



SEISMOLOGY
RESEARCH
CENTRE



Pre-Conference Seismologist Meeting

Australian Seismologists Meeting

Friday 24 November 2017

Geoscience Australia
101 Jerrabomberra Avenue
Symonston, ACT

9.00am – 12.00pm

This Australian Seismologists meeting is separate to the main conference. Anyone may attend. There is no cost, however please indicate your intention to attend to Adam Pascale at adam.pascale@src.com.au



AEES 2017 – Program, Day 1

Friday 24 November 2017

- 12.00 **Registration**
- Register from 12nn. A light standing lunch will be available from this time.
- 12.50pm **Welcome** – Peter McBean
- 12.55pm **Geoscience Australia Welcome** – Andy Barnicoat, Chief, Community Safety & Earth Monitoring Division
- Session One** – Chair: Peter McBean
- 1.00pm **Keynote** – **Brendon Bradley**, *Professor of Earthquake Engineering, University of Canterbury. Deputy Director of QuakeCoRE: The NZ Centre for Earthquake Resilience*
On-going challenges in physics-based ground motion prediction and insights from the 2010-2011 Canterbury and 2016 Kaikoura, New Zealand earthquakes (Paper 406)
- 1.40pm **Dee Ninis** – *Earthquake Scientist/Seismology Research Centre*
Upper plate deformation and its relationship to the underlying Hikurangi subduction interface, southern North Island, New Zealand (Paper 459)
- 1.55pm **Ryan Hoult** – *Senior Tutor/The University of Melbourne, Victoria, Australia*
Seismic Performance of Lightly Reinforced and Unconfined C-shaped Walls (Paper 398)
- 2.10pm **Tamarah King** – *PhD Candidate, The University of Melbourne, Victoria, Australia*
Near-source strong ground motions inferred from displaced geologic objects (Paper 460)
- 2.25pm **Baris Binici** – *Professor/Middle East Technical University, Turkey*
Behaviour of AAC Infilled RC Frames under In Plane and Out of Plane Seismic Demands (Paper 417)
- 2.40pm **Poster Talks**
- Saim Raza** – *PhD Student/Swinburne University of Technology, Hawthorn, Victoria, Australia*
Lateral Load-Drift Model for Normal and High-Strength Reinforced Concrete Columns (Paper 402)
- Andrea Thom** – *Duty Seismologist/Geoscience Australia, ACT, Australia*
Australian Earthquakes 2016 (Paper 409)
- Gonzalo Barrios** – *PhD Student/The University of Auckland, Auckland, New Zealand*
Wave Propagation between Adjacent Structures (Paper 438)
- Kevin McCue** – *Adjunct Professor/Central Queensland University, Rockhampton, QLD, Australia*
Creating an Earthquake Catalogue for 1911; Local, National and World (Paper 447)
- Vic Dent** – *University Associate/Curtin University, Perth, WA, Australia*
Earthquake clusters in southwest Australia seismic zone, June 2016 – May 2017 (Paper 458)
- 3.05pm **Afternoon Tea & Poster Session**

AEEES 2017 – Program, Day 1 cont.

Session Two – Chair: James Daniell

- 3.30pm **Paul Somerville** – Principal Seismologist/AECOM
Conditions under which identified faults contribute significantly to seismic hazard in Australia (Paper 407)
- 3.45pm **Kaiming Bi** – Senior Lecturer/Curtin University, Bentley, WA, Australia
Influence of column types on the seismic responses of bridge structures (Paper 411)
- 4.00pm **Baris Binici** – Professor/Middle East Technical University, Turkey
Seismic Performance Evaluation of Concrete Gravity Dams by Using Pseudo Dynamic Testing and Simulations (Paper 416)
- 4.15pm **Hadi Ghasemi** – Seismologist/Geoscience Australia, Symonston, ACT, Australia
Testing the sensitivity of new Australian empirical magnitude conversion equations on seismic hazard analyses (Paper 419)
- 4.30pm **Jason Lin** – Undergraduate Student/The University of Auckland, Auckland, New Zealand
Experimental Analysis of the Seismic Response of Cluster Structures (Paper 422)
- 4.45pm **Poster Talks**
- Vic Dent** – University Associate/Curtin University, Perth, WA, Australia
Investigation of an earthquake cluster near Corrigin, southwestern Australia, July 2017 (Paper 391)
- Hugh Glanville** – Geophysical Data Team Leader/Senior Duty Seismologist/Geoscience Australia, Symonston, ACT, Australia
Seismic Monitoring at Geoscience Australia (Paper 399)
- Sania Tariq** – Bachelor Student/Capital University of Science & Technology, Islamabad, Pakistan
Seismic Risk Assessment of Residential RCC Buildings with Street Survey in Urban Areas of Developing Countries (Paper 423)
- Kainat Batool** – Bachelor Student/Capital University of Science & Technology, Islamabad, Pakistan
Seismic Vulnerability Assessment of Brick Masonry Houses with Street Survey in Developing Countries (Paper 425)
- Lisa-Mareike Ottenhaus** – PhD Candidate/University of Canterbury, Christchurch, New Zealand
Ductility of large-scale dowelled CLT connections under monotonic and cyclic loading (Paper 405)
- 5.10pm End of Sessions Day 1
- 7.00pm **Conference Dinner** (included in full registrations, student & retiree registrations)
- Lake George Winery
- 6.30pm Bus departs Canberra pick up points (pick up points will be advised)
Short stop at Weereewa Lookout (Dan Clark talk/observations)
7.30pm drinks/canapes
8.00pm dinner served
- Dinner talk - Dan Clark**, Geoscience Australia - Potential geologic sources of seismic hazard in Australia's south-eastern highlands: what do we know? (Paper 420)

Dress: Smart casual. Partners welcome but pre-registration essential.

AES 2017 – Program, Day 2

Saturday 25 November 2017

8.15am Registration/Arrival (Tea/Coffee)

Session Three – Chair: Nelson Lam

8.45am **Trevor Allen** – Leader of the National Seismic Hazard Assessment (NSHA) project, Geoscience Australia, Symonston, ACT, Australia
An updated national seismic assessment for Australia: Are we designing for the right earthquakes? (Paper 433)

9.25am **Doug Jenkins** – Interactive Design Services, Hornsby, NSW, Australia
Design for Extreme Events, Coping with Conflicting Demands; Limit States, Legislation and Black Swans (Paper 424)

9.40am **Tim Mote** – Associate Principal/Arup Sydney, NSW, Australia
Data Analytics Applied to Seismic Disaster Risk Reduction for Building Portfolios (Paper 442)

9.55am **Jeffrey Chiang** – Dean & Professor/SEGi University, Malaysia
Intricacies of addressing distant and local earthquakes in Malaysia in the official design standard EC8 Malaysia NA (Paper 400)

10.10am **Ryan Hoult** – Senior Tutor/The University of Melbourne, Parkville, Australia
Seismic Assessment of the RC building stock of Melbourne from rare and very rare earthquake events (Paper 413)

10.25am **Mehair Yacoubian** – PhD Candidate/The University of Melbourne, Parkville, Australia
Seismic Performance Assessment of Structural Walls Supporting Towers In Tall Buildings (Paper 457)

10.40am **Alireza Mehdipanah** – PhD Candidate/The University of Melbourne, Parkville, Australia
Methods of Structural Analysis of Buildings Incorporating Higher Modes Effects (Paper 463)

10.55am **Poster Talks**

Zhenduo Yan – PhD Candidate/The University of Auckland, New Zealand
Dynamic response of interlocking structures due to harmonic ground motions (Paper 462)

Bruna Rocha – Master of Engineering Science Student/Edith Cowan University, Joondalup, WA, Australia
Sensitivity of the Strut Model for an RC Infill-Frame to the Variations in the Infill Material Properties (Paper 430)

Vic Dent – University Associate/Curtin University, Perth, WA, Australia
A new interpretation of the seismicity of the Mukinbudin/Bonnie Rock area of Western Australia (Paper 448)

Rohit Tiwari – PhD Student/The University of Melbourne, Parkville, VIC, Australia
Assessment of Displacement Demand for Earth Retaining Structures (Paper 453)

Chao Li – PhD Student/Curtin University, Bentley, WA, Australia
Experimental study of precast BFRP-wrapped segmental concrete columns with external ED device under eccentric cyclic loading (Paper 461)

11.20am **Morning Tea & Poster Session**

AEES 2017 – Program, Day 2 cont.

Session Four – Chair: John Wilson

- 11.50am **Keynote – Michael Griffith** – Professor-School of Civil, Environmental & Mining Engineering, University of Adelaide, Adelaide, SA, Australia
Seismic Performance Expectations for Australian Unreinforced Masonry Buildings (Paper 466)
- 12.30pm **Francisco Galvez** – PhD Candidate/The University of Auckland, Auckland, New Zealand
Discrete Element Modelling to Predict Failure Strength of Unreinforced Masonry Walls (Paper 440)
- 12.45pm **Mark Leonard** – Senior Seismologist/Geoscience Australia, Canberra, ACT, Australia
Using hazard curves to examine the sampling of epistemic uncertainty across the Australian continent (Paper 434)
- 1.00pm **Jonathan Griffin** – Geophysical Hazards Modeller/Geoscience Australia, Symonston, ACT, Australia
Performance of national scale smoothed seismicity estimates of earthquake activity rates (Paper 408)
- 1.15pm **Sriskanthan Srisangeerthan** – PhD Student/Swinburne University of Technology, Melbourne, Australia
Influence of Diaphragm Flexibility on the Seismic Performance of Multi-Story Modular Buildings (Paper 465)
- 1.30pm **Lunch** at Conference venue
- 2.30pm AEES Annual General Meeting

6.45pm Bus departs for National Arboretum (pick up points to be advised)

7.00pm Pre-dinner drinks & Canapes

7.30pm Dinner served

Presentation of Charles Bubb Medal

Dress: Smart casual. Partners welcome but pre-registration essential.

AEEES 2017 – Program, Day 3

Sunday 26 November 2017

Session Five – Chair: Trevor Allen

- 9.00am **Keynote** – **John Wilson** – Professor, Pro-Vice Chancellor, Swinburne University of Technology, Hawthorn, Victoria, Australia
Comprehensive Experimental Testing Program of Limited Ductile Reinforced Concrete Walls (Paper 467)
- 9.40am **Anita Amirsardari** – PhD Candidate/The University of Melbourne, Parkville, Australia
Seismic fragility curves for non-ductile RC Buildings including the response of gravity frames (Paper 455)
- 9.55am **Mustafa Al-Mashaykhi** – PhD Candidate/Swinburne University of Technology, Melbourne, Australia & Faculty Member, Tikrit University, Iraq
Seismic Design Methods for Steel Concentric Braced Frame: State-of-the-art Review (Paper 454)
- 10.10am **Gonzalo Barrios** – PhD Candidate/The University of Auckland, Auckland, New Zealand
Dynamic response of adjacent structures in earthquakes (Paper 437)
- 10.25am **Scott Menegon** – Swinburne University of Technology, Melbourne, Vic, Australia
Experimental testing of precast connections for jointed precast building cores (Paper 426)
- 10.40am **Xiaoyu Zhang** – PhD Candidate/Harbin Institute of Technology, Harbin, Heilongjiang, China
Effect of lateral load on the pile's buckling instability in liquefied soil (Paper 410)
- 10.55am **Poster Talks**
- Shivang Pathak** – PhD Student/University of New South Wales, Canberra, Australia
Energy Formulation for Seismic Collapse Assessment of RCC Structures: Improvements in Performance Design (Paper 415)
- Amir Hayat** – BS Student/Capital University of Science & Technology, Islamabad, Pakistan
Use of Pine-Needle Reinforced Composites in Kashmir, Pakistan - A Critical Review (Paper 450)
- 11.05am **Morning Tea & Poster Session**

Session Six – Chair: Paul Somerville

- 11.35am **Kevin McCue** – Adjunct Professor/Central Queensland University, Rockhampton, QLD, Australia
Historical Earthquakes; The 1920s in South Australia (Paper 446)
- 11.50am **Ghazanfar Ali Anwar** – Research Assistant/United Arab Emirates University, Al-Ain, UAE
Earthquake Risk Assessment using PSHA in ArcGIS for developing countries - An easy and quick approach (Paper 451)
- 12.05pm **Yuxiang Tang** – Doctoral Researcher/The University of Melbourne, Victoria, Australia
Framework of a new approach to ground motion predictions (Paper 456)
- 12.20pm **Jack Pappin** – Arup Fellow/Arup Adelaide, SA, Australia
Arup NSHM- Australian National Seismic Hazard Model (Paper 443)
- 12.35pm **Chao Li** – PhD Student/Curtin University, Bentley, WA, Australia
Numerical study on the precast concrete filled steel tubular (CFST) segmental column under biaxial cyclic loadings (Paper 444)
- 12.50pm **Best Student Paper Award**
- Discussion & Wrap up** – Peter McBean
- 1.00pm **Conference Closes**