



Department of State and  
Regional Development



New South Wales Government

## **MEDIA RELEASE**

**September 12, 2008**

### **SOLAR POWER EXPERT NAMED INAUGURAL NSW SCIENTIST OF THE YEAR**

The winners of the inaugural NSW Scientist of the Year Awards were announced last night at a reception at Government House in Sydney.

The 2008 NSW Scientist of the Year is Professor Martin Green, a world leading solar energy expert and the Executive Research Director at the Australian Research Council (ARC) Centre of Excellence for Photovoltaics at the University of NSW.

Professor Green also won the Environment, Water and Climate Change Sciences Category.

Professor Green is a pioneering researcher whose innovative and cutting-edge work has placed Sydney and Australia at the forefront of international efforts to develop more effective solar energy technology.

Professor Green's leadership helped improve the performance of silicon solar cells by over 50 per cent, with his team holding a number of world records for solar cell performance.

He also co-invented pioneering 'second generation' silicon on glass solar cells which offer enormous potential cost savings on traditional technology, resulting in the creation of a spin-off company CSG Solar.

Professor Green and his team are now focusing on 'third-generation' thin film solar cells to achieve significant increases in energy efficiency at a time when world demand for viable renewable energy options is at an all-time high.

Among Professor Green's star pupils is Dr Zhengrong Shi, who completed a PhD in the early 1990s and went on to establish the multi-billion dollar Chinese solar company Suntech Power, making him one of China's richest businessmen.

The NSW Scientist of the Year Awards are an initiative of the NSW Government's Department of State and Regional Development through its Office for Science and Medical Research.

They aim to promote outstanding NSW research that adds economic value through the creation of investment, jobs or skills; or health, environmental and technological solutions to significant challenges.

The inaugural 2008 NSW Scientist of the Year Awards involved nine category awards each offering \$5,000 prizemoney as well as the overall NSW Scientist of the Year award valued at \$40,000.

The other category winners of the 2008 awards are:



Department of State and  
Regional Development



New South Wales Government

- **Engineering Sciences Category Winner:** Professor Veena Sahajwalla, Director at the Centre for Sustainable Materials Research and Technology at the University of NSW. Professor Sahajwalla has invented an environmentally-friendly technology for the recycling of waste plastics in Electric Arc Furnace (EAF) steelmaking and demonstrated on a commercial scale that coke and coal used in the production of steel can be replaced by plastics used in shopping bags and bottles.
- **Computer Sciences Category Winner:** Dr Chris Nicol, Chief Technology Officer at National ICT Australia (NICTA). Dr Nicol established the first Asia-Pacific Bell Labs Research facility in North Ryde and his team invented new circuit techniques that have been widely adopted and deployed in mobile phones and mobile network infrastructure around the world.
- **Chemistry Category Winner:** Professor Gordon Wallace, Executive Research Director at the ARC Centre of Excellence for Electromaterials Science at the University of Wollongong. Professor Wallace established the world's first intelligent polymer research laboratory in NSW, is a pioneer in nanobionics which bridges nanotechnology and human biology, and has successfully used electrical stimulation to significantly enhance growth from nerve cells, offering great potential for repairing damaged hearing and spinal cords.
- **Plant and Animal Sciences Category Winner:** Dr Peter Kirkland, Head of the Virology Laboratory at the Department of Primary Industries' Elizabeth Macarthur Agriculture Institute. Dr Kirkland's expert and rapid response to the 2007 equine influenza outbreak helped eradicate the disease in record time, limiting its potentially devastating impact on Australia's multi-billion dollar horse industry.
- **Biomedical Sciences Category Winner:** Professor Philip Hogg, the National Health and Medical Research Council's Senior Principal Research Fellow and Professor of Vascular Research at the University of NSW. Professor Hogg has invented a class of cancer drugs that starve tumours of their blood supply by inactivating the cells that make the blood vessels in tumours.
- **Physics and Astronomy Category Winner:** Professor Benjamin Eggleton, Director of the ARC Centre of Excellence for Ultrahigh-bandwidth Devices for Optical Systems at the University of Sydney. Professor Eggleton is a world leading researcher and pioneer in optical physics and photonics. His research work with colleagues includes efforts to vastly increase the speed of the Internet by developing a photonic chip that uses light rather than electronic signals, replacing the need for routers that slow data transmission.
- **Mathematical Sciences Category Winner:** Professor Matthew Wand, Research Professor in Statistics at the University of Wollongong. Professor Wand's research has focused on the development of statistical methods to assist public health and medical researchers, and has been a pioneer in the use of "smoothing techniques" to statistically account for random variations in data.
- **Leadership in Secondary Science Teaching Category Winner:** Dr Mark Butler, Head Teacher of Science at Gosford High School. Dr Butler's programs have led to a 50% increase in the number of Gosford students taking senior science over the past decade.

**DSRD media contact: Scott Tucker on (02) 9338 6863**