



CIB INTERNATIONAL CONFERENCE ON SMART BUILT ENVIRONMENT

Virtual Conference: 14 - 15 December 2021



Conference Chairs Professor Mohammed Dulaimi Dr Taha Elhag

14 – 15 December 2021

CIB TG96 ICSBE 2021
International Conference on Smart Built Environment







Conference Keynote Speakers



Mark Enzer, OBE FREng is the head of the National Digital Twin programme (NDTp), Centre for Digital Built Britain and Chief Technical Officer, Mott MacDonald. Mark is a keen champion of innovation in the context of collaborative delivery models and he is particularly interested in the transformation of the infrastructure industry, including: systems-thinking, digital transformation, connected digital twins, data infrastructure, low-carbon sustainable solutions and the circular economy in the built environment. As the Head of the NDTp, Mark is contributing to the leadership of this ambitious programme to enable an ecosystem of connected digital twins across the built environment.



Dr Bilal Succar is an independent researcher and an experienced international consultant in the fields of performance assessment and improvement. Dr Succar worked as a designer, site manager, trainer, and BIM specialist across the Middle East and Australia from 1992-2003. In 2004, Dr Succar established ChangeAgents AEC, an open-innovation consultancy operating out of Melbourne, Australia. In 2016, Dr Succar founded the not-for-profit BIMe Initiative, a Community of Research and Practice of more than 150 volunteers esteemed professors, postgraduate students, and industry specialists - from 41 countries. The BIMe Initiative aims to accelerate the digital transformation of the built environment through process innovation and open knowledge-sharing. It investigates, develops, and delivers

free-to-use, open-access tools, templates, and resources (e.g., BIMdictionary.com and macro-BIM adoption studies) intended to benefit the informed practitioner, topic researcher, and policy maker. Balancing academic research with digital practice, Dr Succar has published several well-cited peer-reviewed articles, led high-impact national initiatives, and delivered topical keynote lectures and strategic workshops in a number of countries - including Brazil, Canada, Chile, China, Germany, Ireland, Italy, Luxembourg, Malaysia, Peru, Qatar, Singapore, Spain, UAE, UK, and USA.



Dr Ali Al-Azzawi is the City Experience Advisor at Dubai Digital Authority, working on Digital Wellbeing and responsible for developing the Happiness Agenda, and ensuring the validity of the science that underpins them, as well as a practicing Professor at the University of Dubai. Ali brings his international, academic, and industrial, hands-on work experience as a technologist in physics, electronics, and computing, along with his psychology PhD and design work on projects such as DubaiNow, UAE PASS, Dubai Pulse data platform, and the Happiness Meter, to ensure a cross-disciplinary pragmatic approach to humanise the Digital Economy.









Professor Ghassan Aouad has been the President of Applied Science University since November 2014. He spent five years in the Department of Civil and Building Engineering of Loughborough University, where he obtained his MSc in Construction (1987) and his PhD entitled Integrated Planning Systems for the Construction Industry (1991). In 1992, Professor Aouad joined the University of Salford as a Research Fellow and progressed through to the role of Pro Vice Chancellor for Research and Innovation and Dean of the College of Science & Technology before he left in December 2011. During that time, he successfully supervised 24 PhD students, externally examined 52 PhD students, authored 3 major research books and co-

authored one book, generated more than £10M in research funding as Principal Investigator and £8M as Co-Investigator, published 92 papers in top rated refereed journals, delivered more than 50 keynote speeches and invited lectures, and presented his work in more than 42 countries. In January 2012, he became President of the University of Wollongong in Dubai (UOWD) and in May 2013, he became Vice President for Academic Affairs at Gulf University for Science & Technology (GUST) based in Kuwait. Furthermore, Prof Aouad was appointed as Vice President of the Chartered Institute of Building (CIOB) in March 2010 and became President in June 2014 for a year. In July 2016, Professor Aouad received an Honorary Doctorate of Technology from Loughborough University in the UK.



Roger Flanagan is Professor at the School of Construction Management and Engineering, University of Reading, UK. He is an Honorary Professor at Tsinghua University, Beijing, and Guest Professor at Chongqing University, Guiyang Institute of Technology, China. Previously Visiting Professor in Hong Kong, Australia, Malaysia, USA, Sweden, Norway, Kenya, South Africa, Turkey, and Croatia. He was President of the Chartered Institute of Building in 2007. He has authored/co-authored 15 books. Research interests include international construction, risk management, quality management, site production management. Roger's industrial experience includes previously being a member of the Board of Directors of Skanska AB for 10 years, parent company of the Skanska Group based in Sweden with operations internationally, and a non-

executive member of the Board of Directors of Halcrow Group (now Jacobs). He has been a member of Board of Directors and Advisory Board member of companies in USA, Hong Kong, South Africa, Switzerland, Canada, and UK.







Professor Chris Gorse is the Director of the Leeds Sustainability Institute and Professor of Construction and Project Management at Leeds Beckett University. He is a Visiting Professor of Lean Construction CUT South Africa and Visiting Professor of the University of Suffolk.& He is Chair of the International Conference for Sustainable Ecological Engineering Design for Society (SEEDS), past Chair of the Association of Researchers in Construction Management (ARCOM) and a founding member of the Building Performance Network. He is currently a Panel Member for Sub-Panel 13 Architecture, Built Environment and Planning, working on the Research and Innovation (UKRI) Research Excellence Framework 2021 exercise. He has contributed

to a number of projects for the Department for Business, Energy & Industrial Strategy for UK Government and Innovate UK and has a good oversight of the quality, excellence and depth of research in the UK. He has a keen interest in digital technologies and their impact on key assets in the built environment. He has worked on and directed major UK and international research projects, exploring the potential of smart digital monitoring and management tools, evaluating the use of smart meters and their role for in-use measurement of building performance, he has also contributed to systems engineering projects – integrating smart asset management tools at scale. Chris has a passion to better understanding the impact of internal and external environments on people and the interventions that can be made to improve health and wellbeing. Currently Chris is working with NHS trusts, educational estates and local housing providers exploring both micro and city scale environments to better understand the role of the built and natural environment and its impact on occupant health.



Don Ward was appointed as Chief Executive of the International Council for Research and Innovation in Building and Construction, known as CIB, in February 2020. The CIB is a not-for-profit NGO established in 1953 with the support of the United Nations. It is the world's foremost platform for international cooperation and information exchange in building and construction research and innovation. Its worldwide network comprises of over 3,000 experts from about 300 member organisations with a research, university, industry or government background. Don was previously chief executive of the UK best practice and knowledge transfer organisation Constructing Excellence for 12 years to 2019 and its international arm for 5 years, which included being based in the

Middle East. Other CEO roles have included the European Construction Institute (2017-19), Design Build Foundation and Be (2001-2006) and the Construction Industry Board (1996-2001). His early career was at the UK's Building Research Establishment (BRE) where he led work on energy efficiency in housing. Don has 35 years' experience of innovation and best practice in the built environment sector, specialising in policy making, industry change, strategic procurement, supply chain integration, collaborative working and sustainability in housing, buildings and infrastructure. He has provided strategic advice at government and sector level in over 30 different countries. In 2017, Don was awarded an Industrial Fellowship in infrastructure development with the Alliance Manchester Business School of the University of Manchester.



