

Seminar on:
**From iPhones to Submarines - the Future of Mechanical and
Electronic Engineering**

by

Prof. John Roddick

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Venue : P03 – Level 4 (VCR)
Date : 04 August 2011 (Thursday)
Time : 11.30 am – 1.00 pm

Abstract: The interface between science and engineering is changing. Scientists are producing engineered products and engineers are contributing to fundamental scientific advances. This presentation will explore the future directions of mechanical and electronic engineering in a world where advanced manufacturing will offer the greatest impetus for economic development in many areas of the world.

Speaker's CV: Since the late 1980s Professor Roddick has contributed to the area of conceptual modelling and intelligent databases including the development of techniques for data summarization, spatio-temporal databases, query languages, evolution and change in data and metadata management, information semantics and, data mining and knowledge discovery. His papers in these areas have received over 3,000 citations (per Google Scholar) with six with over 150 citations. He has an h-index of 28.

His work has resulted in contributions to the design and development of database architectures, query languages and systems that enable the semantics inherent in data to be more readily understood and manipulated, thus enabling systems to adapt. Part of his work in temporal query languages, for example, contributed to the TSQL2 temporal language proposal. His research agenda has a particular focus on complex and large volumes of data, commonly using medical data as the application domain.

Professor Roddick has published widely, including a number of well-cited surveys. He maintains active collaborative links with a number of researchers internationally, and has undertaken commercial research contracts with a number of organisations in his area of expertise including the DSTO, the Royal Australasian College of Surgery, EDS Australia, PriceWaterhouseCoopers, the SA Government, rL Solutions and PowerHealth Solutions.