

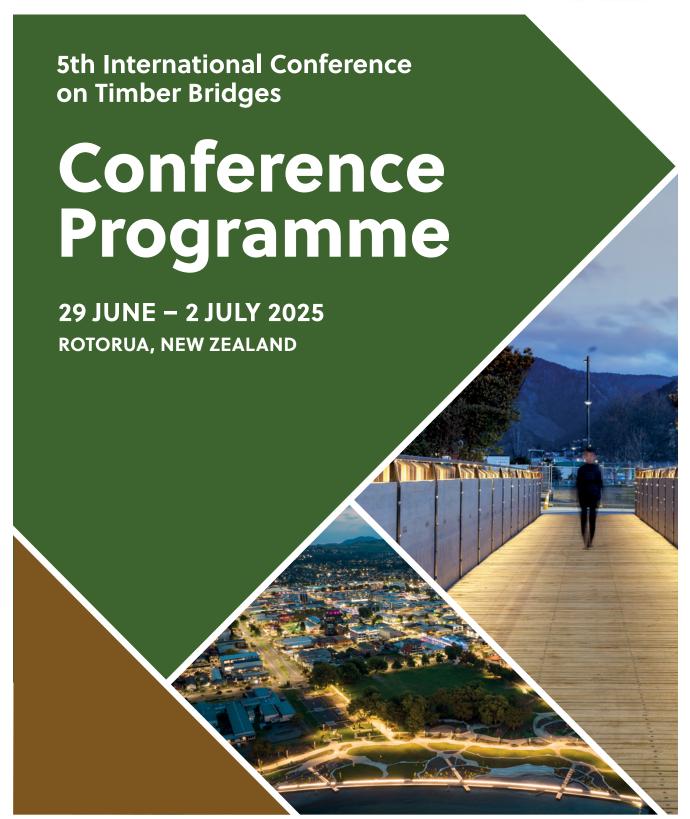
BUILT PNCF

HOSTS





Rotorua, New Zealand · 29 June - 2 July 2025







Conference Programme - Sunday 29 June 2025

13.30	Bus tickets must be pre-booked Bus Departs Auckland CBD	Auckland	
14.30	Bus Departs Auckland International Airport		
РМ	Own time to explore local activities	Rotorua	
15.00 – 19.00	Registration Open	Sir Howard Morrison Centre	
17.30 – 19.00	Mihi Whakatau - Welcome Reception	Sir Howard Morrison Centre	

Monday 30 June 2025

08.00 - 18.30	Registration Open	Sir Howard Morrison Centre
08.30	Conference Opening Welcome from Conference MC, Andrew Hewitt, Vice-President, New Zealand Timber Design Society Welcome from Rotorua Mayor, Tania Tapsell Welcome from Conference Organising Committee Sulo Shanmuganathan Daniel Moroder Andy Buchanan Welcome from Platinum Sponsor	Haumoko Theatre
09.00	Keynote 1 Daniel Moroder Chair: Moustafa Al-Ani Timber Bridges in Aotearoa New Zealand – Honouring the Past, Shaping the Future	Haumoko Theatre
09.30	Keynote 2 Steffen Franke Long-Span Timber Highway Bridges as a Contribution to Global Decarbonization	Haumoko Theatre
10.00 – 10.30	Coffee Break & Exhibition Responsible Wood	Te Whakaruruhau Banquet Room
10.30 – 12.00	Technical Session 1 Chair: Thomas Lim Room: Haumoko Theatre	Theme
10.30	Durability of Wooden Bridges: Insights from Historical Service Test Data in New Zealand Tripti Singh	Durability
10.52	Extended Design Rules to Improve the Durability of Timber Structures Roland Maderebner	Durability
11.15	Monitoring Technologies for the Long-Term Evaluation of Timber Bridges Andreas Rödel	Monitoring
11.37	131 M Span Timber Cycle-Pedestrian Bridge: Structural Design and Calculation, Wind Tunnel Testing and Implementation of Vibration Control System Mario Suárez Álvarez	Dynamics
12.00 - 13.00	Lunch & Exhibition Responsible Wood	Te Whakaruruhau Banquet Room
13.00	Keynote 3 David Moses Chair: Bettina Franke Breathing New Life into Timber Bridge Engineering in Canada	Haumoko Theatre
13.30 – 15.00	Technical Session 2 Chair: Andy Buchanan Room: Haumoko Theatre	Theme
13.30	Design of Timber Bridges in Europe Steffen Franke	Bridge Design
13.52	Design of Timber Bridges in France - New Technical Guide from the French Association of Civil Engineering Valentina Bruno Hure	Bridge Design
14.15	Analysis of the Collapse of the Timber Bridge over the Duratón River, in Peñafiel (Spain) Alfonso Lozano	Bridge Design
14.37	Kakanui Replacement Bridge – Design of a New 162m Long Timber Road Bridge in New Zealand Anton Kivell	Bridge Design
15.00	Coffee Break & Exhibition Responsible Wood	Te Whakaruruhau Banquet Room





Monday 30 June 2025

15.30 – 17.00	Technical Session 3 Chair: Andy Van Houtte Room: Haumoko Theatre	Theme	Technical Session 4 Chair: Jeremiah Shaw Room: Matatea	Theme
15.30	Ageing Resistance of Bonded Joints in Externally Exposed Glued Laminated Timber Elements Gary Raftery	Durability	Smooth-Shank Nail Withdrawal Capacity: Effects of Wood Relaxation and Moisture Content Yuhao Zhang	Connections
15.48	Investigation of Cross-Laminated (CLT) Decks for Bridge Applications in the USA Justin Dahlberg	Decks	Dowel-Type Connection Behaviour of High- Density Naturally Durable Hardwood Milad Lezgi	Connections
16.06	Investigations on ATCC Components Using Fiber-Optical Sensors for Structural Analyses Andreas Kirchner	Decks	Austenitic Stainless-Steel Self-Tapping Screws in Timber Bridge Design: A Preliminary Performance Analysis Rodrigo Mendes & Ömer Şişman	Connections
16.24	Analysis of the Timber Moisture Content of ATCC-Road Bridge Superstructure Segment Johannes Koch	Decks	Modular Timber Arch Bridge for New Zealand Oliver De Lautour & Moustafa Al-Ani	Structural Design
16.42	Stauffacher Bridge, Timber-UHPC Composite Structure Edgar Kälin	Decks	A Restraint System for Vertically Laminated Glulam Bridge Girders – A Design Engineer's Perspective Michael Campbell	Structural Design
17.00 – 18.30	Technical Session 5 Chair: Gang Yu Room: Haumoko Theatre	Theme	Technical Session 6 Chair: Oliver De Latour Room: Matatea	Theme
17.00	Development for the Composite Hybrid Bridge – A Novel Solution for a Low Carbon Future Royce Liu	Sustainability	CLT Timber Bridges: Experimental and Numerical Study Reza Masoudnia	Construction
17.18	Adding Broader Value to Aotearoa New Zealand – How Timber Bridges can Create Regional Economic Growth while Reducing Carbon Emissions Liz Root	Sustainability	SH 26 Onetai Stream Bridge - New Zealand's First Modern Timber State Highway Bridge in Decades Cameron Douglas	Construction
17.36	Methods of Life Cycle Assessment of Bridge Constructions and Exemplary Investigation of Different Bridge Constructions of Pedestrian and Cycle Bridges Sven Steinbach & Christoph Kunde	Sustainability	The Rakaia Gorge Bridge Deck Replacement and Seismic Strengthening Andrew Bradfield	Construction
17.54	Longevity and Service Life Considerations for Vehicle Timber Bridges in New Zealand Hanshen Wang	Durability	Tharwa Bridge Restoration and Maintenance Marcia Prelog	Construction
18.12	Effects of Brown-Rot Decay and Corrosion on Polymer Composition on Radiata Pine Connectors Camilo Montoya	Durability	Emerging Technology in Timber Bridge Deck Replacement: Recent Use of Engineered Plywood Panels in New Zealand Jeremiah Shaw & John van Rij	Construction
18.30	Own Time Recommended meeting point for evening so Tutanekai Street - Also known as 'Eat Street			





Tuesday 1 July 2025

08.00 – 18.00	Registration Open	
08.30 – 10.00	Technical Session 7 Chair: Henri Baillères Room: Haumoko Theatre	Theme
08.30	GLVL Panels for a New Timber Footbridge over the Brussels Ring Benoît Hargot	Pedestrian Bridges
08.52	Sustainable Spans - Timber's Role in New European Pedestrian and Cycling Networks Frank Miebach & Lukas Osterloff	Pedestrian Bridges
09.15	Bridges in Switzerland - Experience of Bridges for Pedestrians, Traffic and Wildlife Overpass Stefan Zöllig	Pedestrian Bridges
09.37	SH1 Papakura to Drury Shared Use Path Timber Bridge Tony Pham	Pedestrian Bridges
10.00	Coffee Break & Exhibition	Te Whakaruruhau Banquet Room
10.30	Keynote 4 Ralph Belperio Chair: Hugh Morris Past, Present And Future Of Timber Bridges In Australia	Haumoko Theatre
11.00 – 12.30	Technical Session 8 Chair: Anton Kivell Room: Haumoko Theatre	Theme
11.00	Best Practices in Timber Railway Overbridge Asset Management: Queensland Case Studies Dan Schneider & Daniel Anstice	Rail Bridges
11.22	Test-Based Asset Life Management of Timber Railway Bridge Members Evie Anderson	Rail Bridges
11.45	Emergency Repair of Timber Howe Truss Bridge After Vehicle Strike Murray Johnson	Repairs
12.07	The Rehabilitation Design of the West Montrose Covered Bridge Andrew Lehan	Repairs
12.30 – 13.30	Lunch And Exhibition	Te Whakaruruhau Banquet Room
13.30 – 15.00	Technical Session 9 Chair: Gary Raftery Room: Haumoko Theatre	Theme
13.30	Timber Circularity: Sustainable Wood Resource Management in Australia Tripti Singh	Sustainability
13.48	Timber Bridge Asset Management Gang Yu	Asset Management
14.06	Analysis of a Mechanically Connected Timber Arch Section and Steel Hinge Connection for an Arch Bridge Jens Bergenudd	Structural
14.24	Pre-Fabricated Stress Laminated Timber Bridges in New Zealand Edwin Douglass	Pre-Stressed Bridges
14.42	Prestressing Losses in a Stress Laminated Timber (SLT) Logging Bridge Andy Buchanan	Pre-Stressed Bridges
15.00 – 15.30	Coffee Break & Exhibition	Te Whakaruruhau Banquet Room
15.30	Panel: What is the Future of Effective, Efficient, and Resilient Timber Bridge Design? Chair: Moustafa Al-Ani Panellists: Andrew Lehan, Tripti Singh, Anton Kivell, Stefan Zöllig and Borjen Yeh	Haumoko Theatre
17.00	Conference Closing Chair: Hugh Morris Expression of Interest for 6th ICTB in 2029: Bettina Franke Conference Close: Sulo Shanmuganathan	Haumoko Theatre
17.30	Bridge Testing Competition Chair: Thomas Lim	Entrance Foyer
19.00 - Late	Conference Dinner Sponsored By Rothoblaas NZ Tothoblaas Solutions for Building Technology	Te Whakaruruhau Banquet Room





Wednesday 2 July 2025

08.45	Bus Departs from outside Sir Howard Morrison Centre	
09.00 - 10.30	Red Stag TimberLab CLT Factory Site Visit	Scion - Te Whare Nui o Tuteata Site Visit
10.45	Bus Departs from outside Sir Howard Morrison Centre	
11.00 – 12.30	Red Stag TimberLab CLT Factory Site Visit Bus will return to Sir Howard Morrison Centre after site visit including a drop at Scion as per below.	Scion - Te Whare Nui o Tuteata Site Visit Bus will return to Sir Howard Morrison Centre after site visit including a drop at Scion as per below.
12.30	Optional Lunch in Scion Café (at own cost) Redwoods Treewalk \$5 discount promocode: 2025TWTIMBER Redwoods Altitude Treewalk \$10 discount promocode: 2025ALTTIMBER Bus departs to Sir Howard Morrison Centre	
14.00 16.00 18.00 19.00	Auckland bus tickets must be pre-booked Bus Departs from outside Sir Howard Morrison Centre including stops: » Onetai Timber Bridge (weather dependent) » Auckland Airport » Auckland CBD	



ICTB 2025 APP

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- » Sulo Shanmuganathan, Chief Engineer, New Zealand Transport Agency (Convenor)
- » Andy Buchanan, Principal, PTL Structural & Fire (Chair, Scientific Committee)
- » Daniel Moroder, Technical Director, PTL Structural & Fire, Past President, NZ Timber Design Society (Co-Convenor)
- » Bettina Franke, Head of Research and Marketting, Timbagroup Holding AG, Switzerland (Chair, 4th ICTB)
- » Moustafa Al-Ani, Lead Advisor Structures, New Zealand Transport Agency
- » Hyungsuk Thomas Lim, WIDE Trust Senior Lecturer, University of Canterbury
- » Hugh Morris, Technical Manager, Timber Unlimited
- » Gary Raftery, Senior Lecturer and Co-Director of CIRCUIT Research Centre, University of Auckland
- » Tripti Singh, Senior Scientist, Scion, Rotorua and Director, National Centre for Timber Durability & Design Life, Australia



Special Dietary Requirements

If you indicated your dietary requirement during the online registration, this has been forwarded to the caterers. Depending on your requirement, the main food may be suitable for you, or a separate table will have your food. Please make yourself known to the catering staff who will assist or please see the Registration Desk for assistance.



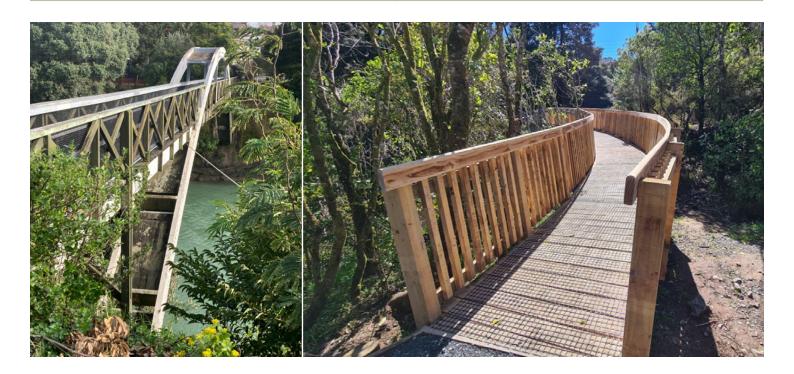


Scientific Committee

» James Wacker, USA

Chair of Scientific Committee: Andy Buchanan, PTL Structural & Fire, New Zealand

Gran of objecting Committee . Andy Buchanan, FTE Gructura & Fire, New Zealand		
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» Ralph Belperio, Australia	» Henri Bailleres, Scion	
» Valentina Bruno-Hure, France	» Ben Browne, Novare Design	
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» Caroline Frenette, Canada	» Oliver De Lautour, Aurecon	
» Liu Jie, China	» Matt Ireland, Holmes NZ	
» Benjamin Kromoser, Austria	» Anton Kivell, Hoffcon	
» Andrew Lehan, Canada	» Sam Leslie, Redstag	
» Thomas Lim, New Zealand	» Lisa Oliver, Holmes NZ	
» Kjell Arne Malo, Norway	» Ranjit Rajasingh, AECOM	
» David Moses, Canada	» John Roebuck, Holmes Solutions	
» Hideyuki Nasu, Japan	» Jeremiah Shaw, Beca	
» Gary Raftery, New Zealand	» Charlotte Toma, University of Auckland	
» Antje Simon, Germany	» Andy Van Houtte, Potius	
» Tripti Singh, Australia and New Zealand	» Mike Wall, Fletcher Projects	
» Julio Vivas, Spain	» Gang Yu, Auckland Transport	







Rotorua, New Zealand • 29 June – 2 July 2025

Notes	





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