



Australasian Structural Engineering Conference 2022			
Engineers Australia Melbourne office & Online Level 31, 600 Bourke St, Melbourne VIC			
Effective as of 29 July 2022   Subject to Change			
Wednesday 9 November			
	Room A	Room B	Room C
9:00 - 10:00	Arrival, Registration, Netowrking		
10:00 - 10:15	Conference Opening & Acknowledgement of Country		
10:15 - 11:00	Keynote 1: Jane Entwistle, President, Institution of Structural Engineers		
11:00 - 11:30	30 minute break		
	<b>Sustainability in design 1</b>	<b>Buildings: Steel</b>	<b>Innovation and digitalisation</b>
11:30	Application of circular economy principles to structural design <b>Mrs Evelyn Storey</b>	Fire Resistance of External Light Gauge Steel Framed Walls with Different Claddings <b>Mr Jashnav Pancheti</b>	Automation of 3D Revit Modelling for Infrastructure Projects <b>Ms Jasmine Tan, Mr. Trieu Nguyen Luu</b>
11:50	High strength, normal ductility trench mesh offers better performance and decarbonization of footings <b>Mr Graeme McGregor</b>	Experimental investigation on preload loss of bolted joints with steel and fibre reinforced polymer bolts <b>Mr Kai Yang</b>	Simulation of a three-dimensional model of human structure-interaction on a flexible surface <b>Señor Bryan Castillo</b>
12:10	Carbon Sunk: How site selection locks in embodied carbon before design begins <b>Mr David Law, Mr Heinrich Stander</b>	Experiments and Analytical Studies of Perforated Cold-formed Ferritic Stainless Steel Channels with Restrained Flanges Subject to Web Crippling <b>Dr Amirmohammad Yousefi</b>	Digital design and innovation on the Kids' Bridge <b>Mr Michael Kakulas, Mr Nick Keage</b>
12:30	A comparative analysis of the mechanical properties of waste cardboard and plastic fibres within concrete composite materials <b>Mr Robert Haigh</b>	Key Considerations when Designing Steel Structures under Close-in Blast Event <b>Dr Van Tin Do</b>	Sydney's Central Station upgrade – Design modularity and heritage-enhancement in the renewal of the Grand and Northern Concourse <b>Miss Amy Clark, Mr Michael Chernyavsky</b>
12:50	Experimental study on the performance of tyre walls subjected to combined compressive and out-of-plane load conditions <b>Mr Yachong Xu, Dr Martin Freney</b>	The strength and ductility of ultra - high strength steel spiral confined high strength concrete <b>Mr Neelam Bajracharya</b>	Digital Design for Sydney Fish Markets <b>Mr Graham Babcock</b>
13:10	Environmental sustainability expertise in the Australian transport infrastructure sector <b>Dr Yann Bouras</b>		
13:30	60 minute lunch break		
	<b>Sustainability in design 2</b>	<b>Buildings: Fastners</b>	<b>Buildings: Micellaneous</b>
13:30	Application and Benefits of GFRP and CFRP as Alternatives for Steel Reinforcement in Bridges for Having more Suitable Infrastructures <b>Dr Khodamorad Nabaki</b>	Very shallow cast-in headed fasteners with void formers <b>Dr Jessey Lee</b>	Experimental validation on the use of semi-rigid brick ties to remediate existing double brick walls <b>Dr Dmytro Dizhur</b>
13:50	Sustainable and resilient bridges: challenges and opportunities <b>Mr John Hilton</b>	Power actuated fasteners in Australia: application and design <b>Dr Tilak Pokharel</b>	Efficient Resilience of Building Structures <b>Mr Angelo Thurairajah</b>
14:10	Timber Bridge Design for Longevity <b>Mr Dean Ashton</b>	Optimal Percentage of Substituted Recycled Fine Aggregates in Structural Mortar <b>Dr Mahsa Mirmomeni</b>	Decoding the causes of risk misallocation on public building projects <b>Dr Chipozya Tembo</b>
14:30	Prestressing Systems in the Colne Valley Viaduct being delivered by the Align JV as Part of HS2 Phase One in the UK Mr Julien Boiteux, <b>Mr Juan Sevellano</b>	Development and validation of seismic test set-up for fasteners in Australia <b>Mr Chandani Neupane</b>	Queen Victoria Markets – A Sensitive Heritage Renewal <b>Mr Quentin Suckling</b>
14:50		Experimental Study of Axially Loaded Micropiles <b>Miss Rania Al-Taie</b>	Three-dimensional modelling and analysis of high-speed train-induced building vibration considering different soil types <b>Mr Abdul Ahad Faizan</b>
16:10			Communicating resilience to clients – Lessons from New Zealand's post-earthquake environment <b>Mr Jared Keen</b>
16:30 - 18:00	ASEC 2022 Welcome Reception		



Australasian  
Structural  
Engineering  
Conference

**Engineering Resilience**  
9–10 November 2022

Register now →



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<b>Thursday 10 November</b>			
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	<b>Room A</b>	<b>Room B</b>	<b>Room C</b>
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8:30 - 9:05	<b>Arrival, Registration, Networking</b>		
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9:05 - 9:15	Day 2 Welcome & Recap		
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9:15 - 10:00	Keynote 2: Geoff Boughton, Adjunct Associate Professor, James Cook University		
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10:00 - 10:30	30 minute break		
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	<b>Transport infrastructure 1</b>	<b>Climate Change Mitigation</b>	<b>Buildings: Concrete</b>
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10:30	Iconic Twin Network Arch Bridges for the Sydney Gateway Project, Australia <b>Mr Sameer Khan</b>	Safety of structures in the climate emergency <b>Ms Karlie Collis</b>	The curvilinear stress block – A design model to decarbonize reinforced concrete columns using 600 MPa steels <b>Mr Anthony Ng</b>
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10:50	Harwood Bridge Mr Jaime Granell, <b>Mr Francisco Palacios</b>	Climate Adaptation Engineering: Cost-Effective Housing Mitigation and Resilience for Extreme Winds <b>Prof Mark Stewart</b>	The flexural behaviour of polyvinyl alcohol fibre reinforced foam concrete <b>Mr Jiehong Li</b>
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11:10	Extending Life of Timber Bridges <b>Mr Dean Ashton</b>	Stoplogs for Warragamba Dam Drum Gate <b>Dr Russell Keays</b>	Critical reinforcement design and detailing for resilience and preservation of concrete structures <b>Mr Scott Munter</b>
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11:30	Practitioner's perspective on using nonlinear finite element analysis in AS5100.5-2017 for strength checking of existing structures <b>Mr Richard Hao</b>	Development of a building resilience rating system for natural hazards <b>Dr David Henderson</b>	
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11:50	The Chiltern Tunnel Shafts being delivered by the Align JV as part of HS2 Phase One in the UK <b>Mr Antonio Perez</b>		
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12:10	Light-Duty Pavement (Non-Highway Pavements) – Best Practice Design and Construction Methods <b>Mr Kipp Richter</b>		
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12:30	60 minute lunch break		
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13:30	Panel Discussion: Engineering resilience for extreme events		
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	<b>Transport infrastructure 2</b>	<b>Buildings: Environmental</b>	
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14:30	Sydney's Central Station upgrade – Top-down construction of the Metro Station Box <b>Mr Jonathon Turley, Ms Amy Clark</b>	Bushfire Resistance of Windows and Shutters <b>Mr Birunthan Perinpalangam, Dr Anthony Ariyanayagam</b>	
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14:50	Sydney Metro Central Station project – Central Walk temporary track slab and underground support structures <b>Mr Marco Liang, Mr Kevin Su</b>	Predicting Bushfire Heat Loading on Buildings Using Computational Fluid Dynamics <b>Mr Benjamin Springfield, Dr Anthony Ariyanayagam</b>	
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15:10	Electrified Railway Viaducts; Design Essentials <b>Mr Satyajit Datar, Ms. Zohreh Jafarizizi</b>	Multi-hazard vulnerability of industrial buildings to tropical cyclone loading <b>Dr Matthew Mason</b>	
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15:30	The Colne Valley Viaduct being delivered by the Align JV as part of HS2 Phase One in the UK <b>Mr George Kapos, Mr Sameer Khan</b>	Improving the resilience of the building envelope to wind driven rainwater ingress <b>Dr Korah Parackal</b>	
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15:50	The 12 labours of...mechanical anchors for reinforcement bars in New Zealand <b>Mr Emanuele Naccini, Mr Sam Adshead</b>	Ageing high voltage power transmission structures resilience under extreme weather events – An approach to legacy designs in light of recent failure events, challenges faced by Power Utilities/ Consumers/ Regulators & proposed changes to design standards <b>Mr ASIF Bhangor</b>	
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16:10	Practical considerations during Match Casting for the design of Precast Deck Segments <b>Mr Derik Hanekom, Mr Owen Vickers</b>		
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16:30 - 18:00	ASEC 2022 RW Chapman Awards Presentation		
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 <b>ENGINEERS AUSTRALIA</b>	Australasian Structural Engineering Conference	<b>Engineering Resilience</b> 9–10 November 2022	<span style="background-color: red; color: white; padding: 5px 10px; border-radius: 5px;">Register now →</span>	
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# ASEC 2022 Poster Listing

Subject to change. Current as of 1 August 2022.

ID	Poster Title	Presenter	Subtheme
3	Seismic soil-structure interaction analysis of multi-storey RC building subjected to different earthquake ground motions considering various soil types	Mr Abdul Ahad Faizan	Buildings
7	Automation of structural wall outputs using Civil 3D	Mr Brent Burgess	Innovation and digitalisation
25	Testing, evaluating, and qualifying the ReidBrace system in Australia using AS/NZS 4671:2019 grade 500N ReidBar	Mr Andrew Coumaros	Buildings
32	Digital tools used on the design of the Colne Valley Viaduct being delivered by Align JV as Part of HS2 Phase One in the UK	Mr Juan Sevillano Mr Omar Nabeel	Innovation and digitalisation
42	Circular economy and Resilience economy – how do they exist together?	Ms Alexandria Moore & Valentina	Climate change mitigation
43	Climate Mitigation, Adaptation and Resilience: What's the Difference, and why does it matter?	Ms Alexandria Moore Mr Sam Warren	Climate change mitigation
44	Resilience Planning: Why we need to think about the bigger picture?	Ms Alexandria Moore	Sustainability in design