

# Construction 4.0

— CONFERENCE 2024 —

15 NOVEMBER 2024  
9AM, FLETCHER PAVILLION

**NGĀKOPA**  
construction 4.0 hub



## Agenda Items

9 am	Karakia timatanga and mihi whakatau	<b>Saul Roberts</b>   Waikato Tainui, Te Waiohua - Ngati Te Ata/Ngati Te Rori)   Pou Tātaki   TOA Architects  <b>Val Panui</b>   Ngāti Rangī, Te Ātihaunui-ā-Pāpārangi   Kaitohutohu Ahurea Matua   Fletcher Construction
9:10	Introduction	<b>Dr Troy Coyle</b>   CEO   HERA and Construction 4.0 Impact Leader
9.20	Inspiration on what is possible with Construction 4.0	<b>Prof Mathew Aitchison</b>   CEO   Australia's Building 4.0 CRC
10:00	Imbedding mātauranga Māori in Construction 4.0: introducing the Ngākopa Construction 4.0 takarangī diagram as a guide for the sector	<b>A/Prof Fleur Palmer</b>   Te Rarawa, Te Aupōuri   AUT and Construction 4.0 Science Leader
10.40	<i>Morning tea and tech display</i> Exhibitors include: Nextspace	
11:10	Inspiration on what is possible – <b>MC Dr Yuqian Lu</b>   University of Auckland	<b>Panel</b> <b>Dr Alayna Rā</b>   Ngāi Tahu   Indigenous Design Director   WSP  <b>Brendan Attewell</b>   Engineering Services and Innovation Manager   Fletcher Construction  <b>Warren McLuckie</b>   Head of Research & Development   FRAMECAD

11:50	<p>Panel discussion: Challenges for adoption of Construction 4.0— learnings from BIM, regulatory &amp; data protocols</p> <p><b>MC Prof Robert Amor</b>   University of Auckland and Construction 4.0 Science Leader</p>	<p><b>Panel</b>  <b>Brent Tassell</b>   BIM Lead    Fletcher Construction  <b>Dr Diane Menzies ONZM</b>    Rongowhakaata   Director    Landcult</p> <p><b>Mark Thomas</b>   Founder and CEO   Nextspace</p>
<p><b>12:30</b> Lunch and tech display  Exhibitors include: Nextspace</p>		
1:30	<p>Case study 1. Room to rūma- te reo Māori- towards Construction 4.0</p> <p><b>MC Prof Xun Xu</b>   University of Auckland</p>	<p><b>Richard Goldie</b>   Director    Peddlethorp</p>
2:00	<p>Student program (15 min presentations)</p> <p><b>MC Prof Sarah McLaren</b>   Massey University and Construction 4.0 Sustainable Futures Theme Leader</p>	
2:10	<p>Carbon budgets for Construction 4.0 in Aotearoa, New Zealand</p>	<p><b>Sachini Weerasinghe</b>   Massey University</p>
2:25	<p>Unconventional technique implementation in Construction 4.0 life cycle assessment to enhance pre-existing methodologies</p>	<p><b>James Halliday</b>   Ngāti Porou and Te Āti Haunui-a-Pāpārangi   Massey University</p>
2:40	<p>A conceptual data connectivity model for Construction 4.0</p>	<p><b>Vikram Dhotre</b>   University of Auckland</p>
2:55	<p>From the digital properties of building materials to Construction 4.0 in Aotearoa, New Zealand</p>	<p><b>Deao Xing</b>   University of Auckland</p>
3:10	<p>Streamlining construction processes with AI for Construction 4.0</p>	<p><b>Li Xu</b>   University of Auckland</p>
3:25	<p>Part 1: MCDM with the Māori Paradigm  Part 2: Artificial Intelligence and Optimisation</p>	<p><b>Parsa Yazdi</b>   University of Waikato</p>
3:45	<p>Close</p>	<p><b>Dr Troy Coyle</b>   CEO   HERA and Construction 4.0 Impact Leader</p>
3:55	<p>Karakia Whakamutanga</p>	<p><b>Saul Roberts</b>   Waikato Tainui, Te Waiohūa - Ngati Te Ata/Ngati Te Rori)   Pou Tātaki   TOA Architects</p>
<p><b>4:00-5:00</b> Networking and drinks</p>		