

# NZ SOCIETY FOR EARTHQUAKE ENGINEERING INC

## Technical Conference and AGM

### War Memorial Centre, Napier

Friday/Sunday 15-17 March 2002

#### CONFERENCE PROGRAMME AND TABLE OF CONTENTS

##### FRIDAY 15 MARCH

12.30	Registration	
1.20	Welcome and Conference Opening	
1.30	Welcome to Hawkes Bay	
<b>Session 1</b>	<b>Chair: Richard Sharpe</b>	
1.45-3.30		
	1.1 Lifelines mitigation in Hawkes Bay	Evans, N.L.
	1.2 Improvements in research knowledge: a challenge for engineering	Falconer, R.K.H.
	1.3 Earthquake risk reduction actions for New Zealand	Dowrick, D.J.
	1.4 The role of earthquakes in developing an indigenous New Zealand architecture	Sinclair, J.
	1.5 The magnitude 8.3 Arequipa, Peru earthquake and tsunami: closing a gap in our understanding of earthquake hazard	Stirling, M.W, Langridge, R.M., Benites, R. & Aleman, H.
3.30 - 3.50	Afternoon Tea	
<b>Session 2</b>	<b>Chair: Andrew King</b>	
	2.1 Guidelines for the use and development of land close to active earthquake faults	Nathan, S., Stirling, M., Brunson, D. & Webb, P.
	2.2 Effective ways to model earthquake risk	Smith, W.D. & Cousins, W.J.
	2.3 Strong-motion instrumentation of buildings in New Zealand	Deam, B.L. & Cousins, W.J.
	2.4 Gujarat earthquake, January 2001 – lessons to be learnt	Walls, K.L. & Mujoo, I.
	2.5 Kiwi technology to protect Indian hospital from earthquakes	Sharpe, R.D.
5.45 – 6.30	NZSEE Annual General Meeting	
6.45	Conference Reception followed by dinner at the War Memorial Centre	

## SATURDAY 24 MARCH

### Session 3 Chair: Bruce Deam

8.30 – 10.30

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| 3.1 EQC's use of computer modelling in a catastrophe response              | Middleton, D.A.                            |
| 3.2 The Earthquake Commission's earthquake insurance loss model            | Shephard, R.B., Spurr, D.D. & Walker, G.R. |
| 3.3 Inelastic response of buildings subject to revised code ground motion  | King, A. Davidson, B. & McVerry, G.        |
| 3.4 Seismic design issues and strategies using the proposed loadings code  | Bell, D., & Davidson, B.                   |
| 3.5 Study group on seismic design of storage tanks summary progress report | Whittaker, D.                              |

10.30 – 11.00 Morning Tea

### Session 4 Chair: David Middleton

11.00 – 12.30

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|--|---|
| 4.1 The role of engineers and scientists in reducing the impact of urban disasters | Angus, L.B. & Dance, R.J.               |
| 4.2 Working party on integrated planning for earthquake response – 2001 report     | Brunsdon, D.                            |
| 4.3 Observations on the role of engineers following the Nisqually earthquake       | Duncan, D.                              |
| 4.4 Urban search and rescue and the role of the engineer                           | McGuigan, D.M., Deam, B.L. & Bull, D.K. |
| 4.5 Project Phoenix: preparing to respond to a major earthquake in Wellington      | O'Kane, K.                              |

12.45 Light lunch followed by optional leisure activities

6.45 Dinner at Brookfields vineyard

## SUNDAY 17 MARCH

### Session 5 Chair: Kevin O'Kane

8.30 – 10.30

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|--|---|
| 5.1 Seismic security of state highway bridges: screening and retrofit – progress summary | Chapman, H.E., Kirkcaldie, D.E., Lauder, M.K. & Oakden, G.J.      |
| 5.2 Seismic retrofit of highway bridge foundations using micropiles                      | Turner, J., McManus, K. & Armour, T.                              |
| 5.3 Earthquake response of building parts  | Shelton, R.H., Park, S.G. & King, A.B.                            |
| 5.4 Modelling the spread of post-earthquake fire in Wellington city                      | Cousins, W.J., Heron, D.W., Mazzoni, S., Thomas, G.C. & Lloyd, D. |

- 5.5 Seismic safety of schools in Kathmandu Valley, Nepal: problems and opportunities Bothara, J.K., Dixit, A.M., Nakarmi, M., Pradanang, S.B. & Thapa, R.C.
- 5.6 Study group on earthquake risk buildings: progress report 2001/02 Hopkins, D.C. & Brunson, D.

10.30 – 10.50 Morning Tea

**Session 6 Chair: Kevin McManus**

10.50 – 12.30

- 6.1 Calibrated displacement prediction accuracy using the substitute structure method Edwards, M.R., Wilson, J.L. & Lam, N.T.K.
- 6.2 Accounting for seismic risk in financial analysis of property investment Beck, J.L., Porter, K.A. & Shaikhutdinov, R.
- 6.3 The influence of foundation conditions on the earthquake response of two tanks Larkin, T.J.
- 6.4 Is there a relationship between observed felt intensity and parameters from strong motion instrument recordings? Davenport, P.N. & Dowrick, D.J.
- 6.5 Influence of hysteretic form on seismic behaviour of structures Judi, H., Fenwick, R.C. & Davidson, B.J.

**12.30 Best Student Presentation Award**

**Conference Closure**

**Poster Papers**

- 7.1 Effects of microzoning and foundations on damage to houses in the Inangahua earthquake. Dowrick, D.J., Rhoades, D.A. & Davenport, P.N.
- 7.2 Seismic performance of r/c perimeter frames with slabs containing prestressed units. Lau, D.B.N., Fenwick, R.C. & Davidson, B.J.
- 7.3 New source spectral model and strong ground motion simulation of the 1994 M6.7 Northridge earthquake. Wang, G., Tao, X. & Xie, L.

*Please note that the views contained in these papers are those of the individual authors and do not necessarily reflect the views of NZSEE.*

Further copies of this volume priced at \$56.25 (GST inclusive) are available from:

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