



**SESOC**  
CONFERENCE **2025**

**Navigating  
Change**  
With Integrity  
and Future Focus

25-27 JUNE 2025 • TĀKINA, WELLINGTON

# CONFERENCE PROGRAMME

[confer.nz/sesoc2025](https://confer.nz/sesoc2025)



## CONFERENCE PROGRAMME

### WEDNESDAY 25 JUNE 2025

12.30 – 13.30	<b>Location: Molesworth Street</b> Parliamentary Precinct Site Tour
14:00 – 15:00	<b>Room: Tāwhirimātea Foyer</b> Paramanawa o te ahiahi – Afternoon Tea
14:00 – 19:15	<b>Room: Tāwhirimātea Foyer</b> Registration Desk & Exhibition Open
15:00 – 15.30	<b>Room: Tāwhirimātea A</b> Conference Opening – SESOC President Welcome Address
15.30 – 16.20	<b>Room: Tāwhirimātea A</b> <b>Keynote:</b> Engineering the Future: How MMC is Disrupting the Way We Build <b>Alessandro Marzucchini</b> – Technical Director, Head of MMC, Ramboll Singapore <b>Chair: Tessa Beetham</b>
16.20 – 17.45	<b>Room: Tāwhirimātea A</b> Industry Key Updates » Earthquake Prone Building Policy Review – <b>Ken Elwood</b> – MBIE » Seismic Risk Working Group (TS1170.5) Progress Update – <b>Michelle Grant</b> – LGE Consulting and <b>John Hare</b> – Holmes NZ » Low Damage Seismic Design Guidelines – <b>Stuart Oliver</b> – Holmes NZ <b>Chair: Stuart Oliver</b>
17.50 – 18.45	<b>Room: Tāwhirimātea C</b> Emerging Structural Engineers (ESE) Session <b>Chair: Henry Rowden</b>
17.45 – 19.00	<b>Room: Tāwhirimātea Foyer</b> Icebreaker – Meet & Greet

### THURSDAY 26 JUNE 2025

8.00 – 19.00	<b>Room: Tāwhirimātea Foyer</b> Registration Desk Open
8.00 – 17.30	<b>Room: Tāwhirimātea Foyer</b> Exhibition Open
9.00 – 9.50	<b>Room: Tāwhirimātea A</b> <b>Keynote:</b> Thinking beyond earthquakes: redefining how engineers can lead in hazard risk management <b>Sarah-Jayne McCurrach</b> – Head of Risk Reduction   Kaiārahi mō te Whakapāpaku Tūraru, Natural Hazards Commission Toka Tū Ake <b>Chair: Charlotte Toma</b>
9.50 – 11.00	Collaborative Construction: Building Stronger Outcomes through Partnership and Innovation <b>Panellists:</b> » <b>Chris Wooding</b> – LT McGuinness – National Engineering Manager » <b>Christian Gamst</b> – Te Waihangā – Senior Advisor » <b>Jeremy McAlister</b> – Rubix – Project Manager » <b>Ilona Haghsheenas</b> – Warren and Mahoney – Studio Principal <b>Chair: Jenni Tipler</b>
11.00 – 11.30	<b>Room: Tāwhirimātea Foyer</b> Paramanawa – Morning Tea

\* Please note the programme is subject to change

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### THURSDAY 26 JUNE 2025

11.30 – 13.00	<b>Room: Tāwhirimātea A</b> Session 1A   Professional Practice <b>Chair: Stuart Oliver</b>	<b>Room: Tāwhirimātea B</b> Session 1B   Sustainability <b>Chair: Nic Brooke</b>	<b>Room: Tāwhirimātea C</b> Session 1C   Emerging Structural Engineers <b>Chair: Andrew Gaul and Henry Rowden</b>
11.30 – 11.48	How contractor led design can enhance sustainability outcomes whilst reducing costs. <b>Kishan Seger</b>	Seismic Carbon Risk in Context <b>Charlotte Toma &amp; Steph Miller</b>	11.30 – 11.42 Innovation Through Constraint: The Chatham Island Renewable Energy Project <b>Matt Lindsay</b>
11.48 – 12.06	Engineering New Zealand – Strengthening CPEng standards, trust, and public safety <b>Paul Kirby</b>	Low carbon design: Is French flair at play and where are opportunities for New Zealand to up the game? <b>Anais Guennoc &amp; Julio Ortiz</b>	11.42 – 11.54 How utilising a dFMA approach led to the successful delivery of 42 teaching spaces, across Auckland, from inception to construction completion within 6 months <b>Hannah Wu</b>  11.54 – 12.06 Design and Construction Monitoring of Rā Hihi on the Eastern Busway <b>Kurt Haywood</b>
12.06 – 12.24	Producer Statements and their Changing Role in Litigation <b>Daniel Kennett &amp; Wade Morris</b>	Quantification of Embodied Carbon Benefits of Base Isolation with Supplemental Damping <b>Laura Whitehurst</b>	12.06 – 12.18 Staged Analysis and Construction Sequencing of Innovative Pool Roof Box Girders for Hiwa, Recreation Centre <b>Libby Lindsay</b>
12.24 – 12.42	Non-Structural Seismic Restraint Strategies and Procurement <b>Jamie Lester &amp; Ben Larson</b>	Fire Protection Optimisation for Low Carbon Design <b>Mayank Shrivastava &amp; Kaveh Andisheh</b>	12.18 – 12.30 QIC Motorsports and Speed Park <b>Akshi Rana</b>  12.30 – 12.42 The development of CarbonFlow: a Revit based LCA tool used to navigate large-scale embodied carbon goals <b>Maja Sagaser &amp; Charis Hyde</b>
12.42 – 13.00	Design method for seismic strengthening of diaphragms using FRP ties <b>Enrique Del Rey Castillo</b>	Ngā Mokopuna <b>Rowan Ballagh</b>	12.42 – 12.54 How to Engage Young Members at a Local and National Level Successfully <b>Jessica Chen</b>
13.00 – 14.00	<b>Room: Tāwhirimātea Foyer</b> Tina – Lunch		
14.00 – 15.00	<b>Room: Tāwhirimātea A</b> Keynote: Structural Engineers in an AI world <b>Mohammad Al-Dah</b> – IStructE President <b>Chair: Brad Nichols</b>		
15.00 – 16.30	<b>Room: Tāwhirimātea A</b> From Blueprint to Bytes: The impact of Digital Transformation on Engineering and Construction <b>Panellists:</b> » <b>Troy Coyle</b> – HERA - CEO » <b>Alex Hampshire</b> – WT – Director Advisory » <b>Anton Shaw</b> – Warren and Mahoney – Automation Lead » <b>Ben Wanklyn</b> – Naylor Love – Modern Methods of Construction Manager <b>Chair: Tessa Beetham</b>		
18.00 – 19.00	<b>Room: Tāwhirimātea Foyer</b> Pre-dinner drinks and networking		
19.00 – Late	<b>Room: Tāwhirimātea Foyer</b> SESOC Gala & Awards Dinner		

\*Refer to the conference mobile app for additional presenters and abstract details.

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### FRIDAY 27 JUNE 2025

8.00 – 16.00	Room: Tāwhirimātea Foyer Registration Desk Open			
8.00 – 14.00	Room: Tāwhirimātea Foyer Exhibition Open			
9.00 – 10.30	Room: Tāwhirimātea A Session 2A   Case Studies and Projects Chair: Jaden Whiunui	Room: Tāwhirimātea B Session 2B   Non-structural elements and Construction Chair: John Snook	Room: Tāwhirimātea C Session 2C   Geo + Structure Chair: Julio Ortiz	Room: Whātaimai Session 2D   Engineering General Practitioners Chair: Matt Stewart
9.00 – 9.18	The challenges of designing an unconventionally shaped mass timber structure Hamish Strange	Incorporating Non-Structural Performance Considerations into Structural Design of Low-Rise Buildings Andrew Baird	A Streamlined Approach to Soil-Structure Interaction (SSI): Reducing Iterations Between Structural and Geotechnical Engineers Javier Berrios & Nick Clendon	New Zealand Residential Construction Engineering Realities – Risk and Regulatory Constraints Ian Watson, Michelle Grant & Craig Lewis
9.18 – 9.36	School Building Design: Observations of a Decade of the MoE Structural and Geotechnical Requirements Paul Campbell	Neglect Secondary Structures at your Building's Peril Alistair Cattanaach	The “Use” and “Misuse” of Soil-Structure Interaction in NZ Practice Arun M. Puthanpurayil	New Zealand Residential Construction Engineering Realities – Foundations Paul Jaquin
9.36 – 9.54	Canterbury Multi-use Arena: Structural Design Integration with Diverse Design Drivers Nick Carman & Terry Dawson	Advancing Non-Structural Building Element Engineering through Open Source Methods Matt Bishop	Embedded Retaining Walls – Methodology Selection Nick Wharmby	New Zealand Residential Construction Engineering Realities – Designs to minimise Cost and Carbon Ian Watson
9.54 – 10.12	Skyline Queenstown Redevelopment Project Jared Zarifeh	Temporary Works: Lessons Learnt and Future Focus Mark Hedley	SESOC Retaining Wall Design Guidance & Software Geoff Bird	New Zealand Residential Construction – Engineering realities – The Role of the EGP Engineer  Panel Discussion Panellists: » Nick Calvert » Alasdair Sinclair » Matt Stewart Moderator: Kelly Pilkington
10.12 – 10.30	Seismic Strengthening of the Heritage Category 1 Carillon Tower in Wellington, New Zealand Renee Brook	Practical Considerations for Temporary Works Design for Permanent Works Structural Designers in the Strengthening and Construction of New Buildings David Lyes	Construction Facts of Jeddah Tower: The World’s Tallest Building Samy Eltantawy	
10.30 – 11.00	Room: Tāwhirimātea Foyer Paramanawa – Morning Tea			
11.00 – 11.50	Room: Tāwhirimātea A Keynote: Engineering with integrity and a focus on the future in the 2020s and beyond Jane MacMaster – Babcock International Group Chair: Michelle Grant			

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### FRIDAY 27 JUNE 2025

<b>11.55 – 13.15</b>	<b>Room: Tāwhirimātea A</b> Session 3A   Industry <b>Chair: Laura Whitehurst</b>	<b>Room: Tāwhirimātea B</b> Session 3B   Design <b>Chair: Simon Burrough</b>	<b>Room: Tāwhirimātea C</b> Session 3C   Medley <b>Chair: Carl Ashby</b>
<b>11.55 – 12.11</b>	MBIE/NHC/SESOC Low Damage Seismic Design Technical Guidance <b>Stuart Oliver</b>	Seismic Force for Diaphragm Design of Tall Buildings <b>Mohsen Shabankareh</b>	Draft New Zealand Guidelines for the Assessment of Reinforced Concrete Masonry Structures <b>Greg Cole</b>
<b>12.11 – 12.27</b>	Advancing Structural Engineering with AI <b>Chris Vorster &amp; Julian Lee</b>	Out-of-Plane Seismic Force for RC Walls of Industrial Buildings <b>Mohsen Shabankareh</b>	Ivey West and Memorial Hall Revitalisation <b>Sandip Singh &amp; Dion Fitzgerald</b>
<b>12.27 – 12.43</b>	Wind Comfort Modelling for the Sustainable Built Environment: A Structural Engineering Perspective <b>Frederic Houet</b>	Design of Structures for Winds in the Context of New Zealand: Some Observations <b>Pierre Verhaeghe</b>	Seismic Performance of Concentrically Braced Frame with Friction Sliding Connections: Learning from Subassembly Component Test, Numerical Simulations and Shake Table Test <b>Zhenduo Yan</b>
<b>12.43 – 12.59</b>	The Role of Structural Design in Carbon Reduction of Steel Buildings <b>Kaveh Andisheh</b>	Highlighting the impact of a window opening on the seismic vulnerability of a light timber-framed wall <b>Max Dawson</b>	Seismic Performance of Steel Braced Frames with Buckling Restrained Braces, Friction Braces, and Braces with Resilient Slip Friction Joint Dampers <b>Soheil Assadi</b>
<b>12.59 – 13.15</b>	Hybrid Post-Tensioned Concrete and Steel BRBF Parking Garage – A Fresh Approach <b>Jerod Johnson &amp; Brandt Saxey</b>	Seismic Performance of Concrete-Encased Concrete-Filled Steel Tubular Column to RC Wide Flat Beam Joint with Different Connection Details <b>Xueming Zhang</b>	Integrating Carbon Thinking in Structural Design to Enhance Building Sustainability Outcomes <b>Julio Ortiz &amp; Daniel Fernandez</b>
<b>13.15 – 14.00</b>	<b>Room: Tāwhirimātea Foyer</b> Tina - Lunch		
<b>14.00 – 15.00</b>	<b>Room: Tāwhirimātea A</b> Inclusion and the Relationship to Retention <b>Panelists:</b> <ul style="list-style-type: none"> <li>» <b>Judi Keith-Brown – Architect/Business Owner</b></li> <li>» <b>Joe Consedine – DEI consultant/Co-founder of Mobilise</b></li> <li>» <b>Yasmin Becker – CEO of IStructE</b></li> <li>» <b>Teresa Poli – Māori Strategy Consultant and Engineer at Aurecon</b></li> <li>» <b>Sam Jones – Buildings Structures Practice Leader at Aurecon</b></li> </ul> <b>Chair: Craig Watson – Diversity Agenda</b>		



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FRIDAY 27 JUNE 2025

15.00 – 16.00	<p><b>Room: Tāwhirimātea A</b></p> <p>Lightning Talks</p> <p><b>Presenters:</b></p> <ol style="list-style-type: none"><li>1. Design and Construction of Te Arawhiti ki Matangi Āwhio. Truss Bridge with CNC Art Panels – <b>Marcus Grierson</b></li><li>2. Engineering assumptions – Addressing Certainty and Managing Risk in a Cost Sensitive Environment – <b>Jamie Lester</b></li><li>3. Wind Engineering - Air New Zealand Hangar 4 at Auckland Airport – <b>Neil Jamieson</b></li><li>4. How is your Heart Health? – <b>Jason Ingham</b></li><li>5. Independent Review of Structural Designs for Building Consent - SESOC Guidance 2025 Update – <b>Ashley Smith</b></li><li>6. Wind Loading of Shrink-Wrapped Scaffolding – <b>Nick Locke</b></li><li>7. The Mean and the Median of Code Minimum – <b>Charlotte Toma</b></li><li>8. Selection and Modification of Wellington Hazard-Consistent Ground Motions – <b>Andreas Giannakogiorgos</b></li><li>9. Improving The Way We Build With Smart Collaboration Between Contractors and Consultants – Examples of Success – <b>Vincent Willcock</b></li></ol> <p><b>Chair: Jason Ingham</b></p>
16.00 – 16.15	<p><b>Room: Tāwhirimātea A</b></p> <p>Conference Closing Ceremony</p>

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