

#### **CONFERENCE 2025**

15-17 October 2025

Auckland Viaduct Events Centre





#### THE CONFERENCE ORGANISING COMMITTEE GRATEFULLY ACKNOWLEDGES THE CONFERENCE SPONSORS FOR THEIR GENEROUS SUPPORT







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### Wednesday 15th October

| 13.00 - 16.00 | Holcim Site Tours<br>RSVP required                    |         |
|---------------|---|---------|
| 16.30 - 19.30 | Registration Desk & Exhibition Open                   | Waiheke |
| 17.30 - 19.30 | President's Reception Proudly Supported by Golden Bay | Waiheke |

### Thursday 16th October

| 07.30 - 16.30 | Registration Desk & Exhibition Open   |   | Waiheke |
|---------------|---|---|---------|
| 08.30 - 09.00 | Conference Opening<br>Mihi Whakatau<br>Welcome, Organising Committee Chair, Alistair Russell  |   | Kawau   |
| 09.00 – 10.35 | Session 1: Chair: Moustafa Al-Ani   |   |         |
| 09.00 – 09.45 | <b>Keynote Speaker: Clare Tubolets</b> , SmartCrete CRC Decarbonised Concrete — What's stopping us? An Australian perspective   |   |         |
| 09.45 - 09.50 | Brian Dillon, Construction Growth Foundation (CGF)  |   |         |
| 09.50 - 10.35 | <b>Keynote Speaker: Andrew Minson</b> , Global Cement & Concrete Association (GCCA) Global perspectives on delivering zero carbon in cement and concrete sector                     |   |         |
| 10.35 - 11.10 | Morning Tea   |   | Waiheke |
| 11.10 – 12.30 | Session 2A<br>Chair: Rick Henry   | Session 2B<br>Chair: Dave Darlow  |         |
| Room          | Kawau   | Rangitoto   |         |
| 11.10 - 11.30 | Structural Design of Bledisloe North Wharf<br>Martin Kirkpatrick, Beca  | Concrete Materials Technology: Selected ABCs to Improve Project Decisions and Outcomes  Sue Freitag, WSP New Zealand Limited & Paul Donoghue, Concrete NZ                         |         |
| 11.30 – 11.50 | Seeing Further - Hihiani Radar Project, Hawkins Hill,<br>Wellington<br>Alex Kelly & John Heenan, Beca   | Energy Requirements and Cost Analysis for Drying Pumice for Use as a Supplementary Cementitious Material Luay N. Dwaikat, The University of Auckland, Ara Institute of Canterbury |         |
| 11.50 - 12.10 | Bentonite Support Fluid — Interactions with Steel<br>Reinforcing Bar and the Effect on Concrete-Rebar<br>Bonding<br>Dorian Borosnyoi-Crawley, WSP Research and<br>Innovation Centre | Experimental Study on Predictive Models for Anchorage in Concrete Incorporating Supplementary Cementitious Materials  Emanuele Naccini, Reid - ITW Concrete Systems               |         |
| 12.10 - 12.30 | Robot-Ready Floors: Aligning Concrete Floor<br>Performance with Warehouse Automation<br>Tim Walker, Face Consultants Ltd, Cogri Group   | Estimation of the CO2 emissions of limestone calcined clay-<br>based 3D- Concrete Printing mixtures<br><b>Zahir Azimi, University of Canterbury</b>                               |         |
| 12.30 - 13.30 | Lunch   |   | Waiheke |



## Thursday 16th October

| 13.30 – 14.50 | Session 3A<br>Chair: Dave McGuigan   | Session 3B<br>Chair: Tim Kleir  | Session 3C<br>Chair: Mike Botherway   |           |
|---------------|--|---|---|-----------|
| Room          | Kawau  | Rangitoto   | Motutapu  |           |
| 13.30 - 13.50 | Te Whau Pathway Project: Modular<br>Precast Design for Low-Impact<br>Construction in an Ecologically<br>Sensitive Marine Environment,<br>Jia Xu, Beca & Amy O'Donnell,<br>HEB Construction                               | Review of the Reactivity Testing<br>Methods for Pozzolanic Materials<br><b>Amirhoseein Saesaei, University of</b><br><b>Auckland</b>  | Concrete NZ Readymix Business Plan Update Mike Botherway, Higgins Concrete Ltd Concrete Pump Safety — Open Discussion MATES Programme Slade McFarland, MATES in Construction  Q&A |           |
| 13.50 - 14.10 | Takitimu North Link — Stage 1<br>Cameron Weir, Beca & Dan Ashby,<br>Holmes   | Rapid-Hardening Concrete in Airside<br>Infrastructure: A Case Study of Large-<br>Scale Application at Melbourne Airport<br>Eike Brueckner & Patrick Staehli,<br>Concretum Construction Science AG |   |           |
| 14.10 - 14.30 | The Electrification of Local<br>Steelmaking and Reinforcing Bar<br>Manufacturing<br>Israel MacDonald, New Zealand<br>Steel   | Ultra-High Performance Concrete<br>(UHPC) - an environmentally friendly<br>concrete solution<br>Ray Hudd, University of Waikato   |   |           |
| 14.30 - 14.50 | Experimental Investigation of Composite Anchoring Systems for Load Transfer Between Carbon fibre Connectors and Concrete Under Flexural and Axial Tension Loading Conditions Prashant Magare, MBP (NZ) Ltd (Mapei Group) | Al-Driven Optimization in Concrete<br>Logistics: A Pathway to Net-Zero and<br>Operational Excellence<br>Paul Flachskampf, Inform Software<br>Corporation Pty Ltd                                  |   |           |
| 14.50-15.20   | Afternoon Tea  |   |   | Waiheke   |
| 15.20 -16.30  | Concrete NZ AGM: 15.20 – 15.50<br>Learned Society AGM: 15.50 – 16.05<br>Readymix AGM: 16.05 – 16.30<br>With refreshments   |   |   | Rangitoto |
| 18.30         | Pre-dinner Drinks and Canapes  |   | Waiheke   |           |
| 19.00 - Late  | Formal Conference Dinner & Awards Evening  |   | Kawau   |           |



# Friday 17th October

| 08.30 - 15.30 | Registration Desk & Exhibition Open Wai   |   |  |
|---------------|---|---|--|
| 09.00 - 09.55 | Session 4: Chair: Mike Botherway Keynote Speaker: Sir John Kirwan (pre-recorded) and Dr Fiona Chrichton, Groov From the Ground Up: The Concrete Case for Performance Care |   |  |
| 09.55-10.00   | Move to breakout sessions   |   |  |
| 10.00 – 10.40 | Session 5A<br>Chair: Tim Blackbourn   | Session 5B<br>Chair: Allan Scott  |  |
| Room          | Kawau   | Rangitoto   |  |
| 10.00 - 10.20 | Evaluating AS/NZS 2327 Provisions for Deep Deck<br>Composite Slabs: Insights from Full-Scale Testing of<br>ComFlor 210 Profiles<br>Hayden Wright, Holmes Solutions        | Calcined Clay Cement - A local Perspective  Jarod Wilson, Golden Bay Cement   |  |
| 10.20 - 10.40 | Review Of Structural Connection Details in Recently<br>Constructed Medium-Density Housing<br>Guocai Lin & Siyuan Feng, University of Auckland                             | Breaking Barriers: Empowering trades women to excel in the New Zealand Concrete Industry  Andy Donohue & Amanda Williams, BCITO   |  |
| 10.40 - 11.10 | Morning Tea   | Waihek  |  |
| 11.10 – 12.10 | Session 6A<br>Chair: Kent Huxford   | Session 6B<br>Chair: Paul Donoghue  |  |
| Room          | Kawau   | Rangitoto   |  |
| 11.10-11.30   | Optimizing Steel Fibre Reinforced Concrete Performance:<br>Spacing Theory and Application-Specific Safety Factors<br>Sean Page-Wood, Bosfa                                | Performance of Concrete with Low Water Demand Pumice at Normal and Elevated Temperatures  Kavishan Sathsara Ranatunga, The University of Auckland   |  |
| 11.30-11.50   | Sustainable Long-Term Repair of Reinforced Concrete Structures using Galvanic encasements and Jackets Andrew Dickinson, Vector Corrosion Technologies                     | Cradle-To-Cradle Life Cycle Assessment of Modular<br>Concrete Gravity Retaining Walls: A Case Study on<br>Emissions and Carbon Uptake Potential<br>Osama Mughrabi, The University of Auckland |  |
| 11.50 - 12.10 | Effect of Hyperstatic Loads from Post-Tensioned Slabs on Columns and Walls in High-Rise Buildings Thu Ha Tran, Auckland University of Technology                          | Paving the Future Michel Abou Jaoude, Bosfa Pty Ltd   |  |
| 12.10 - 13.10 | Lunch & Cricket Bat Competition Waiheke   |   |  |
|               |   |   |  |



# Friday 17th October

| 13.10 -14.30  | Session 7: Lighting Talks<br>Moderator: Ralf Kessel  | Kawau |
|---------------|--|-------|
|               | <b>Ronald Lumantarna &amp; Lachlan Hick</b> - Solutions for shear performance of fixings with annular gap in accordance with international standards <b>Adnan Ahmed</b> - The Britomart Skylid: Design and Construction Considerations   |       |
|               | Marco Chui - Design of Westpoint Drive  Nick Kerr - Streamlining Concrete Mix Design and Business Efficiency with an Al-Powered Excel  Application   |       |
|               | Matthew Thornton - The Repair of a Dilapidated Concrete Wing Wall Tony Wang - Detailing and Coordination in the Design of the Silverstream Landfill Stormwater Chute Thomas D. Kishore - Challenges and prospects of mussel shell pozzolanic binder in Aotearoa New Zealand  |       |
|               | Lisa Lin - From Structure to Surface: Exploring the Aesthetic Potential of Functionally Graded Concrete in Architecture  Banu Balaskandan - Mg-based Binder Systems with Inexpensive Aluminosilicates for Terrestrial and  |       |
|               | Off-Earth Applications <b>Stefania Mattea</b> - Concrete with Pumice: Economic Insights and Consumer Preferences <b>Ivy Hua</b> - Overview of the O2NL Project   |       |
| 14.30 - 15.30 | Izzy Cattermole & Fraser Beggs - WSP's Low Carbon Concrete Guide  Session 8: Plenary Session + Conference Closing Ceremony Chair: Alistair Russell   | Kawau |
|               | <ul> <li>Alistair Russell - Learned Society Diaphragm Project</li> <li>Rick Henry (University of Auckland), Allan Scott (University of Canterbury) &amp; Ray Hudd (University of Waikato) - Universities Research Update</li> <li>Moustafa Al-Ani - Concrete Cricket Bat Competition Presentation</li> <li>Tim Blackbourn - Sandy Cormack Award + Lightning Talk Presentation</li> <li>Philip Yong (Director of Clendon Burns &amp; Park Ltd) &amp; Dean Latham (Operations Manager, Contech) - Te Whare o Rehua Sarjeant Gallery Project Profile</li> </ul> |       |
|               | Moustafa Al-Ani - Learned Society Update + Closing   |       |



#### **Exhibition Floorplan**

Golden Bay

Registration Desk

| Organisation                     | Stand                            |
|----------------------------------|----------------------------------|
| ACRS - Steel Certification       | Stand 02                         |
| AEL                              | Stand 31, 37 & Machinery Display |
| BarChip Inc & Geosynthetic       | Stand 05                         |
| Partners International Ltd       |                                  |
| BCITO                            | Stand 10 & Coffee Cart           |
| BOSFA NZ                         | Stand 19                         |
| <b>BuildingPoint New Zealand</b> | Stand 24                         |
| Chryso / Saint-Gobain            | Stand 33                         |
| Command Alkon                    | Stand 35                         |
| Complete Reinforcing             | Stand 15                         |
| Concrete NZ                      | Stand 16 & 17                    |
| Concrete Solutions Ltd           | Stand 08                         |
| Conequip Ltd                     | Stand 39                         |
| CONQOR by MARKHAM                | Stand 01                         |
| Conveyor Industries              | Stand 22                         |
| Dorner New Zealand Ltd           | Stand 14                         |
| Duragroup Ltd                    | Stand 09                         |
| Firth Industries                 | Stand 11                         |
| Fletcher Reinforcing             | Stand 28                         |
| Fosroc                           | Stand 12                         |
| Geotechnics                      | Stand 07                         |
| Golden Bay                       | Stand 18 & Machinery Display     |
| HOLCIM                           | Stand 26, 27 & Machinery Display |
| IMBMS                            | Stand 36                         |
| Inforce Global                   | Stand 04                         |
| J P Marshall Engineering         | Stand 13                         |
| Leviat                           | Stand 32                         |
| Master Builders Solutions        | Stand 06                         |
| MBP (NZ) Ltd                     | Stand 34                         |
| Pacific Steel                    | Stand 30                         |
| Powerpac Group                   | Stand 02A                        |
| Pultron - Mateenbar GFRP Rebar   | Stand 29                         |
| PYTHON Fixings                   | Stand 40                         |
| Reid & Ramset                    | Stand 20 & 21                    |
| Sika                             | Stand 25                         |
| Steel & Tube                     | Stand 23                         |
| Tekton Consulting                | Stand 41                         |
| Winstone Aggregates              | Stand 03                         |
| Working In                       | Stand 38                         |



