



SEISMOLOGY
RESEARCH
CENTRE



Pre-Conference Seismologist Meeting

Australian Seismologists Meeting

Friday 15 November 2013

The Old Woolstore Hotel
1 Macquarie Street
Hobart

Theatrette

8.30am - 11.30am



AEES 2013 – Program, Day 1

Friday 15 November 2013

12.00 **Registration** (register at 12 and then head into the Merino Room for a light lunch before the conference commences at 12.55pm)

All conference sessions will be held in the Theatrette

12.55pm **Conference Opening** – Hong Hao

Session One – Chair: Professor Hong Hao

1.00pm **Keynote** – **Marlene Kanga**, National President, Engineers Australia
Modelling and Methods for Seismic Risk Assessment and Mitigation

1.40pm **Kevin McCue** – Australian Seismological Centre, Jamison, ACT
Some Historical Earthquakes in Tasmania with implications for Seismic Hazard assessment

1.55pm **Xiaoyang Qin** - Department of Civil & Environmental Engineering, Faculty of Engineering, The University of Auckland, New Zealand
Prediction of seismic induced forces in an upliftable structure

2.10pm **George Walker** – Aon Benfield Analytics Asia Pacific, James Cook University, Macquarie University
Disaster Risk Reduction and the Earthquake Code - A Disconnect

2.25pm **Poster Talks**

Hong Hao - School of Civil & Resource Engineering, The University of WA, Crawley, Western Australia
Adequacy of Required Separation Distance in AS1170.4-2007 to Avoid Seismic Pounding between Adjacent Buildings

Hong Hao - School of Civil & Resource Engineering, The University of WA, Crawley, Western Australia
Torsional Responses of Building Structures to Earthquake Loadings Defined in AS1170.4-2007

Dmytro Dizhur - Department of Civil & Environmental Engineering, The University of Auckland, New Zealand
Performance of posttensioned seismic retrofit of two stone masonry buildings during the Canterbury earthquakes

Dominik Duschlbauer - SLR Consulting Australia Pty Ltd, Lane Cove, NSW
Changing the Language of Induced Micro-Seismicity

Neaz Sheikh – School of Civil, Mining & Environmental Engineering, University of Wollongong, NSW
Evaluation of Damping Modification Factors for Seismic Response Spectra

Hugh Glanville - Geoscience Australia, Canberra, ACT
Australian Earthquakes 2012

Mohd Zamri Ramli - Faculty of Civil Engineering, Universiti Teknologi Malaysia
Drift Performance of Bridge Pier with Various Rubber Bearing Design

2.30-4.30pm Partners High Tea @ Wrest Point
Meet in lobby of Old Woolstore Hotel at 2.00pm
(return transport provided)

AEES 2013 – Program, Day 1 cont.

3.00pm **Afternoon Tea & Poster Session** (Merino Room)

Session Two – Chair: Adjunct Professor Kevin McCue

3.30pm **Keynote – Kazuhiko Kasai**, Professor, Structural Engineering Research Centre, Tokyo Institute of Technology, Japan

Seismic Performance of Building Protective Systems: Evaluations from Full-Scale Lab Tests and Actual Earthquake Observations

4.10pm **Paul Thenhaus** – EQECAT, Inc, Oakland CA, USA

Earthquake Hazard Model for Loss Estimation in Australia Using the 2012 GA Hazard Data

4.25pm **Massoud Sofi** – Department of Infrastructure Engineering, The University of Melbourne, Victoria

The Effects of Building Parameters on Seismic Inter-Storey Drifts of Tall buildings

4.40pm **Spiro Spiliopoulos** – Geoscience Australia

Locating Australian Earthquakes Using the Australian Seismological Reference Model (AuSREM)

4.55pm **Poster Talks**

Jonathan Liang - GHD Pty Ltd, Perth, WA

Probabilistic Seismically-induced Liquefaction Evaluation

Sushil Khatiwada - Dept of Civil & Environmental Engineering, The University of Auckland, NZ

An Experimental Study on Pounding Force between Reinforced Concrete Slabs

Vidal Paton-Cole - Dept of Infrastructure Engineering, The University of Melbourne

Analysis of brick veneer walls on steel frame subjected to seismic loads

Bipin Shrestha - School of Civil & Resource Engineering, The University of WA

Pounding and Unseating Damage Mitigation on Bridge Structures subjected to Spatially Varying Ground Motions using Restrainers and Rubber Bumpers

5.15pm End of Sessions Day 1

6.30pm Bus departs Old Woolstore Hotel

7.05pm Arrive Peppermint Bay

Pre-Dinner drinks

Dinner

Dress: Smart Casual

9.15pm Bus departs Peppermint Bay

9.50pm Bus arrives Old Woolstore Hotel

AEEs 2013 – Program, Day 2

Saturday 16 November 2013

8.00am Registration/Arrival (Tea/Coffee/OJ)

Session Three – Chair: Professor Michael Griffith

8.30am **Keynote - Charles Clifton** – Associate Professor, Department of Civil & Environmental Engineering, The University of Auckland, New Zealand
Lessons Learned for Steel Seismic Design from the 2010/2011 Canterbury Earthquake Series

9.10am **Peter McBean** – Wallbridge & Gilbert, Adelaide, South Australia
Seismic design principles and methodology for the new Royal Adelaide Hospital

9.25am **Kevin Walsh** – Department of Civil & Environmental Engineering, The University of Auckland, New Zealand & Department of Property, Auckland Council, Auckland, New Zealand
Seismic Assessment and Retrofit Prioritisation of Auckland Council's Property Portfolio

9.40am **Hing-Ho Tsang** – Swinburne University, Hawthorn, Victoria
A Design Spectrum Model Featuring Resonant-like Soil-Amplification

9.55am **Poster Talks**

Chern Kun - Department of Civil & Environmental Engineering, The University of Auckland, New Zealand
An Experimental Investigation of the Seismic Response of a Bridge due to Simultaneous Horizontal and Vertical Excitations

Nam Nguyen - Department of Civil, Structural & Environmental Engineering, University of Buffalo, NY, USA
In-plane shear response of steel-concrete composite shear walls: results of experiments

Libo Yan - Department of Civil & Environmental Engineering, The University of Auckland, New Zealand
Seismic performance of flax FRP encased coconut fibre reinforced concrete column

Janaka Wepitiya - School of Engineering & Science, Victoria University, Melb
Coda Q for the Sri Lankan Precambrian crust

Vic Dent - University of Sydney, Camperdown, NSW
Using the "PSN" seismograph network in southwest Australia to improve earthquake locations in the region

Rojit Shahi - Dept of Infrastructure Engineering, The University of Melbourne
Realistic Modelling of Cold-Formed Steel in Domestic Constructions for Performance Based Design

Kevin McCue - Central Queensland University, Rockhampton, Qld
Darwin Northern Territory - an Earthquake Hazard

Gary Connah - Ancon Building Products, Mount Druitt, NSW
Prequalification of Mechanical Splices for Reinforcing Bars in Seismic Conditions

10.35am **Morning Tea & Poster Session** (Merino Room)

Session Four – Chair: Gary Gibson

11.00am **David Love**, Department of Manufacturing, Innovation, Trade, Resources & Energy, Adelaide, SA
Do Earthquakes Occur on Fault Lines?

11.15am **Nick Haritos** - Faculty of Engineering and Industrial Sciences, Swinburne University of Technology, Hawthorn, Victoria
Floor Vibrations Induced by Forklifts

AEES 2013 – Program, Day 2 cont.

- 11.30am **Minly So - Arup Pty Ltd, Sydney, NSW**
Determination of Small Strain Soil Properties in Hong Kong by Geophysics Testing
- 11.45am **Ryan Hoult - Dept of Infrastructure Engineering, The University of Melbourne**
Ground Motion Modelling and Response Spectra for Australian Earthquakes
- 12.00pm **Ali Altheeb - Dept of Civil & Environmental Engineering, The University of Melbourne**
The Development of Strain Penetration in Lightly Reinforced Concrete Shear Walls
- 12.15pm **Hyeuk Ryu - Vulnerability, Resilience and Mitigation Section, Geoscience Australia, Canberra ACT**
An Enhancement of Earthquake Vulnerability Models for Australian Residential Buildings Using Historical Building Damage
- 12.30pm **Bill Jordan - Bill Jordan & Associates Pty Ltd, Newcastle, NSW**
Induced building vibrations - can we calculate responses?
- 12.45pm **Michael Andre Phillips - EPSO Seismic, Coonabarabran, NSW**
Measuring Bridge Characteristics to Predict their Response in Earthquakes
- 1.00pm **Lunch** at Conference venue (for non tour participants)
- 1.15pm Optional Tour - Callington Mill
Bus departs Old Woolstore Hotel
(take-away lunches provided)
- 2.30pm Bus arrives Callington Mill
- 3.45pm Depart Callington Mill
(stopover at Richmond Bridge if time permits)
- 4.30pm MR1 MONA Ferry departs Brooke St Pier
- 5.00pm Ferry docks at MONA & guests enjoy self guided tour of MONA using O device
- 5.15pm Tour group arrives Old Woolstore Hotel/Marina (depending on time)
- 5.30pm MR1 MONA Ferry departs Brooke St Pier
- 6.00pm Ferry docks at MONA
MONA galleries close
Guests gather on the Tennis Court & are escorted to Eros Room
- Welcome drinks served on the Ether Lawns
- 6.30pm Guests are invited to their seats
- 6.45pm Churrasco BBQ is served
- 9.30pm Guests depart via MR1 MONA Ferry

AEES 2013 – Program, Day 3

Sunday 17 November 2013

8.00am **AEES Annual General Meeting** (Theatrette)

Session Five – Chair: Associate Professor Nelson Lam

9.00am **Keynote – Paul Somerville**, URS Corporation
Assessment of Seismic Design Motions at Low Probabilities: Comparing Australia and New Zealand

9.40am **Abdulrahman Albidah** – Dept of Civil & Environmental Engineering, The University of Melbourne
A Reconnaissance Survey on Shear Wall Characteristics in Regions of Low- to-Moderate Seismicity

9.55am **Hadi Ghasemi** – Geoscience Australia, Canberra, ACT
Aftershock probability model for Australia

10.10am **Beatriz Estrada** – Pells Sullivan Meynink, Engineering Consultants, North Ryde, NSW
Application of Tectonic Geomorphology in Earthquake Hazard Assessments

10.25am **Bob Semple** – Coffey Geotechnics, Burswood, WA
Relevance and Reliability of Current Liquefaction Criteria

10.40am **Poster Talks**

Kevin McCue - Central Queensland University, Rockhampton, Qld
50 years since the Skopje 1963 earthquake – Implications for Australian Building Standards

Wei Yuen Loo - Dept of Civil and Environmental Engineering, University of Auckland, NZ
A new shear key for rocking timber shear walls

Yuanzhi Chen - Dept of Civil and Environmental Engineering, Faculty of Engineering, The University of Auckland, NZ
Experimental Investigation of Bridge with Footing Uplift under Near-fault Earthquake

10.55am **Morning Tea & Poster Session** (Merino Room)

Session Six – Chair: Paul Somerville

11.20am **Ken Campbell** – EQECAT, Inc, Oakland CA, USA
Updated NGA-West2 Ground Motion Prediction Equations for Active Tectonic Regions Worldwide

11.35am **Neaz Sheikh** – School of Civil, Mining and Environmental Engineering, University of Wollongong, NSW
Dynamic Properties of Sand-Tyre Chip Mixtures

11.50am **Tim Mote** – Arup Pty Ltd, Sydney, NSW
Sensitivity of Liquefaction Triggering Analysis to Earthquake Magnitude

12.05pm **Shane Turner** – Building Management Division, Dept of Planning, Transport & Infrastructure, SA
South Australia's Earthquake Risk Assessment process using the National Emergency Risk Assessment Guidelines

12.20pm **Kaiming Bi (Hong Hao)** – School of Civil & Resource Engineering, The University of WA
Progressive Collapse Analysis of Hongqi Viaduct: a multi-span simply-Supported Bridge

AEES 2013 – Program, Day 3 cont.

- 12.35pm **Nick Haritos** – Faculty of Engineering and Industrial Sciences, Swinburne University of Technology, Hawthorn, Victoria
Cyclic Testing Methodology for Temporary Propping of Tilt-up Panels for Wind Loading Effects
- 12.50pm **Natalie Balfour** – Research School of Earth Sciences, The Australian National University, Canberra, ACT
The Australian Seismometers in Schools Network: a multipurpose network for education, research and monitoring
- 1.05pm Discussion & Wrap up – Professor Hong Hao
- 1.20pm Conference Closes