

## Dr John O'Sullivan

The honorary degree of Doctor of Engineering was conferred upon Dr John O'Sullivan, BSc BE(Hons) PhD *Sydney*, by the Deputy Chancellor Alan Cameron AO at the graduation ceremony for the Faculty of Science and the Faculty of Engineering and Information Technologies held in the Great Hall at 9.30am on 18 May 2012.



The Deputy Chancellor and Dr O'Sullivan, *photo, copyright Memento Photography.*

### Citation

Deputy Chancellor, it gives me great pleasure to commend Dr John O'Sullivan to you for admission to the degree of Doctor of Engineering (*honoris causa*) in recognition of his outstanding contributions to science and society. Dr O'Sullivan has distinguished himself through his crucial scientific leadership of the team that invented WiFi and a range of additional scientific innovations.

Dr O'Sullivan was awarded a Bachelor of Science in 1967, a Bachelor of Engineering with Honours in 1969 and a PhD in Electrical Engineering in 1974. After completing his PhD, he was appointed to the Foundation for Radio Astronomy in the Netherlands (now ASTRON). He went on to become the Head of its Engineering group, making major contributions in the electronics and signal and imaging areas.

In 1983, Dr O'Sullivan returned to Australia and the CSIRO where he played an important role in the conception of the Australia Telescope receiving systems. This work led to the group, together with various commercial partners and customers, making significant contributions in areas such as image processing for medical and geophysical applications, underground mine safety, communications systems and radar processing systems. After his development of the Wireless LAN system, he left the CSIRO in 1995 to join News Ltd as Australian Director of Technology where he presided over and personally contributed to a number of significant technical developments.

Dr O'Sullivan is one of Australia's most brilliant research scientists and a world changing technological innovator. He led the team that invented WiFi, a technology that made the wireless LAN fast and robust, allowing mobile phones, laptops and printers to connect to the internet through a high-speed wireless network. This technology stems from his earlier work in detecting the radio whispers of exploding black holes. This breakthrough provided the CSIRO with its most lucrative patent ever and earned Dr O'Sullivan Australia's highest scientific honour in 2009 – The Prime Minister's Prize for Science.

Among other accolades, Dr O'Sullivan has the distinction of having received the Australian Academy of Technological Sciences and Engineering Clunies Ross Award in 2010, CSIRO Chairman's Medal in 2009, CSIRO Medal for Research Achievement in 2000 and the University of Sydney Medal in 1969.

Dr O'Sullivan also has exceptional accomplishments in the field of advanced signal processing techniques for radioastronomy. His achievements in this area are internationally renowned, and his work on one of the world's leading radio telescopes, the Australian Square Kilometre Array Pathfinder, will provide Australian

and international astronomers with another world-leading radio astronomy observatory and may lead to the next phase of transformational personal communication technology.

Dr O'Sullivan's innovations have had a world changing impact on technology resulting in tangible benefits to our society. For transforming the way the world connects, communicates and works every day, we are delighted to take this opportunity to recognise his immense contributions.

Deputy Chancellor, I present Dr John O'Sullivan for admission to the degree of Doctor of Engineering (honoris causa), and I invite you to confer the degree upon him.