Building Our Future: Informing practice to enhance the lives of current and future generations

27-30 June 2022
RMIT University, Melbourne
Hybrid Conference

CIB World Building Congress 2022

cibwbc2022.org

International Council for Research and Innovation in Building and Construction

RMIT University
The artwork is called “Luwaytini”, which is Palawa Kani for Milky Way. It represents the connection to something greater. Even though we may occasionally feel outcast or forgotten, we are made up of the same energy and we belong.”

“This represents that the uniqueness of everyone is what makes them special, and it is the light they should shine to the world, rather than feeling dark and hiding from it. After losing my mother last year, as well as watching the pandemic unfold, it was my way of healing personally as well as focusing on the positive aspects of life.”
Building 80 (Swanston Academic Building)
Conference Rooms
Levels 2, 3, 4, 5, 6, 11
Lecture Theatres
Levels 4, 6

Building 16 (Storey Hall)
Registration Desk
Sponsor Exhibits
Plenaries
Welcome & Closing
Level 5
Green Brain
Level 7, Rooms 7/8

Building 8
Conference Rooms
Level 9

Melbourne Town Hall
Welcome Reception
Congress Dinner
90-130 Swanston St (corner Collins St)
Welcome to the CIB World Building Congress 2022 ‘Building Our Future: Informing Practice to Enhance the Lives of Current and Future Generations’ held from 27 to 30 June 2022 in Melbourne, Australia and online. In this booklet, you will find information on accommodation, transport, etc as well as the conference programme. We hope you arrive safely and enjoy your stay.

WIFI: RMIT-Guest
Log-in: Event
Password: 256039
Dear Colleagues

Welcome to the CIB World Building Congress 2022 themed “Building our Future: Informing practice to enhance the lives of current and future generations”.

As President of the International Council for Research and Innovation in Building and Construction (CIB), I am most grateful to Ron Wakefield and his team at RMIT University for their invaluable commitment and support in hosting this event on behalf of Australia’s Sustainable Built Environment National Research Centre (SBEnrc)*.

This event marks the first major face-to-face opportunity for our global industry, government and researcher network for more than two years. To my mind, there is no doubting the added value that this FTF format will bring for attendees. But the optional on-line format will also bring benefits of a different kind of collaboration to many unable to attend personally in the beautiful city of Melbourne.

I wish all participants of this 22nd World Building Congress a most successful week of discussion and debate and importantly building the professional and personal networks that drive innovation and collaboration in our industry.

Welcome - and enjoy CIB WBC2022!

Professor Keith Hampson
PhD MBA BEng FTSE FIEAust FAICD
CEO – Sustainable Built Environment National Research Centre (SBEnrc), Australia

*The SBEnrc has the broadest built environment research alliance in Australia, with Core Members including BGC Australia, ATCO, the Western Australian and Queensland Governments, Curtin University, Griffith University, Western Sydney University and RMIT University - all of which are represented on the Centre’s Governing Board.
WBC2022 is made possible thanks to the support of our sponsors

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The Company has over 9,400 employees in over 80 subsidiaries globally, serving customers in more than 100 countries and regions. Its 340,000 business customers are enjoying over 100 professional products and services delivered through a sales and service network covering over 200 cities worldwide. Since 2008, Glodon has made steady progress in going global. This is demonstrated by the subsidiaries, offices, and R&D centers which have been set up in the United States, the United Kingdom, Finland, Sweden, Poland, Germany, Malaysia, Indonesia, and Singapore.
Shrine of Remembrance
Artwork by
Guillermo Aranda-Mena
Conference Program

The program is accessible online. Please check back regularly as it is continuously updated. Don’t forget to log in to see the full details of each session as not everything is visible in the public view.

PROGRAM HIGHLIGHTS

- **Welcome Reception**
  A Welcome Reception is planned at 17:30 on Monday 27 June 2022 and is free for WBC2022 registrants in Melbourne. Join us at the Melbourne Town Hall (Supper Room) for a drink, a snack and a Welcome to Country from a Wurundjeri elder.

- **Congress Dinner**
  The WBC2022 Congress Dinner is at 18:00 on Wednesday 29 June 2022 at the Melbourne Town Hall (Main Hall).

- **Sponsor Exhibits**
  You can speak to our wonderful sponsors at their exhibits at Storey Hall (RMIT Building 16) or visit them online.

Abstract Book

The abstract book is available as a digital, hyperlinked PDF.
Special Meetings

There are several commission meetings which will be held during WBC2022. Please refer to the online program for the latest times and locations as they may change from the below.

- **SBEncr Board Meeting**
  Location: "Green Brain" Building 16, level 7, room 7/8
  Monday, June 27: 14:00 - 17:00

- **CIB Board Meeting**
  Location: "Green Brain" Building 16, level 7, room 7/8
  Tuesday, June 28: 17:15 - 19:00
  Thursday, June 30: 17:30 - 19:00

- **CIB General Assembly**
  Location: Building 80, level 6, room 1
  Wednesday, June 29: 8:00 - 8:45

- **CIB Coordinators’ Lunch**
  Location: "Green Brain" Building 16, level 7, room 7/8
  Tuesday, June 28: 12:30 - 13:30

- **ISO/TC59/SC14 Chairman’s Advisory Group**
  Location: Building 80, level 2, room 3
  Wednesday, June 29: 11:00 - 12:30

- **ISO/TC59/SC14 Plenary Meeting**
  Location: Building 80, level 2, room 3
  Thursday, June 30: 11:00 - 12:30, 13:30 - 15:00, 15:30 - 16:30

- **TG124 Launch Net Zero Carbon Building Design and Construction Practices**
  Location: Building 80, level 5, room 12
  Monday, June 27: 15:30 - 17:00

- **W055 & W065 & TG81 Joint Commission Meeting**
  Location: Building 8, level 9, room 1
  Tuesday, June 28: 13:30 - 15:00

- **W080 Commission Meetings**
  Location: Building 80, level 2, room 3
  Monday, June 27: 11:00 - 12:00, 13:00 - 14:00
  Location: Building 8, level 9, room 1
  Thursday, June 30: 13:30 - 15:00

- **W086 Commission Meeting**
  Location: Building 8, level 9, room 1
  Monday, June 27: 15:30 - 17:00

- **W089 Commission Meeting**
  Location: Building 8, level 9, room 1
  Tuesday, June 28: 13:30 - 15:00

- **W096 Architectural and Design Management Commission Meeting**
  Location: Building 8, level 9, room 3
  Wednesday, June 29: 15:30 - 17:00

- **W099 & W123 Joint Commission Meeting**
  Location: Building 8, level 9, room 2
  Thursday, June 30: 13:30 - 15:00

- **W101 Commission Meeting**
  Location: Building 8, level 9, room 1
  Thursday, June 30: 11:00am - 12:30

- **W102 Commission Meeting**
  Location: Building 8, level 9, room 2
  Wednesday, June 29: 17:00 - 17:30

- **W116 & TG96 Joint Commission Meeting**
  Location: Building 80, level 11, room 10
  Thursday, June 30: 15:30 - 16:30

- **W122 on PPP: Commission Meeting - Brainstorming Workshop**
  Location: Building 8, level 9, room 3
  Wednesday, June 29: 13:30 - 15:00
Below are the CIB Student Chapter events. Please refer to the online program for the latest locations and times as they may change.

There are 18 CIB Student Chapters around the world. For more information on CIB Student Chapters including the RMIT University chapter, please visit the CIB page here: cibworld.org/student-chapters

- **CIB Student Chapter Event Opening (followed by a Campus Tour)**
  Location: Lecture Theatre Building 80, level 4 room 6
  Monday, June 27: 15:30 - 16:30

- **CIB Student Chapter PhD Employability Workshop Session (Academia)**
  Location: Lecture Theatre Building 80, level 4 room 6
  Tuesday, June 28: 11:00 - 12:30

- **CIB Student Chapter PhD Employability Workshop Session (Industry)**
  Location: Lecture Theatre Building 80, level 4 room 6
  Tuesday, June 28: 13:30 - 14:30

- **ECR Interactive Session: Unravelling the Early Career Journey in the Built Environment**
  Location: Lecture Theatre Building 80, level 4 room 6
  Wednesday, June 29: 15:30 - 17:00

- **CIB Student Chapter Closing Event**
  Location: Lecture Theatre Building 80, level 4 room 6
  Wednesday, June 29: 17:00 - 17:30

- **Engaging with Scholarly Journals: Publishing, Reviewing and Creating Impact**
  Location: Lecture Theatre Building 80, level 4 room 6
  Thursday, June 30: 15:30 - 16:30
Innovation World Cup

Location: Lecture Theatre Building 80, level 6, room 1
Tuesday, June 28: 15:30 - 17:00pm

MEET THE TOP SMART BUILDING/SMART CONSTRUCTION INNOVATORS AT THE CIB WORLD BUILDING CONGRESS 2022

CIB, in collaboration with Innovation World Cup® and BIM World MUNICH, proudly presents the Top Smart Building / Smart Construction Innovators 2022, who will pitch their solutions at the CIB World Building Congress in Melbourne:

- "The Next Best Thing to Teleportation"
  Adrian Merkel, CEO, FRAMENCE (Germany)
- "When Spaces Have Voices: Design & Monitoring of IoT Driven Healthy Buildings"
  Vinay Venkatraman, CEO & Founder, Leapcraft (Denmark)
- "Madaster: The Digital Ecosystem to Keep Materials Available Forever"
  Claudius Frank, Product Manager, Madaster (Germany)
- "Treble: Enabling a Better Sound World"
  Dr. Finnur Pind, CEO & Founder, Treble (Iceland)
- "Autonomous Cranes: Digital Job Sites"
  Asaf Yarkoni, Business Development Manager, Ultrawis (Israel)
- "Bridging the Gap between GIS and BIM"
  Marc Hodapp, Co-Founder, Urbanistic (Germany)

The pitch session will take place online and in RMIT Lecture Theatre 80.6.1 at the CIB World Building Congress in Melbourne, 15:30 – 17:00pm UTC+1 (7:30 – 9:00 CET). The winner will receive 1-year membership with CIB, worldwide visibility, valuable business connections and collaborative projects.

More information: www.innovationworldcup.com
Welcome to the 39th CIB_W078 International Conference of Information Technology for Construction which this year runs within the CIB World Building Congress 2022 at RMIT University in Melbourne, Australia. W078 is one of the largest and most active working commissions of the International Council for Research and Innovation in Building (CIB). We are confident that you will find this a worthwhile event, not only as a source of acquiring cutting-edge knowledge on topics such as Artificial Intelligence, Digital Twins or Augmented Reality but also as an opportunity to exchange knowledge and establish future collaborations.

We, at RMIT’s School of Property, Construction and Project Management, are excited to host such significant event. We are experiencing challenging times in academia, and events such as this one remind us of our purpose within the institution and in society at large. While universities are often seen as somewhat closed communities of practice, in-person social academic conferences such as W078 return us to our purposes for knowledge exchange, dissemination and engagement with industry and the wider community. A forum for discussion and debate is fundamental to progress our knowledge, just as the Greeks did two thousand years ago.

We also like to remind ourselves that in-person conferences are effective in providing PhD students with access to experts and the opportunity to test and progress their own ideas. While they may attract criticism, often that criticism forms the basis for further thought and deeper understanding. We have made every effort to provide extensive feedback during the double-blind review process for papers but encourage every presenter to seek more comments during or after the conference. PhD prizes such as the Professor Charles Eastman Award are not only there to recognise outstanding individual achievements but are also a reminder of what PhD students bring to events like this.

Our W078 conference themes for 2022 are no surprise, Artificial Intelligence, BIM/Digital Twins, Virtual/Augmented Reality and Blended Learning. All en-vogue themes, and each conference session will present and discuss them. This accords with our aim that delegates should experience the full breath of themes, even if attending a single session. Presentations have also been combined between academics and PhD research students, and feedback will be encouraged.

Our four-day W078 event will run in one conference room with no parallel sessions, and this will allow each delegate to fully participate, synchronously. All W078 presentations have been scheduled for the afternoons allowing delegates to attend all Congress Plenary sessions and allow a better time-zone alignment for those attending online. If you are attending either in-person or online, take advantage of our full Congress program and bookmark all sessions of interest to you.

I particularly would like to thank our eminent speakers, Dr. Alain Zarli, Dr. Nora El-Gohary, Dr. Paolo Tombesi and Dr. Andrew Maher for their in-kind contribution and in-person attendance to our W078 conference event. I also, would like to thank the CIB W078 Scientific Committee 2022 and fellow academics for their participation in the double-blind reviewing process. A personal thank you to the CIB W078 Directive for nominating me as Chair for 2022, and to the CIB WBC2022 for allowing us to join the Congress. It has been an honour and a pleasure preparing for this event.

CIB W078 Conference Chair
Swanston Academic Building,
RMIT University

Artwork by
Guillermo Aranda-Mena
Your Presentation and Conference Procedures

All Presenters
For everyone's safety, please do not attend in person if you are feeling ill.

Ensure you have registered for the conference at: www.cibwbc2022.org/registration

Ensure you have updated your presentation type to reflect your registration type (in-person or online).

Ensure you have uploaded your camera-ready paper and presentation slides or video by editing your submission in Oxford Abstracts before June 20.

Ensure you have updated your attendee profile/name badge on Oxford Abstracts so that you can engage with other congress-goers. You will receive an email with the Oxford Abstracts link after you've completed your registration to attend the conference.

Please arrive or log in at your session 5 minutes early to review the session plan and test your equipment.

Photographs and audio and video recordings will be taken at WBC2022 for marketing, promotional, publication and educational activities; as well as for use on websites, such as CIB websites and related business or partner websites. Notwithstanding anything in our Privacy Policy (available on CIB's website), we will own all the rights in the photographs and recordings including copyright, and you waive any rights you may have in them. By entering the event or joining event sessions online you agree to these terms, and consent to us photographing and recording and using your image and likeness.

Presenters Attending Online
During your presentation your slides will be presented by an RMIT AV technician. Please let the technician know when to advance the slide by saying “next slide please.”

Presenters Attending In Person
Please make sure that you check in at the registration desk before the start of the conference, in Storey Hall (Building 16). You'll receive a nametag which functions as your security pass to access RMIT buildings. You must display your nametag when on campus.

This is a paper-less and sustainable event and therefore there are no printed booklets and maps. For more information please visit www.cibwbc2022.org/program and www.cibwbc2022.org/your-visit

All locations at the RMIT campus follow the room label structure BBB.LL.RR, with BBB referring to the building number, LL referring to the level, and RR referring to the room number. For example, 80.5.11 refers to building 80, level 5, room 11.

Sessions will be 60 minutes or 90 minutes depending on the number of presentations (four or six per session). Presentations will be 10 minutes followed by Q&A.

Every hybrid session has a session chair, an AV technician and a student volunteer. The session chair will lead and moderate discussion, the AV technician will oversee equipment functionality, and the volunteers are available to assist you. You can identify the volunteer by their green clothing.
Accessing WBC2022 Online
Your online access to WBC2022 is exclusively linked to the email address you used to register. To join WBC2022 online, you’ll need to login using that email address (don’t log in with Google or Linkedin). The first time you login, you’ll need to create a free account in Oxford Abstracts. (If you’ve submitted a paper to WBC2022, you may already have an account).

The [WBC2022 online program](#) is frequently updated with new content. If you click the icons on left-side menu, you check out the program sessions, search titles and authors and visit our sponsors' virtual exhibits. Search the participants (people icon) for your own name to see when you’re presenting or chairing sessions. To make your own personalised timetable, click the ribbon icon on any session to bookmark it, and then filter your program view to show only the bookmarked sessions you want to attend.

The links in the program sessions will lead you into Microsoft Teams virtual meeting rooms. You don’t need a Microsoft account to use Teams. You can open Teams in your web browser or in the Teams app, which you can download for free. We recommend using the Teams app for WBC2022.

If you're using Teams in your web browser, click “Cancel” in the pop up when asked to select an application and then click "Continue in Browser". Be sure to allow Teams to access your camera and microphone so we can see and hear you in the sessions.

Meeting rooms are closed until the sessions start. If you join early, you’ll wait in the virtual lobby. You can find a quick guide to Teams [here](#).

IT Troubleshooting
If you encounter technical difficulties at the conference, please:
- Turn off and turn on your device
- Wifi connection issue? Ask the AV technician or visit the Building 80 Level 3 Help Desk
- Teams issue? Please visit Microsoft support [webpage](#)
- Check Oxford Abstracts [help pages](#) and Youtube [videos](#)
- Google it
- and as a last resort please email wbc2022@rmit.edu.au or call 0447 454 518.

WI-FI Access
Please note that internet access will be available via a special RMIT event log-in. The details are

**WIFI: RMIT-Guest**
Log-in: Event
Password: 256039
Keynote Speakers

**Sue Eddy, Chief Executive Officer**
*Victorian Building Authority*

Sue plays an integral role in ensuring Victoria’s building and plumbing industries operate effectively to produce safe, well-constructed buildings. She is at the forefront of driving effective regulation, spearheading significant industry change, and protecting Victorians through her leadership of the Victorian Government’s world leading Statewide Cladding Audit.

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**Dongping Fang, Dean, School of Engineering**
*Tsinghua University*

Dongping is a leading researcher in construction safety and urban resilience. He has developed an LCB approach for enhancing safety leadership, safety culture and behavioral safety in construction, and the approach has been implemented in many megaprojects and leading enterprises in China and overseas. Meanwhile, Dongping has also developed a trio-space system-of-systems framework and led a research team working on urban resilience focusing on safeguarding the construction and operation of urban infrastructure systems in megacities.

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**Jacqueline Cramer, Member**
*Amsterdam Economic Board*

Dr Jacqueline Cramer is a member of the Amsterdam Economic Board, where she is actively engaged in circular economy initiatives. She is also Supervisory Board Chair of Holland Circular Hotspot and a Professor of Sustainable Innovation at Utrecht University. From 2007 to 2010, she was the Minister of Housing, Spatial Planning and the Environment for the Dutch Labour Party. Since 1990, Jacqueline has been a consultant, advising over 200 companies and many partners cooperating in product chains and at a regional level on implementation of sustainable entrepreneurship, corporate social responsibility and the circular economy.
Corey Hannett, *Director-General, Major Transport Infrastructure Authority (MTIA)*

Corey has been Victoria’s Director-General overseeing its massive pipeline of transport infrastructure projects since 2014. As head of MTIA, he is responsible for the delivery of some of Australia’s largest transport projects, including the North East Link road tunnel, Metro rail tunnel, West Gate road tunnel, and the removal of 85 of Melbourne’s most dangerous and congested level crossings. As well as these mega-projects, MTIA is upgrading every regional passenger line in Victoria, planning for a rail link to Melbourne Airport, planning for fast rail to Geelong and upgrading roads across suburban and regional Victoria.

Chimay Anumba, *Dean, Design, Construction and Planning, University of Florida*

Chimay is well known globally as a leader in the development and use of computing systems to solve challenging problems in design and construction. He holds a Ph.D. in Civil Engineering from The University of Leeds, a higher doctorate, D.Sc., from Loughborough University, and an Honorary Doctorate (Dr.h.c.) from Delft University of Technology. His research has received support worth over $150 million and he has supervised 52 doctoral candidates to completion and mentored over 25 postdoctoral researchers.

Thomas Uhd, *Head of Sustainability & External Relations, Cementir*

Thomas Uhd is Head of Sustainability & External Relations for the global cement and concrete producer Cementir in the Nordic & Baltic region. He supports the business units with sustainability strategies, roadmaps and initiatives, external communication and market positioning, and public affairs. In his former position he was Director of the Danish Concrete Association representing the concrete producers in Denmark. He has also worked as Head of Communications and Public Affairs for The Danish Association of Construction Clients, as advisor within the construction and energy sector for companies, organizations, and public agencies, and for IKEA Denmark and IKEA Property with focus on expansion and establishing new warehouses.
**James Baker, CEO, Graphene@Manchester**  
**University of Manchester**

James joined the University of Manchester after 25 years in Industry where most recently he was Vice-President of Technology Collaboration Programmes and Managing Director of the Advanced Technology Centres for BAE Systems in the UK. As the CEO Graphene@Manchester, which includes the business responsibilities for the National Graphene Institute (NGI) and the Graphene Engineering Innovation Centre (GEIC), James develops the industrial partnerships and collaborations to accelerate the commercialisation opportunities for graphene.

**Paul Cartuyvels, Executive Director**  
**BOUYGUES Europe**

Paul is President of the European Construction Technology Platform (ECTP), which is co-chairing with the World Green Building Council (WGBC) together with the European Commission the Built for People Partnership (B4P) of Horizon Europe 2021-2027. For the Smart Cities Marketplace (SCM) of the Commission, he acts as Leader of the Action Cluster on Sustainable Built Environment. Within the Strategic Energy Technology Plan (SET Plan), he is a member of the Implementation Groups on Energy efficient Buildings and on Smart Cities /Positive Energy Districts (PED).

**Alistair Gibb, Prof. Emerit., Construction Engineering Mgmt**  
**Loughborough University**

Alistair has led a research team in construction innovation, safety and health for more than 28 years, pioneering work on the interaction between these two domains. He has led projects on nanotechnology, 3D concrete printing, offsite construction, platform technologies, transformational H&S, accident causality, and COVID. His research has engaged with mega-projects in the UK and across the globe. He has been an influencer, working closely with the HSE, UK Government, professional institutions and industry. He currently serves on panels implementing learning from the Grenfell Tower disaster. Prior to joining Loughborough University, he had a successful career as an engineer and construction manager on major projects.
Australian Centre for Contemporary Art
Artwork by Guillermo Aranda-Mena
**Xianzhong Zhao, Tongji University**

“AlphaTruss: An MDP-based reinforcement learning algorithm for intelligent design of spatial structures”

Dr Xianzhong Zhao is a Professor in Civil Engineering at Tongji University and the Head of the Intelligent Design & Construction (IDC) research group. He is a distinguished professor of the Changjiang Scholars Program and was the Dean of the College of Civil Engineering at Tongji University from 2016 to 2021. His research areas include steel structures, progressive collapse of structures, as well as intelligent design and construction following his work on digital design as a Research Associate (RA) at the University of Cambridge.

**Phoa Le, Western Sydney University**

“Technology and Its Impact to Building Construction Research”

Dr Khoa N. Le received his Ph.D. in October 2002 from Monash University, Melbourne, Australia. From April 2003 to June 2009, he was a Lecturer at Griffith University, Gold Coast campus, Griffith School of Engineering. From January to July 2008, he was a Visiting Professor at Intelligence Signal Processing Laboratory, Korea University, Seoul, Korea. From January 2009 to February 2009, he was a Visiting Professor at the Wireless Communication Centre, University Technology Malaysia, Johor Bahru, Malaysia.

**Jack Cheng, HKUST**

“Robotics, AI and Blockchain: Unlocking the Opportunities of Automation and Digitalization for AECO Applications”

Prof. Jack CHENG is an Associate Head and Professor in the Department of Civil and Environmental Engineering, Associate Director of GREAT Smart Cities Institute, Director of BIM Lab, and Director of Radio Frequency Identification (RFID) Center at the Hong Kong University of Science and Technology (HKUST). He obtained his Bachelor degree with First Class Honors and his MPhil degree from HKUST, and then obtained his PhD degree from Stanford University. His research interests include BIM, digital twin, Internet of Things, artificial intelligence, construction robotics, blockchain, construction and facility management, smart and low carbon buildings, and construction digitalization. He has led a number of Research and Development projects in smart buildings and construction. He is an author of over 250 international journal and conference publications.
Liang Zheng, *Australian National University*

“The Promises of Synthetic Data in Computer Vision”

Dr Liang Zheng is a Senior Lecturer, CS Futures Fellow and DECRA Fellow in the School of Computing, Australian National University. He is best known for his contributions in object re-identification, and his recent research interest is data-centered computer vision, where improving leveraging, analysing and improving data instead of algorithms are the of primary concern. He was/is a co-organiser of the AI City workshop series at CVPR and is an Area Chair for CVPR 2020, ECCV 2020, and ACM Multimedia 2020, 2021, and an Associate Editor for IEEE T-CSVT. He received his B.S. degree (2010) and Ph.D. degree (2015) from Tsinghua University, China.

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Alain Zarli, *R2M Solution and the European Construction Technology Platform*

“Information and Communication Technologies are a Means; Collaboration is a Privilege”

Dr. Alain ZARLI is a Managing Partner at R2M Solution and Secretary General of ECTP, the European Construction Technology Platform. He was formerly Head of the “Innovation Numérique pour la Construction” division at the Centre Scientifique et Technique du Bâtiment (CSTB) in the “Technologies de l’Information et Diffusion du Savoir” department (Sophia-Antipolis - FRANCE), and European Affairs Manager in CSTB.

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Nora El-Gohary, *University of Illinois at Urbana-Champaign*

“Artificial Intelligence for the Built Environment: Opportunities, Challenges, and the Path Forward”

Dr. El-Gohary’s research focuses on data analytics and AI for the development and operation of sustainable buildings and infrastructure systems, including information modeling, information extraction, data fusion, machine learning, and big data analytics. Her research has been funded by the National Science Foundation (NSF), Illinois Department of Transportation, Qatar Foundation, and Natural Sciences and Engineering Research Council (NSERC) of Canada among other funding agencies. The outcomes of her research have been published in over 140 journal and conference publications. She has received several research awards including the NSERC’s Discovery Award in 2009, the NSF’s CAREER Award in 2013, the Center of Advanced Study Award in 2015, the National Center for Supercomputing Applications (NCSA) Award in 2018, and the Institute for Sustainability, Energy, and Environment (iSEE) Award in 2019.
Paolo Tombesi, Swiss Federal Institute of Technology (EPFL)
“‘To what end’ technology? The difficult externalization of project knowledge”

Trained as an architect in Italy, Paolo Tombesi has a long-nurtured interest in the analysis of the building process and the division of technical labour in complex projects, particularly in the way their structure emerges from design documentation. He has been working as a consultant for state and federal governments on research and heritage issues, most notably on the 2006 World Heritage Listing nomination to UNESCO of the Sydney Opera House, which he continues to study to this day.

Andrew Maher, Aurecon
“Digital Transformation in the AEC Industry”

Dr Andrew Maher, Group Managing Principal at Aurecon, is responsible for the group-wide Eminence, Digital, Data & Innovation programmes. In 2020 Aurecon acquired Digital Node to broaden its digital advisory services. Andrew’s presentation will touch on digital transformation in the AEC industry and the applications of the firm’s recent investments including Studio Magnified to create a global visualisation also, Unsigned Studio for creative technologies, and ELARA, an artificial intelligence platform on which Andrew maintains a director role.
RMIT University is hosting WBC2022 with most of the Congress being held at the City Campus. The City Campus is right in the Melbourne Central Business District and is very easy to get to. There are tram stops on Swanston Street which runs right through the campus, and the nearest train station, Melbourne Central, is right next door.

Public Transport
Melbourne is serviced by extensive train, tram, and bus networks. You can use the Public Transport Victoria PTV website to plan your journey [www.ptv.vic.gov.au](http://www.ptv.vic.gov.au), or you can use Google Maps which will provide you with public transport information as well.

You will require a Myki card to travel on the these (with the exception of the free city tram). You can purchase a Myki from Myki machines located at most train stations, some major tram stops, at 7-Eleven stores, and other places. You can also download a Myki for your Android phone to use in lieu of a card. Please note that you cannot purchase Myki cards onboard trains, trams, or buses; you need to purchase one before you get on.

If you are travelling within the CBD only, you can use trams free of charge within the Free Tram Zone. Simply jump on and off trams without tapping your Myki card. Please refer to the Free Tram Zone map on the next page (or here) to see where you can travel. Important: the RMIT tram stop on Swanston Street outside building 80 is not covered by the Free Tram Zone - you will need to get off one stop earlier at Melbourne Central Station stop.

From the Airport
The most common way to get from the Melbourne Tullamarine airport to the city is via the Skybus coach service. You can pre-purchase a ticket for the service here: [www.skybus.com.au](http://www.skybus.com.au)

Please note that Skybus is privately run and therefore your Myki card will not work for the service.

There are also taxis and ride sharing services operating from Tullamarine airport.

You can of course hire a car for your stay using one of several car hire companies at the airport.

Ride sharing
You can use various ride-sharing apps in Australia including Uber, Ola, and Didi.
FAQ

The starting point for answers is the WBC2022 website (www.cibwbc2022.org):

PLANNING AHEAD

- **Do I need a visa to enter Australia?**
  Unless you are an Australian citizen, you will need a visa to enter Australia. You must apply for a visa before leaving home (except New Zealand citizens who can apply for a visa upon arrival in the country). There are a variety of visas available. Please visit this page for more information: immi.homeaffairs.gov.au/entering-and-leaving-australia/entering-australia/can-i-go-to-australia

- **What are the extra requirements (if any) for the state of Victoria?**
  Please refer to the Victorian government website for the latest requirements and restrictions: www.coronavirus.vic.gov.au/information-overseas-travellers
  Please refer to the WBC2022 website for the latest requirements for the conference.

- **What is the currency and exchange rate?**
  The currency used in Australia is the Australian Dollar (AUD). No other currencies are accepted. On 2 May 2022, 1AUD = 0.72USD, but please use an online currency converter to check the latest exchange rate. Melbourne is largely cashless with almost all businesses accepting credit cards.

- **What is the Melbourne weather like in late June?**
  Melbourne is often touted as a city of four seasons in one day. June will be the beginning of Winter with cool to cold temperatures between 10 to 15 degrees Celsius. There may be occasional bouts of rain followed by periods of sunshine.

- **What is the electrical power supply in Australia?**
  The standard Australian mains power supply is 240 volts, 50 Hertz, and the majority of power outlets are 10 Amps. You may require a converter and/or transformer to use your electrical devices.

ACCOMMODATION

- **Where should I stay during WBC2022?**
  There are three hotels with discounts available to conference attendees: Scape Living, Scape Aurora, and Jasper. Please see the WBC2022 website (www.cibwbc2022.org/accommodation) for details and discount codes. All are very close to the conference venue and within walking distance. Discount codes are available until sold out. There are also AirBNBs available too.

ARRIVAL

- **What can I expect at the airport?**
  Australia is quite well known for its strict customs requirements, with many organic items not permitted to enter the country such as food, wood and plant products, and animals. Before entering the country, you will be required to complete an immigration form which includes a section for you to declare any restricted items.
• How do I get from the airport to the city centre?
WBC2022 is located in the Melbourne Central Business District (the city centre). There are a couple of transfer options, including taxis and ride-sharing services at Melbourne Tullamarine airport. There is also a Skybus coach service that will take you to the Melbourne CBD for a cost; tickets for this service can be pre-purchased. Please refer to www.cibwbc2022.org/transport for more details.

• Where are the foreign currency exchanges, and are credit cards accepted in Australia?
Melbourne is largely cashless with almost every business accepting most credit cards via EFTPOS machines. However, you can exchange currency at the Prosegur Foreign Exchange stores found on Terminal 2 at the airport. There are also some ATMs that will accept most international bank cards.

SAFETY

• How safe is Melbourne?
Melbourne is generally regarded as a safe city and has been rated the #1 best place to live in the world. Petty crimes such as pickpocketing or street scams are rare, although common sense and normal precautions apply. The emergency hotline in Australia is 000 which is a free service and will connect you to the emergency services including the police, ambulance, or fire rescue.

THE CONFERENCE

• Where and when do I register?
Please register via the WBC2022 website: www.cibwbc2022.org/registration. Registration deadline is June 20th (AEST) 2022.

• Where can I find the WBC2022 conference program?
The program can be found here www.cibwbc2022.org/program and is updated regularly.

LEISURE TIME

• Which local restaurants, cafes and bars can you recommend?
- There are countless fantastic restaurants in Melbourne catering to a very diverse range of tastes and price points. Bookings are recommended and available at most restaurants. Melbourne doesn’t have Michelin-starred restaurants but instead has its own “Hats” rating system. The Age Good Food Guide awards excellent restaurants 1-3 chef’s hats, with a three-hatted restaurant being the highest rated.
- Melbourne boasts excellent coffee and there are an extraordinary number of cafes to be found. Most cafes offer dining as well, and a popular Melbourne meal is the “brunch”.
- Melbourne has many bars, pubs, and clubs that are popular.
- For more information visit www.visitmelbourne.com

• What are some useful shops in Melbourne?
- Googling is the best way to find what you need.
- The three main supermarket chains in Melbourne are Coles, Woolworths and IGA. Smaller versions of these can be found in the CBD. There is an Aldi close to the RMIT
- There are numerous pharmacies in Melbourne.
- There are a few Australia Post branches in the CBD.
- JB Hi-Fi is perhaps the most popular consumer electronics shop in Melbourne.
- Swanston and Bourke Streets are the most popular shopping streets. You can find Myer and David Jones on the Bourke Street Mall. Melbourne Central, QV, and the Emporium are the largest indoor shopping malls in the CBD.
- One of Melbourne's charms is the many little shops and eateries you can find in hidden alleyways off the main streets. We encourage you to wander and explore.

• **Tourism/places of interest**
  - There are various tourist attractions in the city including Federation Square, the National Gallery of Victoria, the State Library.
  - Victoria has many great places for visitors willing to travel out of the city. Around Melbourne you can find many wineries, breweries, and distilleries, including in the Yarra Valley wine region. Nature lovers can visit the Great Ocean Road, Wilson's Prom, the Grampians, or the Mornington Peninsula (home to the Peninsula Hot Springs and beautiful beaches). There are plenty of golf courses; the most famous is the Royal Melbourne Golf Club which is private but does allow international visitors to play.
  - For more information visit [www.visitmelbourne.com](http://www.visitmelbourne.com)

• **Should I tip?**
  Tipping is not common practice in Australia, however you are welcome to leave a tip if you receive good service.

**LOCAL CONTACT INFORMATION**

• **CIB and RMIT Teams**
  If you need to contact us during the conference, you can contact the WBC2022 team via wbc2022@rmit.edu.au, or call us on: 0447 454 518. For emergencies, the emergency hotline in Australia is 000, or for general security enquiries contact RMIT Security on 61 3 9925 3895.

• **Where can I find a WBC2022 organiser?**
  A member of the local organising team will be based at the registration desk in the foyer of Storey Hall (RMIT Building 16) accessible from Swanston Street.
Melbourne Central

Artwork by
Guillermo Aranda-Mena
Contact Us

Email: wbc2022@rmit.edu.au  
Website: www.cibwbc2022.org  
Phone: +61 447 454 518

While in Australia the emergency services hotline is toll-free 000 from any phone. While at the RMIT campus, RMIT Security is contactable on +61 3 9925 3895 for non-urgent issues.
Thank you for joining us at WBC2022