

SASBE 2024 CONFERENCE PROGRAMME

Location: Auckland University of Technology, Auckland City Campus, New Zealand. Website: [www.sasbe2024.com](http://www.sasbe2024.com)

| Time          | Day 1: November 7, 2024                                                                                                                                                                 | Venue  |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 17:00 – 18:00 | Arrival & Registration                                                                                                                                                                  | WG 201 |
| 18:00 – 18:30 | Formal Welcome<br>Professor Ali Ghaffarian Hoseini<br><u>Professor Amirhosein GhaffarianHoseini</u><br>Professor Charles Walker<br><u>Dr Mahesh Babu</u><br><u>Ms Janie van Woerden</u> |        |
| 18:30 – 20:00 | Networking & Drinks                                                                                                                                                                     |        |
|               |                                                                                                                                                                                         |        |

| Time          | Day 2: November 8, 2024                                                                                                                                  |                                                                                                                                                                                                                                                                                                | Session Chair         | Venue      | Time          | Day 3: November 9, 2024                                                                                                                                                                                            |                                                                                                                                                                                               | Session Chair         | Venue      |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|
| 08:30 – 09:00 | SASBE2024 Opening<br>Professor Ali Ghaffarian Hoseini<br>Professor Amirhosein GhaffarianHoseini<br>Professor Charles Walker                              |                                                                                                                                                                                                                                                                                                | Prof. Farzad Rahimian | WA 224 A&B | 08:30 – 09:00 | Keynote 5   Prof. Chan Sik Park (Chung-Ang University, South Korea)<br>iSafe: Transforming Construction Safety with Emerging Digital Technologies                                                                  |                                                                                                                                                                                               | Prof. Jeremy Gibberd  | WA 224 A&B |
| 09:00 – 09:30 | Keynote 1   Prof. Mirostaw Skibniewski (University of Maryland, USA)<br>Construction 5.0: State-of-the-Art and Research Challenges for the Future        |                                                                                                                                                                                                                                                                                                |                       |            | 09:00 – 09:30 | Keynote 6   Prof. Umberto Berardi (The International Association of Building Physics)<br>How Climate Changes require to design buildings differently: Nanotechnologies for building resiliency and competitiveness |                                                                                                                                                                                               |                       |            |
| 09:30 – 10:00 | Keynote 2   Prof. Suzanne Wilkinson (Auckland University of Technology, New Zealand)<br>Thriving Through Change: Resilience in the Construction Industry |                                                                                                                                                                                                                                                                                                |                       |            | 09:30 – 10:00 | Keynote 7  Sam Wiffen (REVEAL and Smart Cities Council)<br>The Future of Urbanization                                                                                                                              |                                                                                                                                                                                               |                       |            |
| 10:00 – 10:30 | Keynote 3   Ar. Huia Reriti (New Zealand Institute of Architects, New Zealand)<br>Sustainable Architecture in New Zealand                                |                                                                                                                                                                                                                                                                                                |                       |            | 10:00 – 10:30 | Keynote 8   Andrew Eagles (New Zealand Green Building Council, New Zealand)<br>A Carbon Neutral Future for New Zealand                                                                                             |                                                                                                                                                                                               |                       |            |
| 10:30 – 10:45 | Q&A                                                                                                                                                      |                                                                                                                                                                                                                                                                                                |                       |            | 10:30 – 10:45 | Q&A                                                                                                                                                                                                                |                                                                                                                                                                                               |                       |            |
| 10:45 – 11:00 | Morning Coffee Break                                                                                                                                     |                                                                                                                                                                                                                                                                                                | WG 201                |            | 10:45 – 11:00 | Morning Coffee Break                                                                                                                                                                                               |                                                                                                                                                                                               | WG 201                |            |
| 11:00 – 13:00 | Track A Presentations   Paper IDs: 420, 424, 510, 569, 570, 571 & 512                                                                                    |                                                                                                                                                                                                                                                                                                | Dr Ali Rashidi        | WA 224 A   | 11:00 – 13:00 | Track I Presentations   Paper IDs: 480, 487, 564, 457, 539, 560, 562 & Special                                                                                                                                     |                                                                                                                                                                                               | Dr Mathias Valenzuela | WA 224 A   |
|               | 11:00 – 11:15                                                                                                                                            | Enhancing the Whole Life Cost Framework for New Zealand Residential Buildings: Addressing Geographical Characteristics and Adverse Weather Factors<br><br>Samarasekara, Herath Mudiyanseelage Samadhi Nayanathara; Purushothaman, Mahesh Babu; Rotimi, Funmilayo Ebum & GhaffarianHoseini, Ali |                       |            |               | 11:00 – 11:15                                                                                                                                                                                                      | Exploring the Determinants of Construction 4.0 Implementation in Australian Construction Industry: A SWOT Analysis<br><br>Rubasin Siriwardhana, Senuri Disara & Moehler, Robert Christian     |                       |            |
|               | 11:15 – 11:30                                                                                                                                            | Interaction Of Factors Affecting The Implementation Of Integrated Project Delivery (IPD) For Sustainable Construction<br><br>Bin Asad, Saad; Purushothaman, Mahesh Babu & Poshdar, Mani                                                                                                        |                       |            |               | 11:15 – 11:30                                                                                                                                                                                                      | Developing a Model for Reducing Carbon Emissions of Construction Heavy Machinery through ECO-hauling and Collaboration<br><br>Hosseinzadeh Moghaddam, Milad; Asnaashari, Ehsan & Sagoo, Amrit |                       |            |
|               | 11:30 – 11:45                                                                                                                                            | Analysing Risk Management Measures in Residential Construction Projects<br><br>James, Amal; Rotimi & Funmilayo Ebum                                                                                                                                                                            |                       |            |               | 11:30 – 11:45                                                                                                                                                                                                      | Formulating a Project Management System for IP Integration in Physical Campus Development Process<br><br>Sahran, Maznah; Ibrahim, Rahinah Binti; Abdullah, Rusli & Roslan, Samsilah           |                       |            |
|               | 11:45 – 12:00                                                                                                                                            | Stakeholder Behaviour in the Circular Economy Adoption for Construction and Demolition Waste Management: A Systematic Literature Review<br><br>Rex Ashokkumar, Anne Dilogini; Karunasena, Gayani; Udawatta, Nilupa & Liu, Chunlu                                                               |                       |            |               | 11:45 – 12:00                                                                                                                                                                                                      | Investigating Geotechnical Factors Influences on Long-Term Residential Safety in New Zealand Post-Disaster<br><br>Yamuna Kumary Sasi Kumar, Akhila & Purushothaman, Mahesh Babu               |                       |            |
|               | 12:00 – 12:15                                                                                                                                            | Cognitive Demand of Shoulder Support Exoskeleton during Overhead Painting Task<br><br>Afolabi, Adedeji; Akanmu, Abiola Abosede & Yusuf, Anthony                                                                                                                                                |                       |            |               | 12:00 – 11:15                                                                                                                                                                                                      | Democratic Counterterrorism Protective Security: An Integrated Approach to Safe Cities<br><br>Frasco, Benjamin Daniel. & Christensen, Pernille H.                                             |                       |            |
|               | 12:15 – 12:30                                                                                                                                            | Machine Learning-Based Fall Risk Detection in Human-Exoskeleton Interaction for Construction Workers<br><br>Okunola, Akinwale; Akanmu, Abiola Abosede & Jebelli, Houtan                                                                                                                        |                       |            |               | 12:15 – 12:30                                                                                                                                                                                                      | Shelter Approaches Towards Disaster Recovery- Addressing Root Causes.<br><br>Rahman, Subin Umar; Boarin, Paola & Premier, Alessandro                                                          |                       |            |

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| 12:30 – 12:45                                                                                  | <p><i>A Qualitative Evaluation Human Behaviour Issues Influencing Wider Offsite Construction Adoption In The United Kingdom.</i></p> <p><b>Wusu, Godoyon</b>; Alaka, Hafiz; Oseghale, Raphael; Balogun, Habeeb; Sunmonu, Funlade &amp; Ajayi, Saheed</p> | Assoc. Prof. Pernille Christensen | WA 224 B |
| 12:45 – 13:00                                                                                  | <p><b>Q&amp;A</b></p>                                                                                                                                                                                                                                    |                                   |          |
| <p><b>Track B Presentations</b>   Paper IDs: <b>572, 463, 469, 470, 481, 485 &amp; 580</b></p> |                                                                                                                                                                                                                                                          |                                   |          |
| 11:00 – 11:15                                                                                  | <p><i>Cognitive Load and Fall Risk Dynamics in Human-Exoskeleton Interaction for Construction Workers</i></p> <p>Okunola, Akinwale; <b>Akanmu, Abiola Abosede</b> &amp; Jebelli, Houtan</p>                                                              |                                   |          |
| 11:15 – 11:30                                                                                  | <p><i>The Strategic Role of Disaster Risk Reduction (DRR) Education on Fire Disaster Preparedness in Residential Buildings</i></p> <p><b>Eklou, Joseph Remir</b>; Widana, I Dewa Ketut Kerta; Suwito, Suwito &amp; Wang, Han-Hsiang</p>                  |                                   |          |
| 11:30 – 11:45                                                                                  | <p><i>A Review on Lean Principles in Offsite Construction (OSC) Manufacturing Stage: Perspectives from New Zealand</i></p> <p><b>Shrivastava, Monica</b>; Sutrisna, Monty &amp; Shahzad, Wajiha Mohsin</p>                                               |                                   |          |
| 11:45 – 12:00                                                                                  | <p><i>Cognitive Biases in Decision-Making in the New Zealand Construction Industry</i></p> <p><b>Aguas, Angelo Bien Rodriguez</b> &amp; Purushothaman, Mahesh Babu</p>                                                                                   |                                   |          |
| 12:00 – 12:15                                                                                  | <p><i>A Systematic Review of Effects of Occupational Health and Safety in Southeast Asian Construction Industry</i></p> <p><b>Widjaya, Patricia</b> &amp; Rotimi, Funmilayo Ebun</p>                                                                     |                                   |          |
| 12:15 – 12:30                                                                                  | <p><i>A Study of Mental Health and Psychological Well-being of Construction Employees in New Zealand: A Focus on Building Resilience.</i></p> <p><b>Wani, Anzar Mushtaq</b> &amp; Purushothaman, Mahesh Babu</p>                                         |                                   |          |
| 12:30 – 12:45                                                                                  | <p><i>Ontology-Based Framework for Enhancing Safety in Earthmoving Operations: A Socio-Technical System Approach in the Industry 4.0 Era</i></p> <p><b>Soltanmohammadlou, Nazi</b>; Hon, Carol K.H &amp; Drogemuller, Robin</p>                          |                                   |          |
| 12:45 – 13:00                                                                                  | <p><b>Q&amp;A</b></p>                                                                                                                                                                                                                                    |                                   |          |
| <p><b>Track C Presentations</b>   Paper IDs: <b>561, 567, 576, 579, 394, 397 &amp; 522</b></p> |                                                                                                                                                                                                                                                          | Dr Ebum Funmilayo Rotimi          | WG 1001  |
| 11:00 – 11:15                                                                                  | <p><i>Venice’s Assemblage: Infrastructural Resilience and Sense of Community in Times of Crisis</i></p> <p><b>Lara-Hernandez, Jose Antonio</b>; Walker, Charles &amp; Burgess, Andrew</p>                                                                |                                   |          |
| 11:15 – 11:30                                                                                  | <p><i>Towards Regenerative Sustainability in the Built Environment: Unpacking International Precedent Case Studies</i></p> <p><b>Rafiei, Marjan</b>; Boarin, Paola &amp; Premier, Alessandro</p>                                                         |                                   |          |
| 11:30 – 11:45                                                                                  | <p><i>Multi-Criteria Decision-Making For Construction And Demolition Waste Management: A Review</i></p> <p><b>Tong, Nguyet</b>; Domingo, Niluka &amp; Le, An</p>                                                                                         |                                   |          |
| 11:45 – 12:00                                                                                  | <p><i>Assessing Circularity Initiatives for Lowering Embodied Carbon in Australian Houses</i></p> <p><b>Hosseini, M Reza</b>; Ahmadi, Mohsen; Elghaish, Faris; Forcada Matheu, Nuria; Fitriani, Heni &amp; Wirahadikusumah, Reini</p>                    |                                   |          |
| 12:00 – 11:15                                                                                  | <p><i>Toward Sustainable Built Environments - Leveraging Green Hydrogen in New Zealand</i></p> <p><b>Lozova, Olga</b>; Tookey, John &amp; GhaffarianHoseini, Ali</p>                                                                                     |                                   |          |
| 12:15 – 12:30                                                                                  | <p><i>A Sustainable Renewable Energy Strategy for Thailand Using the Hybrid Optimization of Multiple Energy Resources (HOMER) Software</i></p> <p><b>Poorisat, Tharaya</b>; Aigwi, Itohan Esther; Tuohy, Paul &amp; Nwadike, Amarachukwu Nnadozie</p>    |                                   |          |

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| 12:30 – 12:45                                                                      | <i>Low-cost Solutions for Improving the Energy Efficiency of Residential Buildings in New Zealand</i><br><br>Jose, Aavril Anna & ; <b>Vishnu, Priya</b>                                                                                                                                                                                    | Dr Eziaku Rasheed | WA 224 B |
| 12:45 – 13:00                                                                      | Bim Methodology and Technologies in Chile applied to Buildings and Infrastructure Companies: Ongoing Research Activities<br><br>Mathias A. Valenzuela                                                                                                                                                                                      |                   |          |
| <b>Track J Presentations</b>   Paper IDs: <b>402, 558, 565, 501, 477 &amp; 413</b> |                                                                                                                                                                                                                                                                                                                                            |                   |          |
| 11:00 – 11:15                                                                      | <i>Particle-Trail: Digital Fabrication and Subtractive Manufacturing for Complex Natural Stone Furniture</i><br><br><b>Premier, Alessandro</b> ; Davis, Michael & Mulla, Sarosh                                                                                                                                                            |                   |          |
| 11:15 – 11:30                                                                      | <i>Optimizing Mosque Facilities: Spiritual Intelligence Needs For Meeting Contemporary Community</i><br><br><b>Harahap, Rohimah Khoiriyah</b> & Ibrahim, Rahinah                                                                                                                                                                           |                   |          |
| 11:30 – 11:45                                                                      | <i>Circular Economy Financial Performance Indicators in Circular Infrastructure Projects: A Meta-Analysis</i><br><br><b>Tetteh, Portia Atswei</b> ; Osei-Kyei, Robert & Tam, Vivian WY                                                                                                                                                     |                   |          |
| 11:45 – 12:00                                                                      | <i>Scoping ecological influences of the built environment: Developing the Biodiversity Lifecycle Impact Assessment for Buildings (BLIAB) framework</i><br><br><b>Kuru, Aysu</b> ; Parkinson, Thomas; Brambilla, Arianna; Gasparri, Eugenia & Astell-Burt, Thomas                                                                           |                   |          |
| 12:00 – 12:15                                                                      | <i>Driving Circularity through Governmental Initiatives: Insights from Leading Global Economies and Influential Countries</i><br><br><b>Ranasinghe, Navoda</b> ; Domingo, Niluka & Kahandawa, Ravindu                                                                                                                                      |                   |          |
| 12:15 – 12:30                                                                      | <i>Collaboration Challenges and Opportunities under Collaborative Contracts</i><br><br><b>Gharouni Jafari, Kobra</b> ; Mottee, Lara & Whyte, Jennifer                                                                                                                                                                                      |                   |          |
| 12:30 – 12:45                                                                      | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                                                             |                   |          |
| <b>Track K Presentations</b>   <b>555, 500, 536, 585, 517 &amp; 547.</b>           |                                                                                                                                                                                                                                                                                                                                            | Dr Zahra Jalali   | WG 1001  |
| 11:00 – 11:15                                                                      | <i>Beyond Convenience: A Historical Perspective on Technology Adoption within the Home</i><br><br><b>Ehteshami, Azin</b> ; Lazanovska, Mirjana & Tucker, Richard                                                                                                                                                                           |                   |          |
| 11:15 – 11:30                                                                      | <i>Leveraging Blockchain-Enabled Digital Twins for Building Commissioning</i><br><br><b>Adu-Amankwa, Nana Akua</b> & Rahimian, Farzad                                                                                                                                                                                                      |                   |          |
| 11:30 – 11:45                                                                      | <i>Digital Competencies for Project Managers in the Smart Built Environment</i><br><br><b>Owais, Omar A.</b> ; Poshdar, Mani; GhaffarianHoseini, Ali; Ying, Fei; Jaafar, Kamal; Sarhan, Saad & Sheikhhoshkar, Moslem                                                                                                                       |                   |          |
| 11:45 – 12:00                                                                      | <i>Circular Economy (CE) in Construction Waste Management: A Review</i><br><br><b>Doan, Dat Tien</b> ; Patu, Tilomai; Naismith, Nicola; Ghaffarianhoseini, Ali & Ghaffarianhoseini, Amirhosein                                                                                                                                             |                   |          |
| 12:00 – 12:15                                                                      | <i>Effectively Transiting from Traditional Construction Method to Offsite Construction Through Robust Data Management Repository-Implications to Wider OSC Approach and Adoption</i><br><br><b>Wusu, Godoyon</b> ; Alaka, Hafiz; Oseghale, Raphael; Yusuf, Wasiu; Sunmonu, Funlade; Ajayi, Saheed; Oriowo, Oluwakemi & Akinyemi, Bolarinwa |                   |          |
| 12:15 – 12:30                                                                      | <i>Cultural Continuum of Indigenous Architectural Expressions: Informing Spatial Intelligence Through Practice</i><br><br><b>Khan, Jaffer Adam Ayub</b> & Varadarajan, Deepika                                                                                                                                                             |                   |          |

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| 12:30 – 12:45                                                                                                              | Examining Glazed Facades as Climate Contributors: Assessing Solar Radiation Effects and Mitigation Measures                                                                                                                                                                                        | Dr Alessandro Premier | WG 1020 |
|                                                                                                                            | Kanaan, Zaid; Shahzad, Wajiha; Rasheed, Eziaku & Elkharboutly, Mohamed                                                                                                                                                                                                                             |                       |         |
| 12:45 – 13:00                                                                                                              | Q&A                                                                                                                                                                                                                                                                                                |                       |         |
| Track D Presentations   Paper IDs: 445, 461,462, 475, 493, 494 & 499                                                       |                                                                                                                                                                                                                                                                                                    |                       |         |
| 11:00 – 11:15                                                                                                              | Shading Impact On Building Integrated Photovoltaics (BIPV) Energy Generation In Low-rise And High-rise Buildings<br><br>Azeem, Aaliya & Thomas, Albert                                                                                                                                             |                       |         |
| 11:15 – 11:30                                                                                                              | A Conceptual Framework for Selecting Sustainable Construction Materials<br><br>Bui, Kien Tin; Domingo, Niluka & Le, An                                                                                                                                                                             |                       |         |
| 11:30 – 11:45                                                                                                              | Investigating Social Sustainability Dimensions in Social Housing in India<br><br>Ahamed, Azra; Haghighi, Farzaneh & Boarin, Paola                                                                                                                                                                  |                       |         |
| 11:45 – 12:00                                                                                                              | Reducing Expanded Polystyrene (EPS) Waste in New Zealand Construction Sites A Case Study on Using EPS as Lightweight Foundation Fill in the Commercial Construction of the AUT A1 Building, Auckland<br><br>Oswald, Ferdinand & Pook, Tessa                                                        |                       |         |
| 12:00 – 12:15                                                                                                              | Current Building Practice And Emerging Building Technology In South Africa<br><br>Bothma, Jacobus Carolus                                                                                                                                                                                          |                       |         |
| 12:15 – 12:30                                                                                                              | Optimizing Energy Efficiency in Residential Buildings Using BIM and Energy Analysis Tools<br><br>Karimi, Mohammad; K, Manjula Vani & Karimi, Mustafa                                                                                                                                               |                       |         |
| 12:30 – 12:45                                                                                                              | A Conceptual Framework for Floor Plan Generation with Optimal Utilization<br><br>Song, Yoan; Jang, Jae Young; Eum, Yujeung & Cha, Seung Hyun                                                                                                                                                       |                       |         |
| 12:45 – 13:00                                                                                                              | Q&A                                                                                                                                                                                                                                                                                                |                       |         |
| Recorded Presentations – Session I - Paper IDs: 440, 460, 546, 484, 521, 444, 554, 516, 497, 543, 541, 488, 583,524 & 410. |                                                                                                                                                                                                                                                                                                    | Dr Megan Burfoot      | WG 201  |
| 11:00-11:10                                                                                                                | Leveraging AI to Enhance XR in the AEC industry<br><br>Alizadehsalehi, Sepehr & Hadavi, Ahmad                                                                                                                                                                                                      |                       |         |
| 11.10-11.20                                                                                                                | Exploring AI's Role in Semantic Segmentation for Data-driven Three-Dimensional Models of Heritage Structures<br><br>B, Subhadha & Jaganathan, Siva                                                                                                                                                 |                       |         |
| 11:20-11:30                                                                                                                | Construction Briefs and the Sustainability Agenda: A Scoping Study to Enhance Brief Quality<br><br>Bajani, Dolapo Kate & Rotimi, James Olabode Bamidele                                                                                                                                            |                       |         |
| 11:30-11:40                                                                                                                | 3D Printing Technology for Precast Concrete: A Business Process Perspective from Indonesian Construction Sector<br><br>Berawi, Mohammed Ali; Sari, Mustika; Bakri, Helty Fatimah; Miraj, Perdana; Saroji, Gunawan & Susilowati, Suci Indah                                                         |                       |         |
| 11:40-11:50                                                                                                                | Perceptions of liveability and sense of community in five different neighbourhoods in Tamaki Makaurau Auckland, New Zealand<br><br>Besen, Priscila; Burgess, Andrew; Vallis, Stacy; Marks, Stefan; Horne, Riana; Geddes, Abby; Traiton Pearson, James; Cruz, Jyllian; Patel, Devarsh & Paala, Kyle |                       |         |
| 11:50-12:00                                                                                                                | Climate Change-Induced Flood Vulnerability Assessment of Earthquake-Prone Heritage Buildings in New Zealand<br><br>Ge, Yijun; Aigwi, Itohan Esther & Nwadike, Amarachukwu Nnadozie                                                                                                                 |                       |         |
| 12:00-12:10                                                                                                                | Using Energy Performance Contracting To Advance Decarbonization And Resiliency In Local Governments: A County Of Maui Case Study                                                                                                                                                                   |                       |         |

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| 12:30 – 12:45                          | Q&A                                                                                                                                                                                                                                  |                                                                                  |         |  |
| Track L Presentations                  |                                                                                                                                                                                                                                      | Paper IDs: 405,422, 509, 446,528 & 436                                           |         |  |
| 11:00 – 11:15                          | Flood Resilience Through Impervious Area Reduction Strategies: Mapping Knowledge, Trends, And Structure Through Bibliometric Analysis                                                                                                | Assoc. Prof. Timothy Adekunle                                                    | WG 1020 |  |
| 11:15 – 11:30                          | Rotimi, Funmilayo Ebun; Kalatehjari, Roohollah; Williams, Helen; Dokyi, George Okyere & Moshood, Taofeeq Durojaye<br>Assessing the Feasibility of Implementing Sponge City Strategies for Urban Stormwater Management in New Zealand |                                                                                  |         |  |
| 11:30 – 11:45                          | Farooq, Umar; Elkharboutly, Mohamed & Shahzad, Wajiha<br>Urban Seascaping: Dos and Don'ts of Integrating Marine Nature-based Approach to Waterfront Development                                                                      |                                                                                  |         |  |
|                                        | Ryu, Soo                                                                                                                                                                                                                             |                                                                                  |         |  |
| 11:45 – 12:00                          | Improving Livability in Cities by Identifying Outdoor Thermal Risk Areas                                                                                                                                                             |                                                                                  |         |  |
|                                        | Hashemi, Saghar; Ghaffarianhoseini, Amirhosein; Ghaffarianhoseini, Ali & Naismith, Nicola                                                                                                                                            |                                                                                  |         |  |
| 12:00 – 12:15                          | Evaluating Energy Savings and Operational Carbon Reduction in Existing New Zealand School Buildings by Adhering to Various Energy Code Requirements                                                                                  |                                                                                  |         |  |
|                                        | Zhou, Jin; Guo, Brian H.W.; Wu, Wentao; Abdelaal, Fatma & Baba, Fuad                                                                                                                                                                 |                                                                                  |         |  |
| 12;15- 12:30                           | Life Cycle Assessment Software: Is There a Best Tool?                                                                                                                                                                                |                                                                                  |         |  |
|                                        | Gong, Joseph; Wilkinson, Suzanne; Vishnupriya, Vishnupriya                                                                                                                                                                           |                                                                                  |         |  |
| 12:30 – 12:45                          | Q & A                                                                                                                                                                                                                                |                                                                                  |         |  |
| Recorded Presentations – Session III - |                                                                                                                                                                                                                                      | Paper IDs: 563, 434, 399, 538, 540, 387, 508, 518, 471, 490, 483, 545, 435 & 584 |         |  |
| 11:00-11:10                            | Leveraging Machine Learning and Wearable Sensor for Cognitive risks Assessments in Human-Wearable Robot Interactions                                                                                                                 | Dr Antonio Lara Hernandez                                                        | WG 201  |  |
|                                        | Tomori, Mariam; Gnanaprakasam, Sriram & Ogunseiju, Omobolanle                                                                                                                                                                        |                                                                                  |         |  |
| 11.10-11.20                            | Achieving Net Zero Carbon Building - A Review of Major Stakeholder Concerns                                                                                                                                                          |                                                                                  |         |  |
|                                        | Falana, Justina Nwaeze; Osei-Kyei, Robert & Tam, Vivian WY                                                                                                                                                                           |                                                                                  |         |  |
| 11:20-11:30                            | Exploring the Use of Open Access Data in Smart Heritage – Using Chinatown Melbourne as a Case Study                                                                                                                                  |                                                                                  |         |  |
|                                        | Geng, Shiran; Chau, Hing-Wah; Jamei, Elmira & Vrcelj, Zora                                                                                                                                                                           |                                                                                  |         |  |
| 11:30-11:40                            | Cross-Disciplinary Scenario Planning for Digitalisation in Project and Building Lifecycle                                                                                                                                            |                                                                                  |         |  |
|                                        | Ghalandar, Toomaj                                                                                                                                                                                                                    |                                                                                  |         |  |
| 11:40-11:50                            | What is the Impact of Real-Time Energy Feedback? A Literature Review on Social Housing                                                                                                                                               |                                                                                  |         |  |
|                                        | Gomez, Edgar; Carter, Kate & Lee, W. Victoria                                                                                                                                                                                        |                                                                                  |         |  |
| 11:50-12:00                            | BIM-based Fuzzy-AHP and TOPSIS ranking process for Renovation Projects Design Alternatives.                                                                                                                                          |                                                                                  |         |  |
|                                        | Hassan, Osama Adel; Masmoudi, Malek & Abdalla, Salem                                                                                                                                                                                 |                                                                                  |         |  |
| 12:00-12:10                            | A Framework to Accelerate the Circular Economy Implementation in the Construction Industry through Digital Technology Adaptation                                                                                                     |                                                                                  |         |  |

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|  |  | de Roode, Alexander Francois |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |
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| 17:00 – 17:15                                                               | <i>Using Digital Twins For Managing Change In Complex Projects</i><br><br>Whyte, Jennifer; Soman, Ranjith K.; Sacks, Rafael; Mohammadi, Neda; Naderpajouh, Nader; <b>Hong, Wei-Ting</b> & Lee, Ghang                                                 |                          |          |
| 17:15 – 17:30                                                               | <i>Application of Virtual Reality to Assess Visual, Thermal Perception, and Users' Adaptive Behaviors in Buildings</i><br><br><b>Arowoiya, Victor</b> ; Moehler, Robert & Fang, Yihai                                                                |                          |          |
| 17:30 – 17:45                                                               | <i>Immersive Virtual Reality for Online Training in Construction Management</i><br><br>Abadia, Rhodora; <b>Jayawickrama, Thilini</b> ; Fritsch, Jonathan & Abdelaal, Shokry                                                                          |                          |          |
| 17:45 – 18:00                                                               | <i>Exploring Digital Twin Applications in New Zealand's Three Water Infrastructure for Sustainable Development: A Comprehensive Review</i><br><br><b>Qureshi, Mehwish Aziz</b> ; Feng, Zhenan; Kumar, Vishal; Lovreglio, Ruggiero & Besharat, Mohsen |                          |          |
| 18:00 – 18:15                                                               | <i>Localising the Global: "Creole Platforms" and the Reimagining of Urban Digital Landscapes</i><br><br><b>Lozano Paredes, Luis Hernando</b>                                                                                                         |                          |          |
| 18:15 – 18:30                                                               | <i>Virtual Reality for professional Safety Training: Development Strategies and Implementation</i><br><br><i>Plumb, Caolan; Rahiman, Farzad; Pandit, Diptanghsu; Thomas, Hannah; Clark, Nigel</i>                                                    |                          |          |
| <b>Track F Presentations   Paper IDs: 431, 433, 478, 479, 502 &amp; 411</b> |                                                                                                                                                                                                                                                      | Dr Mani Poshdar          | WA 224 B |
| 16:30 – 16:45                                                               | <i>Energy Evaluation and Thermal Comfort in Mass Custom Prefabricated Buildings</i><br><br><b>Adekunle, Timothy O.</b>                                                                                                                               |                          |          |
| 16:45 – 17:00                                                               | <i>Advanced Façade Design and New Metal Envelopes Towards a Net-Zero-Carbon Future</i><br><br><b>Premier, Alessandro</b>                                                                                                                             |                          |          |
| 17:00 – 17:15                                                               | <i>A Proposed Knowledge Framework for Experiential Decision-Making in Building Design</i><br><br><b>Dasandara, Miyami</b> ; Rashidi, Ali; Arashpour, Mehrdad & Maxwell, Duncan                                                                       |                          |          |
| 17:15 – 17:30                                                               | <i>Optimal Control Strategies Of A Heat Recovery System For A Large Factory Building</i><br><br><b>Jo, Hyeong-Gon</b> ; Kim, Young-Sub; Kim, Jin-Hong; Park, Cheo-Soo; Urabe, Eiji; Mun, Junghyon; Shin, Yukung & Park, Yongsung                     |                          |          |
| 17:30 – 17:45                                                               | <i>A Framework to Assess the Circular Economy Knowledge Proficiency of Designers in the Construction Industry</i><br><br><b>Buddha Koralage, Malsha Nadeetharu</b> ; Udawatta, Nilupa & Karunasena, Gayani                                           |                          |          |
| 17:45 – 18:00                                                               | <i>Using the Circular Economy Design Evaluation (CEDE) Framework to Identify Sustainability and Efficiency Gaps and Opportunities</i><br><br><b>Gibberd, Jeremy</b>                                                                                  |                          |          |
| 18:00 – 18:15                                                               | <b>Q&amp;A</b>                                                                                                                                                                                                                                       |                          |          |
| <b>Track G Presentations   Paper IDs: 489, 523, 530, 486, 474 &amp; 552</b> |                                                                                                                                                                                                                                                      | Dr Ebum Funmilayo Rotimi | WG 1001  |
| 16:30 – 16:45                                                               | <i>A Conceptual Framework for Designing User-centric and Responsive Digital Experiences in the Built Environment</i><br><br><b>Eum, Yujeung</b> ; Bae, Sun Ah; Kim, Hyun Woo; Song, Yoan & Cha, Seung Hyun                                           |                          |          |
| 16:45 – 17:00                                                               | <i>A Systematic Review of Simulation Tools Used in Fire Safety Training For Hospital Staff</i><br><br><b>Fahmi, Maryse</b> ; Purushothaman, Mahesh Babu; Rotimi, Funmilayo Ebum & Hoseini, Ali Ghaffarian                                            |                          |          |

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| 16:45 –17:00                                                                | <i>Stakeholder Power Dynamics, a Key to Sustainably Win the Game of Sustainability in Construction</i><br><br><b>Koohestani, Kayvan</b> ; Poshdar, Mani; Ninan, Johan & Bidhendi, Ali                                                                                              |                 |          |
| 17:00 –17:15                                                                | <i>Who Are We Designing For?</i><br><br><b>Fraser, Jessamine</b> ; Burgess, Andrew; Burfoot, Megan; Shearer, Rachel & Walker, Charles                                                                                                                                              |                 |          |
| 17:15 –17:30                                                                | <i>Investigating the Impact of Language Barriers on Mental Health of Chinese Migrant Construction Workers in New Zealand</i><br><br><b>Wang, Jiadong</b> & Rotimi, Funmilayo Ebum                                                                                                  |                 |          |
| 17:30 –17:45                                                                | <i>Enhancing Construction Design Efficiency: An Approach to Data Extraction with Natural Language Processing for Technical Drawing</i><br><br><b>Salimi, Ghazal</b> ; Rahimian, Farzad; Ebere Okonta, Donatus; Oliver, Stephen; Di Stefano, Alessandro; Vakaj, Edlira & Lane, Nick |                 |          |
| 17:45 –18:00                                                                | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                     |                 |          |
| <b>Track N Presentations   Paper IDs: 492, 419,557, 418, 468, 721</b>       |                                                                                                                                                                                                                                                                                    | Dr Aysu Kuru    | WA 224 B |
| 16:15 –16:30                                                                | <i>A BIM-enabled Ontological Framework for Multi-criteria Circularity Assessment in the Built Environment</i><br><br><b>Sivashanmugam, Subarna</b> ; Meng, Yiping; Rodriguez, Sergio & Rahimian, Farzad Pour                                                                       |                 |          |
| 16:30 –16:45                                                                | <i>Optimal Control Strategies for Multiple Chillers in a Fabrication Plant Building</i><br><br><b>Kim, Young-Sub</b> ; Kim, Jin-Hong; Jo, Hyeong-Gon; Park, CheolSoo; Urabe, Eiji; Mun, Junghyon; Shin, Yukung & Park, Yongsung                                                    |                 |          |
| 16:45 –17:00                                                                | <i>Leveraging BIM and Prefabrication for Enhanced Architectural Excellence in Sustainable Construction</i><br><br><b>Bidhendi, Ali</b> ; Nahri, Zahra; Motamedmanesh, Mahdi & Poshdar, Mani                                                                                        |                 |          |
| 17:00 –17:15                                                                | <i>Potential for End-User Digital Engagement in Residential Apartment Building Design in Australia: Current Status, and Challenges</i><br><br><b>Motalebi, Maedeh</b> ; Heffernan, Emma; McCarthy, Timothy & Marzban, Samin                                                        |                 |          |
| 17:15 –17:30                                                                | <i>Crafting Sustainable Urban Futures: Manifesting (Non)Productive Urban Realities through DIY Play</i><br><br>Rachev, Rumen; <b>Smith-Harvey, James</b> ; Berthelsen, Chris & Ben-Dror, Adam                                                                                      |                 |          |
| 17:30 –17:45                                                                | <i>The Nuances Between Microclimate, Thermal Comfort, And Daylight Studies On Medium Density Houses; A Systematic Literature Review</i><br><br><b>Deependra Pourel</b> ; Ghaffarianhoseini, Amirhossein; GhaffarianHoseini, Ali; Naismith, Nicola                                  |                 |          |
| 17:45 –18:00                                                                | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                     |                 |          |
| <b>Track O Presentations   Paper IDs: 526, 412, 464, 467, 506 &amp; 533</b> |                                                                                                                                                                                                                                                                                    | Dr Kamal Dhawan | WG 1001  |
| 16:15 –16:30                                                                | <i>A State-Of-The-Art Review of Offsite construction Adoption Within the UK Construction Industry- The RIBA-Plan of Work Perspective</i><br><br><b>Wusu, Godoyon</b> ; Alaka, Hafiz; Oseghale, Raphael & Oriowo, Oluwakemi                                                         |                 |          |
| 16:30 –16:45                                                                | <i>Applying the Deconstruction and Reuse Evaluation (DERUE) Tool to Evaluate the End-of-Life Circularity Potential of Building</i><br><br><b>Gibberd, Jeremy</b>                                                                                                                   |                 |          |

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|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|
| 17:00 – 17:15                                                                                                                              | Exploring Experiential Wellbeing in VR-Simulated Built Environments: Insights from EEG, Pupillometry, and Psychogalvanic Analysis       |                 |         | 16:45 –17:00                                                                                                                      | Challenges in the Construction Material Reuse Supply Chain                                                                                                        |             |        |
|                                                                                                                                            | <b>Khan, Sadaf Haleem;</b> Kujur, Abhijeet & Kumar, Jyoti                                                                               |                 |         |                                                                                                                                   | Kempton, Leela & <b>Heffernan, Emma</b>                                                                                                                           |             |        |
| 17:15 – 17:30                                                                                                                              | De-Supply: Deep Reinforcement Learning for Multivariate Supply Chain Optimization                                                       |                 |         | 17:00 –17:15                                                                                                                      | All Over: A Systemic Review Of Artificial Intelligence In Architecture                                                                                            |             |        |
|                                                                                                                                            | <b>Fotso Mtope, Franck Romuald;</b> Pandit, Diptangshu; Joneidy, Sina & Rahimian, Farzad                                                |                 |         |                                                                                                                                   | <b>McMeel, Dermott;</b> Jayachandran, Surendar & Walker, Charles                                                                                                  |             |        |
| 17:30 – 17:45                                                                                                                              | Plastic Components on New Zealand Residential Construction Sites Examining the Quantity of Packaging, Off-Cuts, and Built-in Plastics   |                 |         | 17:15 –17:30                                                                                                                      | Assessment of Thermal Comfort in a Historic Living Museum – A Case Study of the Parsonage                                                                         |             |        |
|                                                                                                                                            | <b>Oswald, Ferdinand;</b> Laksitoadi, Baskoro & Pook, Tessa                                                                             |                 |         |                                                                                                                                   | <b>Adekunle, Timothy O.</b>                                                                                                                                       |             |        |
| 17:45 – 18:00                                                                                                                              | Closing the Loop in the Construction Industry through Reverse Logistics: A Bibliometric Analysis                                        |                 |         | 17:30 –17:45                                                                                                                      | A Qualitative Assessment of Awareness Influencing Factor on Offsite Construction Adoption Within the United Kingdom- A Construction Industry Professionals' View. |             |        |
|                                                                                                                                            | <b>Wijewickrama, Madduma Kaluge Chamitha Sanjani</b>                                                                                    |                 |         |                                                                                                                                   | <b>Wusu, Godoyon;</b> Alaka, Hafiz; Oseghale, Raphael; Yusuf, Wasiu; Sunmonu, Funlade & Akinyemi, Bolarinwa                                                       |             |        |
| 18:00 – 18:15                                                                                                                              | <b>Q&amp;A</b>                                                                                                                          |                 |         | 17:45 –18:00                                                                                                                      | <b>Q&amp;A</b>                                                                                                                                                    |             |        |
| <b>Track H Presentation  </b> Paper IDs: <b>458, 520, 407, 568, 388 &amp; 482</b>                                                          |                                                                                                                                         | Dr Dat Doan     | WG 1020 | <b>Recorded Presentations – Session IV -</b> Paper IDs: <b>428, 442, 386, 459, 421, 395, 532,451, 466, 544, 439,400 &amp; 383</b> |                                                                                                                                                                   | Dr Dat Doan | WG 201 |
| 16:30 – 16:45                                                                                                                              | Reducing Built Environment Embodied Carbon: A Transport Perspective                                                                     |                 |         | 16:15-16:25                                                                                                                       | Safety By Design: Innovative Evacuation Dynamics of Mega Sports Facilities                                                                                        |             |        |
|                                                                                                                                            | <b>Dhawan, Kamal;</b> Tookey, John & GhaffarianHoseini, Ali                                                                             |                 |         |                                                                                                                                   | <b>Mohammedsherif, Hamdi Ahmed &amp; Fadli, Fodil</b>                                                                                                             |             |        |
| 16:45 – 17:00                                                                                                                              | Circular Building (CB) adoption: Identifying Barriers and Enablers Among Australian AEC Stakeholders                                    |                 |         | 16:25-16:35                                                                                                                       | Universal Design for Neurodiverse in New Zealand Workspaces                                                                                                       |             |        |
|                                                                                                                                            | <b>Motiei, Mohana;</b> Iyer-Raniga, Usha & Andamon, Mary Myla                                                                           |                 |         |                                                                                                                                   | <b>Muneer, Taabish &amp; Burfoot, Megan</b>                                                                                                                       |             |        |
| 17:00 – 17:15                                                                                                                              | A Meta-analysis of Climate Risk Mitigation Strategies in the Construction Sector                                                        |                 |         | 16:35-16:45                                                                                                                       | Prevention And Control Of Cracks In Architectural Concrete Structures: A Design-Based Approach To Load Distribution And Structural Strength Improvement           |             |        |
|                                                                                                                                            | <b>Akomea-Frimpong, Isaac;</b> Jin, Xiaohua; Osei-Kyei, Robert; Agyekum, Amma Kyewaa; Taden, John; Amoakwa, Alexander & Kedjah, Comfort |                 |         |                                                                                                                                   | <b>Clement, Francis Deng;</b> Mehdipour, Armin & Shutian, Zhou                                                                                                    |             |        |
| 17:15 – 17:30                                                                                                                              | BIM-based Deconstruction of Bridge Structures Using Digital 3D-models and Information Containers                                        |                 |         | 16:45-16:55                                                                                                                       | Factors Influencing the Implementation of Biogas in New Zealand                                                                                                   |             |        |
|                                                                                                                                            | <b>Jaekel, Jan-Iwo &amp; Heinlein, Eva</b>                                                                                              |                 |         |                                                                                                                                   | <b>Shanthaveerappa, Tarun &amp; Purushothaman, Mahesh Babu</b>                                                                                                    |             |        |
| 17:30 – 17:45                                                                                                                              | Assessing Native Plant Presence and Maintenance Re-source Allocations in New Zealand Backyards: A Nation-wide Online Questionnaire      |                 |         | 16:55-17:05                                                                                                                       | Sustainable Construction Practices: Evidence from Indian Construction Companies                                                                                   |             |        |
|                                                                                                                                            | <b>Burfoot, Megan Jane;</b> Budha-Magar, Shanta; Ghaffarianhoseini, Ali & Ghaffarianhoseini, Amirhosein                                 |                 |         |                                                                                                                                   | <b>Sreram, Prashanth Kumar</b>                                                                                                                                    |             |        |
| 17:45 – 18:00                                                                                                                              | Application of Design Probes to Promote and Foster Children's Creative Participation in Disaster Risk Reduction                         |                 |         | 17:05-17:15                                                                                                                       | Residential Solar Adoption in Australia: Impact of Personnel-Related Factors                                                                                      |             |        |
|                                                                                                                                            | <b>Mosavat, Mojan;</b> Ghaffarianhoseini, Amirhosein; Ghaffarianhoseini, Ali & Le De, Loic                                              |                 |         |                                                                                                                                   | <b>Zhang, Yanquan;</b> Chang, Ruidong & Zuo, Jian                                                                                                                 |             |        |
| 18:00 – 18:15                                                                                                                              | <b>Q&amp;A</b>                                                                                                                          |                 |         | 17:15-17:25                                                                                                                       | How Changes In Urban Mobility Affect Experienced Urban Diversity: Case Study For Scenarios In Wellington                                                          |             |        |
|                                                                                                                                            |                                                                                                                                         |                 |         |                                                                                                                                   | <b>Baciu, Dan</b>                                                                                                                                                 |             |        |
| <b>Recorded Presentations – Session II -</b> Paper IDs: <b>416, 456, 578, 408, 465, 529, 476, 498, 417, 527, 535, 423,586,728 and 729.</b> |                                                                                                                                         | Dr Kamal Dhawan | WG 201  | 18:15 –18:30                                                                                                                      | Development of SIT Hybrid Machine Learning Algorithm for Hour Level Building Energy Consumption Probabilistic Prediction                                          |             |        |
| 16:30-16:40                                                                                                                                | Revolutionizing Safety Practices: Integrating Neuroscience into Predictive Analytics for the Construction site Stress Reduction         |                 |         | 17:25-17:35                                                                                                                       | <b>Meng,. Yiping;</b> Sun, Yiming & Rahimian, Farzad                                                                                                              |             |        |
| 16:40-16:50                                                                                                                                | Digital Technologies in Off-site Construction Carbon Emissions: A Systematic Literature Review                                          |                 |         |                                                                                                                                   | Feature Ranking for Predicting Occupant Thermal Com-fort using Artificial Neural Networks (ANNs)                                                                  |             |        |
|                                                                                                                                            | <b>Liang, Xun;</b> Feng, Zhenan; Jelodar, Mostafa Babaeian; Shahzad, Wajiha & Yiu, Kenneth                                              |                 |         | 17:35-17:45                                                                                                                       | <b>Uddin, Mohammad Nyme;</b> Lee, Minhyun; Zhang, Xuange; Cui, Xue; Rakib, Soleman; Imran, Md. Iktekar Alam; Hasan, Tanvin & Khan, Anisuzzaman                    |             |        |
| 16:50-17:00                                                                                                                                | A Proposed Framework for Enhanced Interoperability in Smart Cities through Unified City Information Modeling (UCIM)                     |                 |         |                                                                                                                                   | Examining Professional Identity Practices in Autonomous Robots: Toward Professional Identity Development of Construction Engineering and Management Students      |             |        |
|                                                                                                                                            | <b>Okonta, Ebere Donatus;</b> Rahimian, Farzad & Rodriguez, Sergio                                                                      |                 |         | 17:45-17:55                                                                                                                       | <b>Tomori, Mariam &amp; Ogunseiju, Omobolanle</b>                                                                                                                 |             |        |
|                                                                                                                                            |                                                                                                                                         |                 |         |                                                                                                                                   | How Digital Twin Technology can Support Value Stream Mapping, a Renewed Method in Lean Construction                                                               |             |        |
|                                                                                                                                            |                                                                                                                                         |                 |         | 17:55-18:05                                                                                                                       | <b>Golsorkhi, Sina &amp; Poshdar, Mani</b>                                                                                                                        |             |        |

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|  | 17:00-17:10   | <i>Generative AI for Predictive Maintenance in Buildings</i><br><br><b>Asare, Kofi A.B.</b> ; Liu, Rui & Anumba, Chimay J.                                                                                                                              |  |  |  | 18:05-18:15   | <i>Impact of Vertical Greenery Systems on Indoor Comfort in Composite Climates: A Case-Control Experiment in Delhi, India</i><br><br><b>Khan, Irfan Haider</b> & Munawer, Taiyaba |             |       |  |
|  | 17:10-17:20   | <i>Use of BIM to Evaluate Feasibility of Deconstruction</i><br><br><b>Booth, Lachlan</b> ; Kempton, Leela & Heffernan, Emma                                                                                                                             |  |  |  | 18;15-18:25   | <i>A ‘passive’ approach to Net Zero for New Zealand social housing – preliminary findings</i><br><br><b>Zhao, Jing</b> & Rasheed, Eziaku                                          |             |       |  |
|  | 17:20-17:30   | <i>Synergizing Artificial Intelligence with Sustainable Design for Smart Built Environments</i><br><br>Parisi, Luana; <b>Kumah, Victoria Maame Afriyie</b> & Konadu, Elvis Adjei                                                                        |  |  |  | 18.15 – 18.45 | Keynote 11   Prof. Derek Clements- Croome (University of Reading, UK)<br>Intelligent Sustainable Liveable Buildings For The 21st Century                                          | WA 224 A/ B |       |  |
|  | 17:30-17:40   | <i>A Review of CiteSpace-Based Research on Thermal Comfort in Rail Transit Environments</i><br><br><b>Li, Dingran</b> ; Dong, Lili; Cheng, Xiang; Luo, Yu & He, Baojie                                                                                  |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 17:40-17:50   | <i>Research on Lighting Preferences and Their Impacts on E-sports Activities of Resident College Students</i><br><br><b>Cheng, Xiang</b> ; Yan, Yonghong; Wei, Heyi; Zeng, Yue & He, Baojie                                                             |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 17:50-18:00   | <i>Stakeholder Engagement Use Cases for Research in Residential and Infrastructure Projects</i><br><br><b>Hafeez, Mian Atif</b> ; Alani, Yasir; Akponeware, Anderson; Guðlaugsson, Bjarnhéðinn; Dawood, Huda; Rodriguez-Trejo, Sergio & Dawood, Nashwan |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 18:00-18:10   | <i>Assessing the Resilience Potential of Cloisters in Historical Urban Areas in Response to Climate Change.</i><br><br><b>Gherri, Barbara</b> ; Matoti, Sara & Rovetta, Lisa                                                                            |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 18:10-18:20   | <i>Frameworks for Assessment of Flexibility and Adaptability of New Buildings: A Take on Opportunities, Gaps and Limitations</i><br><br><b>Mlote, Doreen Steven</b> ; Cheah, Lynette & Ortner, F. Peter                                                 |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 18:20-18:30   | <i>Factors Influencing Passive House Adoption in New Zealand</i><br><br><b>Nwadike, Amarachukwu Nnadozie</b> ; Aigwi, Esther Itohan & Ye, Chen                                                                                                          |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 18:30-18:40   | <i>Closing the Loop: An Analysis of Construction Waste Reduction Policies</i><br><br><b>Doan, Dat Tien</b> ; McKinney-Ryder, Jack; Mai, Tuyet Phuoc Anh; Ghaffarianhoseini, Ali & Ghaffarianhoseini, Amirhosein                                         |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  | 18:40 – 18:50 | <i>Digital Technology for Construction Circularity: Applications, State of Practice, and Trends</i><br><br><b>Xichen Chen</b>                                                                                                                           |  |  |  | 1845 – 19:00  | Closing Session   Best Paper / Best Presenter Announcement<br><br>Prof. Derek Clements- Croome, Professor Ali GhaffarianHoseini<br>Professor Amirhosein GhaffarianHoseini         |             |       |  |
|  | 18:50 – 19:00 | <i>From Construction 4.0 to Construction 5.0: Principles and enabling technologies</i><br><br><b>Xichen Chen</b>                                                                                                                                        |  |  |  |               |                                                                                                                                                                                   |             |       |  |
|  |               |                                                                                                                                                                                                                                                         |  |  |  | 19:00 –21:30  | SASBE2024 GALA DINNER                                                                                                                                                             |             | WG201 |  |

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