



AEES 2021 – Draft Program, Day 1

Thursday 25 November 2021

Session 1

- 8.50 – 8.59am **Welcome** – Trevor Allen, AEES President
- 9.00 – 9.45am **Keynote** – **Kenneth J. Elwood**, *Professor of Earthquake Engineering, Department of Civil and Environmental Engineering, University of Auckland, New Zealand*
Hollow-core floors in earthquakes - assessment and retrofit (Paper No 46)
- 9.46 – 10.00am **Q&A** with Ken Elwood
- 10.00 – 10.15am **Ryan Hault** – *Postdoctoral Researcher, Institute of Mechanics, Materials & Civil Engineering, UCLouvain, Louvain-la-Neuve, Belgium*
Residual displacements of flexure-governed RC walls detailed with conventional steel and shape memory alloy rebars (Paper No 37)
- 10.16 – 10.31am **Hong Hao** – *John Curtin Distinguished Professor, Center for Infrastructural Monitoring and Protection, School of Civil and Mechanical Engineering, Curtin University, WA*
Damping properties of metaconcrete structures under transverse excitation (Paper No 38)
- 10.32 – 10.47am **Lewis Gooch** – *PhD Student, Centre for Infrastructure Performance and Reliability, The University of Newcastle, Callaghan, NSW*
Design of Experimental Program and Preliminary Finite Element Analyses of Unreinforced Masonry Shear Wall (Paper No 10)
- 10.47 – 11.00am **Coffee break**
- 11.00 – 11.15am **Yu Nie** – *PhD Student, School of Civil, Environmental and Mining Engineering, University of Adelaide, SA*
Interface based damage-plasticity model for predicting the compressive failure of masonry under monotonic and cyclic loads (Paper No 17)
- 11.16 – 11.31am **Xiangzhe Weng** – *PhD Student, Department of Infrastructure Engineering, University of Melbourne, Parkville, VIC*
Seismic Performance of Precast RC Walls in Australia: Literature Review (Paper No 18)

Poster Talks

- 11.32 – 11.37am **Hugh Glanville** – *Team Leader, Geoscience Australia, ACT*
Preservation of Historical Australian Seismograms, Magnetograms and Geomagnetic Absolute Observations (Paper No 22)
- 11.38 – 11.43am **David Love** – *Seismological Association of Aust Inc., SA*
Building Vibration Monitoring (Paper No 1)
- 11.44 – 11.49am **Vic Dent** – *University Associate, Curtin University, Perth, W.A.; Honorary Research Associate, The UWA Institute of Agriculture, UWA, Perth*
Clustered seismicity in southwestern Western Australia July 2020 -June 2021 (Paper No 36)
- 11.50 – 11.55am **Behrang Sarrafi** – *Senior Structural Engineer, ACSES Engineers, Strathfield, NSW*
Wall and column design and detailing comparison according to new Australian Standard AS3600:2018 (Paper No 15)
- 12.00 - 12.15pm **Q&A Session 1**
- 12.15 – 1.15pm **Lunch Break**

Session 2

Update to AS1170.4 Commentary

- 1.15 – 1.25pm **Introduction – Scott Menegon, Adjunct Industry Fellow, Department of Civil and Construction Engineering, Swinburne University of Technology, Hawthorn, VIC**
- 1.26 – 1.41pm **Peter McBean – Joint Managing Director - WGA, Adelaide, SA**
AS1170.4 Special Study Requirements for Importance Level 4 Buildings and Facilities (Paper No 21)
- 1.42 – 1.52pm **Jaroslav Vaculik – Research Associate, School of Civil, Environmental and Mining Engineering, University of Adelaide, SA**
Guidelines for the Retrofit of URM Structures
- 1.55 – 2.15pm **Q&A Session 2** with Scott, Peter & Jaroslav

Session 3

The Mw5.9 Woods Point Earthquake

- 2.20 – 2.40pm **Invited - Dee Ninis – Earthquake Geologist, Seismology Research Centre, Richmond, VIC**
The Mw5.9 Woods Point earthquake and aftershock sequence (Paper No 43)
- 2.41 – 2.51pm **David Love – Seismological Association of Aust Inc., SA**
2021-09-21 Mansfield Earthquake Focal Mechanism and first arrivals (Paper No 40)
- 2.52 – 3.07pm **Ryan Hault – Postdoctoral Researcher, Institute of Mechanics, Materials & Civil Engineering, UCLouvain, Louvain-la-Neuve, Belgium**
The MW 5.9 Woods Point Earthquake: A Preliminary Investigation of the Ground Motion Observations (Paper No 45)
- 3.08 – 3.20pm **Invited - Jaroslav Vaculik – Research Associate, School of Civil, Environmental and Mining Engineering, University of Adelaide, SA**
Observed performance of unreinforced masonry in the September 2021 Victoria earthquake (and the curious case of Betty's Burgers) (Paper No 39)
- 3.21 – 3.36pm **Paul Somerville – Risk Frontiers, St. Leonards, NSW**
Modelled losses of the 2021 Mansfield earthquake and comparison with other Australian earthquakes (Paper No 41)
- 3.37 – 3.42pm **Cvetan Sinadinovski – Global Seismics, Australia**
Focal depth of the magnitude Mw5.9 Woods Point earthquake on 22 September 2021, from seismograms recorded on the other side of the Earth (Paper No 44)
- 3.45 – 4.15pm **Q&A Session 3** with Presenters



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AEES 2021 – Draft Program, Day 2

Friday 26 November 2021

Session 4

- 9.00 – 9.05am **Welcome** – Trevor Allen, AEES President
- 9.06 – 9.51am **Keynote** – **Mark Quigley** *Associate Professor of Earthquake Science, School of Geography, Earth, & Atmospheric Sciences, University of Melbourne, Parkville, VIC*
Environmental effects and the geomechanics of Australian earthquakes (Paper No 47)
- 9.53 – 10.08am **Q&A** with Mark Quigley
- 10.09 – 10.24am **Gregory Brenn** – **Duty Seismologist, Geoscience Australia, Symonston, ACT**
Automated Relocation of the Petermann Ranges Aftershock Sequence (Paper No 14)
- 10.25 – 10.40am **Timothy Mote** – **Associate Principal, Arup, Sydney, NSW**
Multi-Hazard Seismic Risk Assessment for Tongatapu, Tonga (Paper No 3)
- 10.41 – 10.56am **David Love** – **Seismological Association of Aust Inc., SA**
A Review of the ML(SA) Greenhalgh Magnitude Scale (Paper No 5)
- 10.57 – 11.12am **Phil Cummins** – **Seismologist, Geoscience Australia, Symonston, ACT**
Towards Improving ML Estimates for Local Earthquakes Made by Geoscience Australia's Earthquake Monitoring System (Paper No 9)
- 11.12 – 11.30am **COFFEE BREAK**
- 11.30 – 11.45am **Sharmin Shamsalsadati** – **Seismologist, Geoscience Australia, ACT**
Beetaloo Sub-basin Baseline Seismic Monitoring Project – Phase 1 Observations (Paper No 12)
- 11.46am – 12.01pm **Hadi Ghasemi** – **Seismologist, Geoscience Australia, ACT**
Engineering Ground-Motion Database for Western and Central Australia (Paper No 19)
- 12.02 – 12.17pm **Prashidha Khatiwada & Yiwei Hu** – **Department of Infrastructure Engineering, The University of Melbourne, Parkville, VIC**
Program on Generation of Site-Specific Response Spectra in Australia (Paper No 42)
- 12.18 – 12.33pm **Trevor Allen** – **Seismologist, Geoscience Australia, ACT**
Exploring Australian Hazard Map Exceedance Using an Atlas of Historical ShakeMaps (Paper 13)
- 12.34 – 12.49pm **Vic Dent** – **University Associate, Curtin University, Perth, W.A.; Honorary Research Associate, The UWA Institute of Agriculture, UWA, Perth**
Twenty years of earthquakes near Burakin in the Western Australian Wheatbelt: A timeline of events in the Burakin seismic cluster of 2001 – 2002 and subsequent seismicity in the region (Paper No 35)
- 12.49 – 1.05pm **Q&A – Session 4**
- 1.05 – 2.00pm **LUNCH BREAK**

Session 5

- 2.00 – 2.15pm **Bill Jordan – Bill Jordan & Associates, Newcastle, NSW**
Particle Velocity, Frequency and Pulse Length: The Third Parameter Governing Reaction to Ground Vibration (Paper No 4)
- 2.16 – 2.31pm **Nouman Khattak– PhD Student, School of Civil and Environmental Engineering, Queensland University of Technology, Brisbane, QLD**
Applied Element Modelling of the Out-of-Plane Bending Behaviour of Single Leaf Unreinforced Masonry Walls (Paper No 2)
- 2.32 – 2.47pm **Sanjay Nimbalkar – Senior Lecturer, School of Civil and Environmental Engineering, University of Technology Sydney, Broadway, NSW**
Soil Arching in Geosynthetic-Reinforced Pile-supported Railway Embankments under the Seismic Condition (Paper No 20)
- 2.48 – 3.03pm **Bin Xing, PhD Candidate, Department of Infrastructural Engineering, University of Melbourne, Parkville, VIC**
Torsional Rigidity of Asymmetrical Multi-storey Reinforced Concrete Buildings (Paper No 24)

Poster Talks

- 3.04 – 3.09pm **Arash Nazari Rad, Director, Structural/Seismic Engineer, SeismicPro P/L, Sydney, NSW**
Overview of seismic design for prefabricated frames in building services (Paper No 26)
- 3.10 – 3.15pm **Aaroon Joshua Das, Ph.D. student, Department of Civil Engineering, Capital University of Science and Technology, Islamabad, Pakistan**
Energy absorption capabilities of recycled-plastic reinforcing bars for earthquake resistant housing construction (Paper No 34)
- 3.17 – 3.30pm **Q&A – Session 5**
- 3.30pm **Conference Wrap Up**
- 3.45pm **Conference ends**