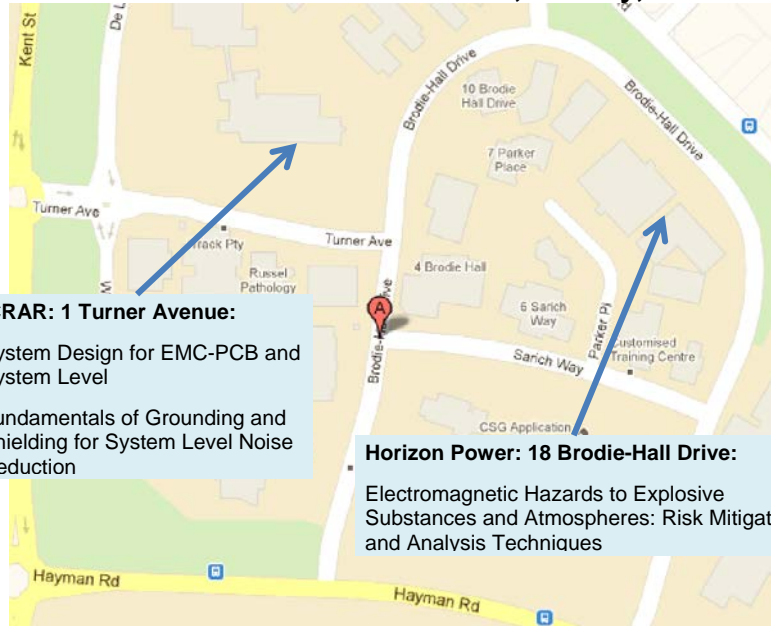


## Workshop Locations

(November 9: 8:00am–5:00pm & November 10: 8:00am–5:30pm)

ICRAR: 1 Turner Avenue, Bentley, WA 6102

Horizon Power: 18 Brodie-Hall Drive, Bentley, WA 6102



### ICRAR: 1 Turner Avenue:

System Design for EMC-PCB and System Level

Fundamentals of Grounding and Shielding for System Level Noise Reduction

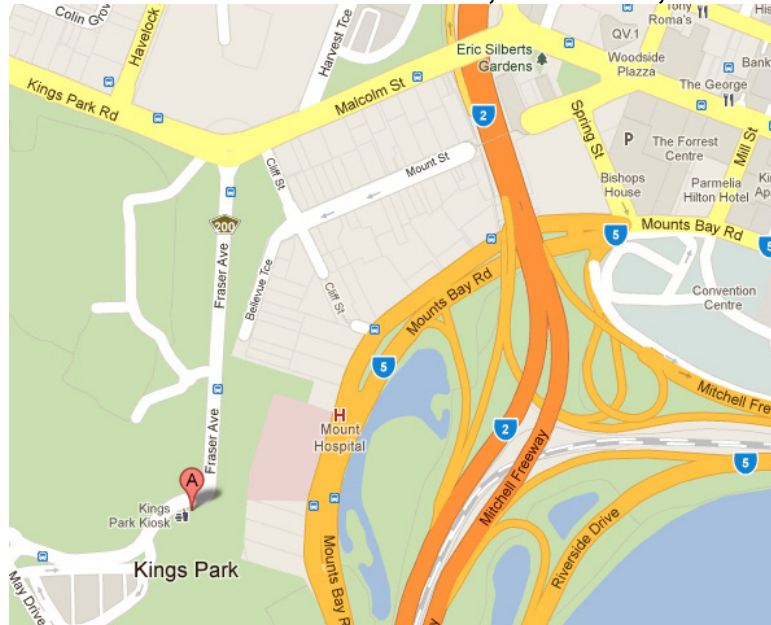
### Horizon Power: 18 Brodie-Hall Drive:

Electromagnetic Hazards to Explosive Substances and Atmospheres: Risk Mitigation and Analysis Techniques

## Symposium Banquet

(November 10: 6:30pm–11:00pm)

Fraser's Restaurant: Fraser Avenue, West Perth, WA 6005



# Perth 2011

November 9-11

Technology Park  
Function Centre  
2 Brodie Hall Drive  
Bentley WA 6102

## Electromagnetic Compatibility Symposium and Exhibition



Hosted by  
The EMC Society of Australia

# Program Booklet



Technical Co-Sponsor

## EMC SOCIETY

### Wednesday: 9 Nov 2011

<b>8:00–9:00</b>	<b>Registrations</b>	
9:00–10:30	<b>Opening Ceremony and Keynote Talk</b> EMC Engineering Education in Asia-Pacific Region Brett Nener	
<b>10:30–11:00</b>	<b>Morning Tea/Coffee</b>	
	<b>Session 1</b>	
	<b>Session Chair: Franz Schlagenhauer</b>	
11:00–11:40	Virtual Electromagnetic Compatibility System: A Software Integrate and Cloud Computing System for IC Design and Modelling <i>H. Li, Boyuan Zhu and J. Lu, Griffith University, Australia</i>	
11:40–12:10	New Trends in Substation Design for Green Energy <i>Shantanu Kumar and S. Wagh, UWA, Australia</i>	
12:10–12:40	New EMI Simulation Methodology for CMC Comparison <i>Pooi Y. Wong, Intel Inc., Malaysia</i>	
<b>12:40–1:40</b>	<b>Lunch</b>	
	<b>Session 2</b>	<b>Tutorial 1</b>
	<b>Session Chair: Andrew Walters</b>	
1:40–2:10	How Decoupling Capacitors May Cause Radiated EMI <i>Mark I. Montrose, Montrose Compliance Services Inc., USA</i>	FFT Based Measurement Receivers <i>Mark Mifsud, Australia</i>
2:10–2:40	Study of Electronic Tuning in Planar Antenna <i>Malay R. Tripathy, M. D. Upadhyay and H. Kumar, Amithy University, India</i>	
<b>2:40–3:50</b>	<b>Afternoon Tea/Coffee</b>	
	<b>Session 3</b>	<b>Tutorial 2</b>
	<b>Session Chair: Paul Kay</b>	
3:50–5:00	JORN EMC Design and Verification <i>Graeme Madiqan, Victorian Government Department of Justice, Australia</i>	Solving EMC/EMI problems with the Latest Simulation Technology in ANSYS Electromagnetic Simulation Tools <i>Thomas Benke, Leap Australia</i>
5:00–6:00	AGM (EMCSA members only)	
<b>6:00–7:00</b>	<b>Welcome Reception</b>	

### Thursday: 10 Nov 2011

<b>8:00–9:00</b>	<b>Registrations</b>	
	<b>Session 4</b>	<b>Tutorial 3</b>
	<b>Session Chair: Gordana Felic</b>	
9:00–9:30	Influence of a Lightning Rod on the Bearing Accuracy of a Direction Finding System <i>Thomas Kaufmann, O. Proginy and C. Fumeaux, The University of Adelaide, Australia</i>	Addition of ESD and Lightning requirements and Testing to MIL-STD-461 <i>Fred Heather, US Navy</i>
9:30–10:00	EMI Emission Study on Photovoltaic Modules for Radio Astronomy Receiver Front-end <i>Budi Juswardy, F. Schlagenhauer, S. Padhi and P. J. Hall, ICRAR, Australia</i>	

10:00–10:30	An Outdoor Antenna Metrology Facility for Candidate Square Kilometre Array Antennas <i>Aziz Jiwani, J. Flexman, S. K. Padhi, J. G. B. de Vaate and P. J. Hall, ICRAR, Australia</i>	
<b>10:30–11:00</b>	<b>Morning Tea/Coffee</b>	
	<b>Session 5</b>	<b>Tutorial 4</b>
	<b>Session Chair: Shantanu Padhi</b>	
11:00–11:30	EMC Test Site Validations for 1m Automotive and Military Emissions Tests <i>Paul Kay, DSTO, Australia</i>	EMC, EMR, SAR, and Safety Approvals- Requirements for Marketing in Australia <i>Chris Zombolas, EMC Technologies Pty. Ltd., Australia</i>
11:30–12:00	Why Do We Have EMC Standards and Regulations? <i>Ghery S. Pettit, Intel Corp., USA</i>	
12:00–12:30	My Secondment to the E3 Authority within the UK Ministry of Defence <i>Andrew Walters, DSTO, Australia</i>	
<b>12:40–1:40</b>	<b>Lunch</b>	
	<b>Session 6</b>	<b>Tutorial 5</b>
	<b>Session Chair: Franz Schlagenhauer</b>	
1:40–2:20	Predicting Current Crowding in Spiral Inductors <i>Gordana Felic and D. Ng, NICTA, Australia</i>	EMC Standards and Regulations Why? <i>Ghery S. Pettit, Intel Corp., USA</i>
2:20–2:50	Ship/Air Integration in the Royal Navy <i>Andrew Walters, DSTO, Australia</i>	
2:50–3:20	Wireless Power Transfer System for LED Display Board by using 1.8 MHz Magnetic Resonant Coils <i>In-Kui Cho, S.-M. Kim, J.-I. Moon, J.-H. Yoon, W.-J. Byun and J.-I. Choi, ETRI, Korea</i>	
<b>3:20–3:50</b>	<b>Afternoon Tea/Coffee</b>	
	<b>Session 7</b>	<b>Tutorial 6</b>
	<b>Session Chair: Andrew Walters</b>	
3:50–4:20	Computation Modelling of the Fields Close to Human Body in Realistic Exposure Environment for Application in Personal RF Dosimetry <i>Steve Iskra, RMIT, Australia</i>	
4:20–4:50	Image Reconstruction in a Microwave Tomography Prototype <i>A. Fhager and Shantanu K. Padhi, ICRAR, Australia</i>	
4:50–5:30	Microwave Reflectometric Measurement of Biological Signals <i>Atsushi Mase, N. Ito, Y. Komada, M. Oda, D. Nagae, D. Zhang, Y. Kogi, S. Tobimatsu, T. Maruyama, Y. Nagayama, D. Kuwahara, T. Yoshinaga, S. Yamaguchi, T. Tokuzawa, K. Kawahata and S. K. Padhi, Kyushu University, Japan</i>	
<b>6:30–11:00</b>	<b>Symposium Banquet at Fraser's Restaurant</b>	