

# "Acoustics 2005"

Busselton Western Australia

9<sup>th</sup> - 11<sup>th</sup> November 2005

## Program

### Program Outline

Session	Schedule
<b>Wednesday</b>	
Pre-conference Workshop on ANVC at University of WA	9.30 -12.30
Pre-conference Short Course on Transportation Noise	10.45 - 3.30
Charter coach departs Perth domestic airport	12.20pm
Conference Registration	4.00-6.30pm
Sundowner Welcome	6.30-10pm
<b>Thursday</b>	
Conference Registration	8.00 - 8.30am
Conference Opening	8.30am
Conference papers and workshops	8.30 - 5.00
AAS Annual General Meeting	5.00 - 5.30pm
Pre-dinner drinks	7.00 - 7.30pm
Conference Dinner	7.30 - 11.00pm
<b>Friday</b>	
Conference papers and workshops	8.30 - 4.15
Conference close	4.15pm
Charter coach departs for Perth domestic airport	5.00pm

**Wednesday 9<sup>th</sup> November 2005**

9.30 - 12.30	Pre-conference workshop on Active Noise and Vibration Control University of Western Australia <i>Coordinator: Dr J Pan</i>
10.45 - 3.30	Pre-conference Short Course on Transportation Noise Abbey Beach Resort, Room Abbey 4 <i>Coordinator: M Limb</i>

	Conference Charter Coach Departs: Perth Domestic Airport 12.20pm, Perth CBD 1.00pm, University of WA 1.30pm
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4.00 - 6.30	Conference Registration Atrium
6.30 - 10.00	Conference Sundowner Welcome Atrium Terrace

**Thursday 10<sup>th</sup> November 2005 - morning**

8.00	Registration in Ballroom Foyer
8.30	Conference Opening Ballroom
8.40	Session P1 Keynote Address by Dr Andy Moorhouse “Virtual acoustic prototypes: listening to machines that don’t exist” <i>Chair: Dr Alec Duncan</i> Ballroom

	Session 1A Environmental Acoustics <i>Chair: S Camp</i> Ballroom	Session 1B Active Noise & Vibration Control <i>Chair: Dr A Zander</i> Abbey 5	Session 1C Vehicle Noise  <i>Chair: J Parnell</i> Abbey 4A	Session 1D Underwater Acoustics Propagation <i>Chair: Prof. A Gavrilov</i> Abbey 4B
9.25	44: Challenges in our changing soundscape  <i>P Dickinson</i>	50: Robust virtual acoustic sensing  <i>D Halim, B Cazzolato</i>	Workshop on Engine-Brake Noise	25: Difference in signals from a mid-ocean shot at hydro-phones near Diego  <i>Garcia &amp; Cape Leeuwin</i> <i>M Hall</i>
9.50a	73: Application of acoustic techniques in the management of a threatened migratory bird  <i>C Wilson, M Holdsworth</i>	10: Investigation into the feasibility of using a parametric array control source in an active noise control system <i>L Brooks, A Zander, C Hansen</i>		83: Simulation of time series received underwater from small explosive detonations in shallow ocean regions <i>A Jones, A Duncan, P Clarke, A Maggi</i>
10.15	67: The acoustics of church belltowers for change ringing  <i>John Bassett</i>	56: Six-axis vibrational power transducer for active vibration isolation  <i>C Howard, C Hansen</i>	34: General design principles for an automotive muffler  <i>D Potente</i>	92: Sound propagation through the Antarctic Convergence Zone & comments on 3 major experiments  <i>M Hall</i>

10.40 Morning Tea in the Trade Exhibition Area

	Session 2A Environmental Acoustics <i>Chair: J Macpherson</i> Ballroom	Session 2B Active Noise & Vibration Control <i>Chair: Dr B Cazzolato</i> Abbey 5	Session 2C Workshop: BCA <i>Chair: G Harding</i> Abbey 4A	Session 2D Underwater Acoustics Sonar <i>Chair: J Exelby</i> Abbey 4B
11.05	03: Noise mapping an entertainment precinct  <i>D Borgeaud</i>	62: Active vibration control of a magneto-rheological sandwich beam <i>L Chen, C Hansen</i>	Workshop on the Building Code of Australia	08: Adaptive beam-forming for sonar audio  <i>Chaoying Bao</i>
11.30	31: Entertainment noise in Western Australia  <i>J Guo, P Gunn</i>	52: Beam steering of sound from flat panels using spatially-averaged objective functions  <i>D Halim, B Cazzolato</i>		15: Expectation maximisation algorithm for detection of high band-width sonar pulses  <i>S Lourey, R Evans, W Moran, A Larsson</i>
11.55	35: Influence of music genre and composition on entertainment noise limits  <i>M Hayne, D Mee, R Rumble (M Lanchester)</i>	47: Measured dynamics of a thin cylindrical shell subject to axial excitation  <i>James A. Forrest</i>		87: Design and implementation of sonars for underwater inspection with ROV  <i>E Sang, X Ji, Y An, J Zhao</i>

12.30 Lunch in the Atrium

**Thursday 10<sup>th</sup> November 2005 - afternoon**

1.30	Session P2 Plenary Address by Joseph Rice "Seaweb acoustic Com/Nav networks" Chair: Chris Gillard Ballroom
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	Session 3A Acoustics of Music  Chair: N Gabriels Ballroom	Session 3B Engineering Noise & Vibration Control Chair: Dr C Howard Abbey 5	Session 3C Workshop: Env Noise Modelling Chair: N Gross Abbey 4A	Session 3D Underwater Acoustics Biological Chair: D Cato Abbey 4B
2.15	17: Musical notes quotient  <i>G.K.Ketkar</i>	95: Improvement of sound absorption of honeycomb panels  <i>J Pan, J Guo, C Ayres</i>	Workshop on Environmental Noise Modelling     _____ Chair #64 TBA	49: High Frequency Biophysical Oceanography in Western Australia <i>N Mortimer, R Kloser, T Koslow</i>
2.40	72: Spectral and temporal changes in singer performance with variation in vocal effort  <i>K Skirlis, D Cabrera, A Connolly</i>	57: Optimisation of design and location of acoustic and vibration absorbers using a distributed computing network <i>C Howard, C Hansen, A Zander</i>		48: Preliminary analysis of single-beam acoustic data of fish spawning aggregations along the Western Australian coastline <i>M Parsons, R McCauley, M Mackie</i>
3.05	80: The role of vocal tract resonances in singing and in playing wind instruments  <i>J Smith, J Wolfe</i>	54: Noise reduction of a rocket payload fairing using tuned vibration absorbers with translational and rotational DOFs <i>C Howard, C Hansen, A Zander</i>	64: Min-norm spatial spectrum based on vector-hydrophone linear array  <i>L Zhang, D Yang</i>	30: An exploratory analysis of non-Poisson temporal behaviour in snapping shrimp noise  <i>M Legg, A Duncan, A Zaknich, M Greening</i>

3.30	Afternoon Tea in the Trade Exhibition Area
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4.00 - 4.55	Session P3 Plenary Forum "The Future for Acoustics in Australia" Chair: Marion Burgess Ballroom
5.00 - 5.30	Australian Acoustical Society <i>Annual General Meeting</i> Ballroom

**Thursday 10th November 2005 - evening**

7.00	Pre-Dinner Drinks TBA
7.30 - 11.00	Conference Dinner Ballroom



**Friday 11<sup>th</sup> November 2005 - afternoon**

	Session 6A Transportation Noise Road <i>Chair: R Langford</i> Ballroom	Session 6B Active Noise & Vibration Control <i>Chair: Dr X Pan</i> Abbey 5	Session 6C Acoustics General <i>Chair: J McLoughlin</i> Abbey 4A	Session 6D Underwater Acoustics Communications <i>Chair: J Rice</i> Abbey 4B
1.15	38: A follow up investigation of the long term road traffic noise attributes of some pavement surfaces in Townsville <i>S Samuels, A Hall</i>	43: Global control of sound radiation from a plate using several adaptive vibration neutralisers with local control schemes <i>M Kidner, R Wright</i>	11: Learning acoustics through the boundary element method: an inexpensive graphical interface and associated tutorials <i>L Brooks, R Morgans, C Hansen</i>	82: The effect of forward error correction on the performance of underwater telemetry systems  <i>D Sweet, J Wang</i>
1.40	39: Queensland Dept of Main Roads pavement surface noise resource manual <i>A Hall, S Samuels</i>	18: Active modal control of hull radiated noise  <i>X Pan, Y Tso, R Juniper</i>	29: Wake and acoustic responses of a circular cylinder to freestream fluctuations <i>R Widjaja, A Ooi, L Chen, R Manasseh</i>	74: Generalised differential encoding for underwater acoustic communication  <i>David W. Bartel</i>
2.05	91: Noise monitoring program for assessing the impact of maximum traffic noise levels  <i>R Treagus, C Beazley</i>	51: Active broad-band control of vibrating panel structures with multiple structural sensors  <i>D Halim, B Cazzolato</i>	77: Acoustic Standards developed by Standards Australia  <i>S Wellham</i>	66: Application of frequency estimation algorithm based on a single vector sensor in underwater acoustic communication <i>G Qiao</i>

2.30

Afternoon Tea in the Trade Exhibition Area

	Session 7A Acoustic/Vibration Measurement/Modelling <i>Chair: G Barnes</i> Ballroom	Session 7B Electro Acoustics <i>Chair: Dr A Zaknich</i> Abbey 5	Session 7C Thermo Acoustics <i>Chair: Dr J Guo</i> Abbey 4A	Session 7D Underwater Acoustics General <i>Chair: Dr C Salgado-Kent</i> Abbey 4B
2.50	14: An optical 3D sound intensity and energy density probe <i>B Cazzolato, D Halim, D Petersen, Y Kahana, A Kots</i>	12: Resolution enhancement of a general HRTF library  <i>J Sodnik, R Susnik, S Tomazic</i>	20: Review of flow-through design in thermoacoustic refrigeration <i>T Bammann, C Howard, B Cazzolato</i>	88: Reduction of the acoustic signature of a submerged vessel <i>P Dylejko, N Kessissoglou, Y Tso, C Norwood</i>
3.15	37: A portable data acquisition system for the measurement of impact attenuation of playground surfacing <i>D Eager, C Chapman</i>	09: A loudspeaker response interpolation model based on 1/12 octave interval frequency measurements <i>A Zaknich</i>	32: Feasibility study of an automotive thermoacoustic refrigerator  <i>L Zoontjens, C Howard, A Zander, B Cazzolato</i>	90: Mobile submarine target strength measurement  <i>A Ghiotto, G Cook</i>
3.40	36: Road traffic noise prediction: an artificial intelligence approach  <i>B Doolan, S Carter</i>	28: Coding of elevation in acoustic image of space  <i>R Susnik, J Sodnik, S Tomazic</i>	33: Development of a low-cost loudspeaker-driven thermoacoustic refrigerator  <i>L Zoontjens, C Howard, A Zander, B Cazzolato</i>	81: Development of an experimental methodology for assessing the impact of noise on marine mammals <i>D Cato, M Noad, D Stokes, P Miller, N Biassoni, E Kniest, G Deane, J Noad</i>

4.05 -  
4.15

Conference Close  
*Chair: Dr Alec Duncan*  
Ballroom

5.00

Charter coach departs for Perth Domestic Airport and Perth CBD