com  
FOR FULL PROGRAM & REGISTRATION



*Promoting the role of Physics  
in research, education, industry  
and the community*

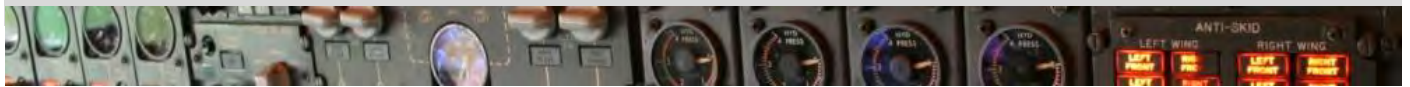




Join us in celebrating our 50th anniversary

2013 Physics in Industry Day

# The Future of Aerospace



physics-industry.com

## Thursday November 7th

CSIRO Materials Science & Engineering

36 Bradfield Road, Lindfield West, NSW 2070

Since the Wright brothers' flight in 1903, aerospace has transformed the world we live in. We take long haul travel for granted and safety has reached levels that most passengers don't give it a second thought. Undoubtedly, progress has been phenomenal, but is the rate of invention much slower now? Consider in 1962 Lockheed took less than two years from signing the contract to delivering the first SR71 Blackbird prototype. What does the future hold? More subsonic winged tubes—just quieter and more efficient? Or is there something more radical on the horizon? Is it all about fuel efficiency and safety—and how will that determine designs of tomorrow? Are UAV's (drones) a disruptive technology—what role will they play?

Find out about leading research in aerospace science, hear from organisations taking technology from laboratory to aircraft (passenger and unmanned) and learn what aviation innovators are saying will be the next big thing.

The event will also host the **Ken Doolan Poster Prize** with \$1000 awarded to the highest rated physics research poster from a student of any age. See website for details.

### REGISTRATION ESSENTIAL



# 2012 AIP PHYSICS IN INDUSTRY DAY TELECOMMUNICATIONS

\*\*\*TOO FAST IS NEVER ENOUGH\*\*\*

physics-industry.com

Thursday November 8th

CSIRO Materials Science & Engineering  
36 Bradfield Road, Lindfield West, NSW 2070

Telecoms have become ubiquitous in our modern lifestyles. They pervade our work, recreation and personal lives—and we now expect to be tapped in to the network wherever we may be. Although the next generation of wired and wireless are reasonably bedded down with the NBN and 4G, we will ask what technologies and services are now in development and what will we need all of this bandwidth for? At what point is the network no longer the bottleneck?

Come and learn about some of NSW's leading research in telecommunications physics, hear from the organisations now building infrastructure for the nation, and discover how our lives may be changed by emerging technology.

The event will also host the **Ken Doolan Poster Prize** with \$1000 awarded to the highest rated physics research poster from a student of any age. See website for details.

## REGISTRATION ESSENTIAL



# Materials Science in Industry Day



## Thinking **INSIDE** the box: Innovation in Packaging

Thursday 10th November 2011  
CSIRO Materials Science & Engineering  
Bradfield Road, West Lindfield, NSW 2070

Take a moment to consider your relationship with packaging and you will quickly appreciate just how important packaging is in our modern lifestyles. Almost everything we purchase arrives in packaging, which can serve multiple purposes: barriers to chemical, physical, biological and vapour contaminants, protecting from the product, containment, convenience, packing/stacking efficiency, handling, marketing, disposal and dispensing of product - to name a few obvious ones.

Each Australian produces about 950kg of domestic waste per year (we rate second after the US). Between 30% and 40% of domestic waste is comprised of packaging. About 9% of your grocery spend buys packaging.

We will look at the roles and challenges in packaging, packaging innovations Companies who have an interest in packaging will benefit from hearing about innovations and developments in materials and design. Researchers will learn about industry priorities. All of us will better understand our impacts and learn about choices we can make to improve!



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**REGISTRATION ESSENTIAL**



# The future of urban transport

## 2010 PHYSICS IN INDUSTRY DAY

**Thursday 11th November 2010**  
**Hosted by CSIRO at their Lindfield facility in Sydney**

How will science and technology (and society and psychology?) determine the urban transport infrastructure of the **far future**? We have assembled a diverse range of speakers from robotics research, ICT research leadership, future scenario planning, urban planning, materials science and multinational infrastructure business to advocates for rail, cycling and pedestrian access to share their expertise and enlighten us with their visions of the future(s) of urban transport.

The program will explore the range of possible futures for cars as well as all forms of public transport.



[physics-industry.com](http://physics-industry.com)





# NSW Medical Physics\* Showcase

\* the term "Medical Physics" is used here to mean the broad application of physics towards medical and health outcomes. The term is often used to define a much more specific range of activities than is intended here.

## 2009 PHYSICS IN INDUSTRY DAY

Thursday 19th November 2009  
Hosted by CSIRO at their Lindfield facility in Sydney

Australia conducts 1.1%<sup>[Access Economics]</sup> of the worlds medical research, but a staggering 3.04% of world health returns can be attributed to Australian research. Sadly, very little of the commercial return is captured by Australia. Our medical device manufacturers export 96%<sup>[AusBioTech]</sup> of their products, demonstrating the untapped market potential. The day will explore how to capture more manufacturing benefits from Australian medical research and will showcase medical research from universities and research agencies. Industry alchemists will reveal how they have successfully transmuted research into innovation.

# Nanotechnology: a Catalyst for Australian Manufacturing?

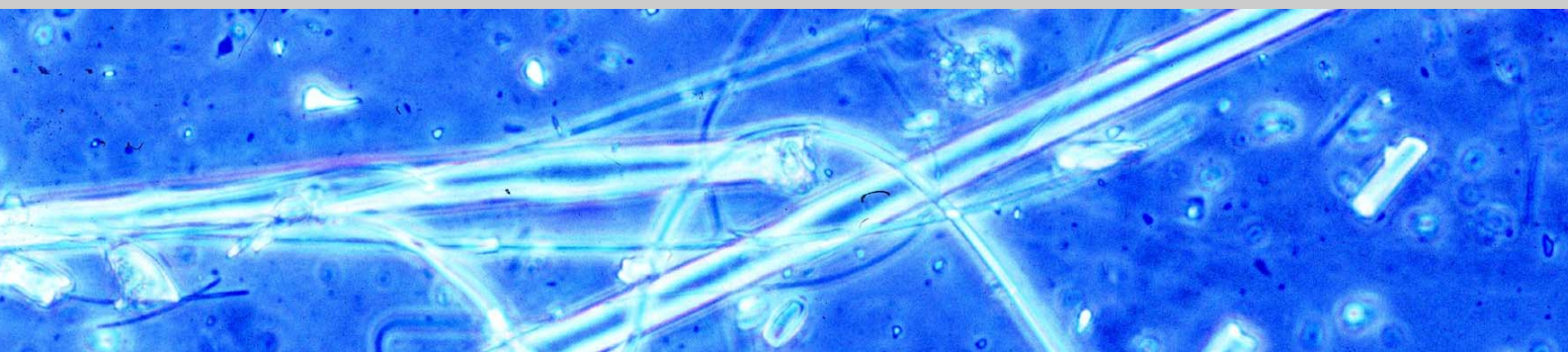
Wednesday 12th November 9am-5pm  
CSIRO Materials Science and Engineering  
Lindfield, Sydney NSW

## 2008 PHYSICS INDUSTRY DAY

**How will nanotechnology influence manufacturing in Australia? Does it represent a new paradigm in materials that will drive fantastic, futuristic products or it is destined to be a collection of incremental improvements? Do the benefits outweigh the unknowns?**

Presentations from industry, universities, research organisations and government

- The day will feature:
- ⇒ Update on government activities, regulation and the state of community attitudes towards nanotechnology
  - ⇒ Australian nano-manufacturing case studies
  - ⇒ Overviews of university nanotech research
  - ⇒ Overviews of government nanotech research & regulatory directions
  - ⇒ Laboratory tours of CSIRO's and NMI's facilities



**2007 PHYSICS INDUSTRY DAY**

**Can We Responsibly Meet  
Future Australian Industry  
Power Requirements?**

CSIRO Industrial Physics, Lindfield NSW  
9:00am to 5pm Wednesday 3<sup>rd</sup> October, 2007



Plenary speech by Dr John Sligar  
Managing Director of Sligar and Associates  
and ex-Chief Scientist with Pacific Power

Presentations from industry, business, universities, other research organisations and government

**How will the future mix of power generation in Australia be influenced by science & technology, availability and cost of renewable alternatives, adoption of carbon trading, industrial demand side initiatives, policy and energy economics?**

The day will feature:

- ⇒ Industry Forum - pose your questions to an expert panel
- ⇒ Laboratory tours of CSIRO's Industrial Physics facility
- ⇒ Research poster competition

[www.nsw.aip.org.au/industry/industry.php](http://www.nsw.aip.org.au/industry/industry.php)

The 2007 AIP Physics Industry Day is proudly supported by:



**Australian Government**  
**National Measurement Institute**



Further info/inquiries:  
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