

Concrete NZ Conference 2022 Technical Programme (At 23 Sept 2022)

| THURSDAY 13 OCTOBER | | | |
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| 10.00 – 17.00 | Registration desk open | | |
| | SKELLERUP & ORPUS ROOM | BAY TRUST FORUM | |
| 11.00 – 12.00 | Concrete NZ – Precast Meeting | | |
| | | 11.30 – 12.00 | Concrete NZ – Readymix Annual Meeting |
| 11.30 – 12.45 | Lunch – Exhibition Hall | | |
| | BAY TRUST FORUM | | |
| 12.45 – 13.00 | Conference Opening | | |
| 13.00 – 14.45 | <p>Session 1 Chair: Alessandro Palermo</p> <p>KEYNOTE: The Future of Concrete Santiago Pujol (University of Canterbury)</p> <p>A Vision for Fast Decarbonisation of the NZ Concrete Industry Kevin Larcombe (Holcim NZ)</p> <p>Americas Cup 36 – Hobson Wharf Extension Design and Construction Joshua Paterson, Ted Polley (Beca Ltd) and Murray Ford (Downer)</p> | | |
| 14.45 – 15.30 | Afternoon Tea – Exhibition Hall | | |
| | BAY TRUST FORUM | SKELLERUP & ORPUS ROOM | |
| 15.30 – 17.00 | <p>Session 2A Chair: Alistair Russell</p> <p>A Dissipative Controlled Rocking Column Solution for Bridge Piers on Monopiles Sabina Piras, Alessandro Palermo, Gabriele Chiaro (University of Canterbury)</p> <p>Effect of Accelerated Curing and Admixtures on Concrete Shrinkage Hossein Askarinejad, Jonathan Chantarawitton, Kiran Joshipandey (Ara Institute of Canterbury); Trevor Sawyer (Firth Concrete)</p> <p>Pioneering a New Way of Building Bridge Piers Hugo Jackson, Alison Craigie (Fulton Hogan Civil)</p> <p>Low Damage Rocking Concrete Wall Structures with Resilient Hold-downs and No Post-Tensioning: Applications, Stiffness and Case Study Ashkan Hashemi, Nicholas Chan, Rick Henry, Pierre Quenneville (University of Auckland); Chris Wallington, Samir Govind (Beca); Pouyan Zarnani (Auckland University of Technology)</p> | <p>Session 2B Chair: John Marshall</p> <p>Mix Design and Fresh Properties of 3D Printed Concrete Giuseppe Loporcaro, Don Clucas (University of Canterbury)</p> <p>Evaluation of the Durability of AutoCast Concrete Pipe Against Machine-Made Concrete Pipe Americo Dos Santos, Tim MacIntosh (Hynds Pipe Systems Ltd); Daksh Baweja, Hayden Duffy (BG&E)</p> <p>Fibre-Reinforced Concrete: A Technical Consideration on Application and Design Kyle Hundloe (Master Builders Solutions Pty Ltd)</p> <p>Carbonation Resistance Factor for Concrete Vineet Shah, Allan Scott (University of Canterbury); James Mackechnie (Concrete NZ/Allied Concrete Ltd)</p> | |

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| | BAY TRUST FORUM |
| 17.00 – 17.30 | Concrete NZ Learned Society AGM |
| 17.30 – 18.00 | Concrete NZ AGM |
| 18.30 | President's Reception – Exhibition Hall |
| 19.00 | Depart for Casual Conference Dinner & Entertainment |

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| FRIDAY 14 OCTOBER | |
| 8.00 – 13.30 | Registration desk open |
| | BAY TRUST FORUM |
| 8.30 – 10.15 | <p>Session 3 Chair: Dave McGuigan</p> <p>Strength Classification and Durability of Concrete Made from Industrial or Natural Supplementary Cementitious Materials James Mackechnie (Concrete NZ/Allied Concrete Ltd); Vineet Shah, Allan Scott (University of Canterbury)</p> <p>Waikato Expressway – Hamilton Section Ted Polley (City Edge Alliance)</p> <p>It's Okay Not to Be Okay – Your Daily Mental Health Journey Mike Botherway (Higgins Concrete Ltd)</p> <p>Northland Rail Upgrade – Fast-tracked Replacement of Five Bridges Using Post-Tensioned Segmental Construction Matthew Ireland, Aidan Summers (Holmes Consulting); Rafael Ballen (KiwiRail)</p> |
| 10.15 – 11.00 | Morning Tea – Exhibition Hall |
| | BAY TRUST FORUM |
| | SKELLERUP & ORPUS ROOM |
| 11.00 – 12.45 | <p>Session 4A Chair: Moustafa Al-Ani</p> <p>Design and Construction of Te Wananga – A New Waterfront Space for Auckland Alex Vink (Tonkin & Taylor); Alex Foxon (Isthmus Group Ltd); Kiel Heeks-Purell (HEB Construction)</p> <p>Overview of the Cyclic Shear Behaviour of Corrosion Damaged RC Circular Columns Benjamin Matthews, Alessandro Palermo and Allan Scott (University of Canterbury)</p> <p>Glass Fibre-Reinforced Polymer (GFRP) Bars – A Durable Reinforcement Alternative for Concrete Bridge Piers Cain Stratford, Alessandro Palermo, Allan Scott (University of Canterbury)</p> <p>Tokomaru Bay - Historic Wharf Restoration Using Modern Materials Ray Hudd, Mark Dyer, James Brott (University of Waikato)</p> <p>Half Moon Bay Marina Precast Concrete Breakwater: Production Lessons Learnt Jamal Almulla (Wilco Precast Ltd)</p> |
| | <p>Session 4B Chair: Kerry Newton</p> <p>Rubberised Concrete: Material Characterization and Mechanical Behaviour Ernesto Hernandez, Royce Liu, Alessandro Palermo, Gabriele Chiaro, Allan Scott (University of Canterbury)</p> <p>Chemical and Mineral Admixture Concrete Mix Design for Sustainability Using Simplex Centroid Model Jarod Wilson, Ezra Jones (Sika)</p> <p>Effect of Curing Condition and Weather on Concrete Cylinder Compressive Strength Opinder Saggi, Nasser Almesfer, Craig Bezett (Allied Concrete Ltd)</p> <p>The Revised NZS 3104 Specification for Concrete Production and the Concrete NZ Plant Audit Scheme James Mackechnie (Concrete NZ/Allied Concrete Ltd); Rob Gaimster, Adam Leach, Dave McGuigan (Concrete NZ)</p> <p>Golden Bay Cement's Waste End-of-Life Tyre Project Gian Raffainer (Golden Bay Cement); David Welsh (Fletcher Building)</p> |
| 12.45 – 13.30 | Lunch – Exhibition Hall |

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| 13.30 | Range of Social Activities – Depart from Energy Events Centre |
| 18.30 | Pre-dinner Drinks – Grand Hall, Energy Events Centre |
| 19.00 | Formal Conference Dinner & Awards Evening - Energy Events Centre |

SATURDAY 15 OCTOBER

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| 8.00 – 13.00 | Registration desk open | |
| | BAY TRUST FORUM | SKELLERUP & ORPUS ROOM |
| 8.30 – 10.15 | Session 5A Chair: Ralf Kessel | Session 5B Chair: Paul Dillon |
| | Case Study of Solar Panel Installation at Concretec New Zealand Ltd <i>Justin Bragg (Concretec New Zealand Ltd)</i> | The Sound of Music: University of Otago – Music and Theatre Redevelopment Project <i>Alex Kelly, John Heenan, Neill Lewis (Beca)</i> |
| | Getting Ahead of the Curve on Decarbonisation and Sustainability <i>Bernie Napp (Concrete NZ)</i> | Effect of Multifaceted Technologies on Concrete in the 2020s <i>Sue Freitag, Mary Ann Halliday (WSP)</i> |
| | Hawkes Bay Airport Terminal Redevelopment <i>James Behan, Brendon Cornell, Jessica Jacks (WSP Wellington)</i> | A Review of Concrete Specifications in the New Zealand Industry and the Complications Associated with Them in Practice <i>Paul Donoghue, Trevor Sawyer (Firth Industries)</i> |
| | Proposed Test Programme for Concrete-Filled Metal Deck Applications: Bridging the Gap for ETA Approved Mechanical Anchors <i>Emanuele Naccini (Ramset); Enrique Del Rey Castillo (University of Auckland)</i> | High and Ultra-High Performance Concrete for New Zealand Bridges: A Natural Pathway to Sustainable Design <i>Rosie Pagel, Alessandro Palermo, Ernesto Hernandez (University of Canterbury); Hannah Weise (WSP)</i> |
| | Carbon Mitigation Options in the Cement Industry <i>Allan Scott (University of Canterbury); Chris Oze (Occidental College); Vineet Shah (Callaghan Innovation)</i> | Projects and People – What Does the Right Workforce Look Like <i>Mark Williams (Waihanga Ara Rau), Greg Durkin (BCITO)</i> |
| 10.15 – 10.45 | Morning Tea – Exhibition Hall | |
| | BAY TRUST FORUM | |
| 10.45 – 12.45 | Session 6 Chair: Rick Henry | |
| | A Sustainability Check of Some Recently Constructed Concrete Bridges – A Case Study <i>Jamil Khan (Beca Ltd)</i> | |
| | Construction of Tekapo a New Intake Gate and Shaft <i>Mark Hedley (Downer NZ); Alex Parfitt (Parfitt Construction Ltd)</i> | |
| | Testing of Flange Hung Double Tee Units with Loop Bars <i>Rick Henry, Matthew Jenkins, Ken Elwood (University of Auckland)</i> | |
| | Underpinning of Auckland’s Chief Post Office Building <i>Niraj Ranjit, Dale Burtenshaw, Michael Chung (Aurecon); Nick Craig (Downer Soletanche Bachy JV)</i> | |
| | Building the Largest Floor Slab in New Zealand and the Future of High-Performance Floors – A Case Study on Foodstuffs North Island Distribution Centre (NIDC) <i>Tim Walker (Face Consultants / RDT Pacific), Sam Datlen-Carter (Conslab)</i> | |
| 12.45 – 13.00 | Sandy Cormack Award and Conference Closure | |