**INSTITUTE OF PHOTONICS & OPTICAL SCIENCE - IPOS**

IPOS is the newest institute within the University of Sydney and the first of its kind in Australia. To be launched in April IPOS research spans all areas of optics and photonics from fundamental to applied, including the ground breaking areas of meta-materials and cloaking, speeding up and greening the Internet, structural health monitoring, as well as the pioneering fields of astrophotonics, medical and quantum photonics. “IPOS has broken new ground in terms of what we have achieved and the amazing future directions in which we are now headed,” says Professor Ben Eggleton, ARC Federation Fellow and IPOS Director. “We’re discovering new ways with photonics and optics that we never imagined.” Eggleton says that by working across diverse areas such as physics, mathematics, chemistry and microscopy, ideas that were once thought to be in the realm of fiction, such as invisibility or remote surgery, are now becoming reality. “Photonics has only just touched on what it’s capable of and being part of a broad team pushes us to truly explore new concepts and ideas even further. ‘What if?’ is a very exciting phrase.”

The University of Sydney Vice-Chancellor, Dr Michael Spence together with Senator Anne McEwen, Chair of the Senate Standing Committee on Environment, Communications and the Arts, will officially launch IPOS, which is based within the School of Physics on Thursday 23 April. The symposium The Photonic Universe - Faster, Further, Smarter will give a fascinating international overview of photonics and optics. It includes eminent speakers such as Professor Alan Willner pioneer of optical networking and Professor Pierre Kern the pioneer of astrophotonics. Faster, Further, Smarter is a free one-day symposium. To register your place email Wendy Espinoz wendy@physics.usyd.edu.au For the full program visit: www.usyd.edu.au/ipos/

**SEEKING YOUNG SLEEK GEeks**

Become a young Sleek Geek by entering the University of Sydney's Sleek Geeks Science Eureka Prize. Dr Karl Kruszelnicki and Adam Spencer, who entertain audiences around Australia with their Sleek Geeks show, invite young Australians to make a short film about any scientific topic. The short film should painlessly increment the audience's science knowledge or, as the Sleek Geeks like to say; "Learn something without even noticing." Dr Karl Kruszelnicki, the Julius Sumner Miller Fellow, and Adam Spencer (pictured top left), Breakfast presenter for 702 ABC Radio Sydney, are encouraging primary, secondary and tertiary students to communicate a scientific idea in a way that is accessible and entertaining to the public. "We’re looking for the next generation of Sleek Geeks. Those with a passion for science and for communicating ideas," says Dr Karl Kruszelnicki. "Each film needs to be one to three minutes long, and tell a scientific story with real science. Get out your digital camera and have some fun!"

There are three categories with great cash prizes up for grabs: the University Student Prize is open to all Australian university students and has a first prize of $3000 and a second prize of $2000, the Secondary School Prize is open to all Australian high school students and has a first prize of $4000 plus a $500 book voucher from Abbey's Bookshop, a second prize of $3000 and a third prize of $2000, the Primary School Prize is open to all Australian primary school students and has a first prize of $1000 plus a $500 book voucher from Abbey's Bookshop.

"Good quality production isn't a major consideration in judging - it's how the 'story' is told that counts," says Dr Karl. Previous winning films have included songs, dances, animations, dramas, comedies and documentary presentations. So get creative! The University of Sydney's Sleek Geeks Science Eureka Prize is part of the Australian Museum Eureka Prizes, which reward excellence in the fields of research and innovation, science leadership, science communication and journalism, and school science. Competition details and entry forms can be found at: www.austmus.gov.au/eureka/ Get your entry in by Friday 1 May 2009. Check out the winning films from previous years at: www.abc.net.au/science/sleekgeeks/eureka/2008/

**ON THE ROAD AGAIN**

In May Kickstart will travel once more to Wagga Wagga, Dubbo and Armidale with a brand new team of demonstrators. If you one of our alumni based in this area then you might like to ensure you or your local school registers with Kickstart to ensure you don’t miss out on all the physics fun. A big thanks to the AIP who is supporting Kickstart on the Road with public talks on the 2008 Nobel prize in Dubbo and Armidale, to be delivered by Drs Chris Stewart and Kevin Varvell. For more info on Kickstart visit: http://www.physics.usyd.edu.au/schools_community/kickstart_regional.shtml