



The AIP 2008 Women in Physics National Lecture Tour

FREE PUBLIC LECTURE

Tuesday 27th May, 7.00 PM
Wollongong Science Centre
Bookings Essential!

“New ways of molding the flow of light with optical fibres”

Professor Tanya Monroe
Chair of Photonics and Director,
DSTO Centre of Expertise in Photonics (CoEP),
University of Adelaide



The Australian Institute of Physics International Women in Physics Lecture Series was instituted to celebrate the contribution of women to advances in physics. Under this scheme, a woman who has made a significant contribution in a field of physics will give a series of lectures around Australia, including a Public Lecture arranged by each participating branch of the AIP. The Lecture will be of interest to a non-specialist physics audience and is expected to increase awareness among students and their families of the possibilities offered by continuing to study physics.

New classes of optical fibres are rapidly emerging that allow fibres to be used well beyond their established role in data transmission and into applications in a broad range of areas including sensing, biology, medicine, defence and optical data processing. These developments have been enabled by research in a diverse range of areas including physics, materials science, process engineering and fluid mechanics. Recent progress in a range of areas will be reviewed. In particular, the use of tiny air holes to modify the propagation of light will be described.

The Speaker

Professor Tanya Monro completed her undergraduate degree (BSc (Hons)) and PhD within the School of Physics at the University of Sydney. Her PhD work on self-written waveguides was awarded the 1998 Bragg Gold Medal for the best PhD thesis by a student from an Australian University. She then took up a postdoctoral research position at the Optoelectronics Research Centre (ORC) at the University of Southampton in the UK. In 2000, Tanya was awarded a Royal Society University Research Fellowship at the ORC, where she worked until the end of 2004 leading research in the areas of holey optical fibres and soft glasses. A year later Tanya returned to Australia to take up the inaugural DSTO Centre of Expertise in Photonics (CoEP) Chair of Photonics and directorship within the School of Chemistry & Physics at the University of Adelaide. In two years she has built the centre into a team of 20 researchers. She has published more than 200 papers and is a member of the SA Premier's Science and Research Council. In 2006 she was awarded the Cosmos Magazine inaugural "Bright Spark" award. 'Optoelectronics is an exciting field to work in. Many of the new and fundamental concepts you work on can be realized and tested within a university environment, and then tailored for real world applications' says Professor Monro.

RSVP Details:

Date: Tuesday 27th May 2008

Venue: Wollongong Science Centre, Squires Way, Wollongong.

Lecture Time: 7:00 PM - 8:00 PM

Parking: Parking is available at the Science Centre at no cost.

Cost: Free

Due to limited seating, bookings are essential.

Booking Contact: Kim Noble, Wollongong Science Centre

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Event sponsored by:

The Australian Institute of Physics – NSW Branch.
Wollongong Science Centre.
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