A Seminar on:
Future Radar Systems

Speaker:
Prof. Chris Baker

Venue: DSO Auditorium, 20 Science Park Drive Singapore 118230
Date: 29 November 2011
Time: 2.00pm to 4.00pm

Abstract:
This talk will discuss a number of developments that are likely to be highly influential in determining the capability and performance of future radar systems. There are two main converging aspects that are keys to these developments; technology and user demand. In regards to technology, there continues to be major advances in digital signal processing and availability of low cost components and even platforms. Indeed, these are already presenting new options for the designer of radar systems that have yet to be exploited. In terms of demand, the need to see further and more reliably with increasing detail of information is already with us. Thus we have a situation in which there is both a technology “push” and a demand “pull”. As a result, there is much emerging research exploiting an increasingly diverse set of design variables around time, space, frequency and waveform. Set in a ‘cognitive’ context, this has the potential to bring about a new revolution in radar system performance and capability with applications based around autonomy coming to the fore. This presentation will set the context for this future and examples of diversity and cognition will be provided to illustrate these exciting possibilities for future radar systems.

Biography of Speaker:
Prof. Chris Baker is the Ohio Research Scholar in Integrated Sensor Systems at The Ohio State University. Until June 2011 he was the Dean and Director of the College of Engineering and Computer Science at the Australian National University (ANU). Prior to this, he held the Thales-Royal Academy of Engineering Chair of intelligent radar systems based at University College London.

Prof. Baker is the recipient of the IEE Mountbatten premium (twice), the IEE Institute premium and is a Fellow of the IET. He is a visiting Professor at the University of Cape Town, Cranfield University, University College London and Adelaide University.

Research Interests
Prof. Baker has been actively engaged in radar system research since 1984 and is the author of over two hundred publications. His research interests include: coherent radar techniques, radar signal processing, radar signal interpretation, electronically scanned radar systems, natural echo locating systems and radar imaging.

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