

16TH BUILT ENVIRONMENT CONFERENCE

26 – 27 SEPTEMBER 2022
26° SOUTH HOTEL, MULDRERSRIFT, GAUTENG, SOUTH AFRICA

CONSTRUCTION IN 5D: DECONSTRUCTION, DIGITALIZATION, DISRUPTION, DISASTER, DEVELOPMENT: A SECOND LOOK

DAY 1: MONDAY, 26 SEPTEMBER 2022

08h00-09h00	REGISTRATION, MORNING TEA & NETWORK
	PLENARY 1: ROOM A – THORN TREE Chair: Prof Haupt Nelson Mandela University
09h00-09h20	WELCOME ADDRESS Wayne Draai Head of School of the Built Environment and Civil Engineering Nelson Mandela University
09h20-10h00	Keynote Address: The Disparity Between BIM University Education and Employment Market Expectations Dr Reza Hosseini Associate Head of School (Research) School of Architecture and Built Environment, Faculty of Science Engineering & Built Environment, Deakin University, Victoria, Australia
10h00-10h40	Keynote Address: Innovation and Global Trends in our Sector Don Ward Chief Executive Officer International Council for Research and Innovation in Building and Construction (CIB)
10h40-11h00	Keynote Address: Construction Innovation with Hilti Rishaan Manilal Head of Engineering Hilti (South Africa) (PTY) Ltd
11h00-11h20	MORNING TEA

11h20-11h40	Keynote Address: Competency Development to Foster Flexibility, Agility and Adaptability of Construction Professionals in Disruptive Environments Sindi Kwenait Acting Manager: Education The South African Council for the Project and Construction Management Professions (SACPCMP)	
11h40-12h10	Teaser Campaign – one minute slide presentations for day 1	
	Chair: Roy Cumberlege <i>Nelson Mandela University</i> VENUE: ROOM A – THORN TREE Sub-Theme: Development	Chair: Chris Allen <i>Nelson Mandela University</i> VENUE: ROOM B - WARTHOG Sub-Theme: Digitalization
12h20-12h40	<i>An Exploration into the Perceptions of Social Sustainability in the Built Environment Amongst Project Managers</i> Tascha Bremer, Rumbidzwai Mhinga	<i>An Overview of the Use of Building Information Modelling (BIM) by General Contractors and the Potential Benefits for Emerging Contractors</i> Phumlani Masondo, Jan Wium
12h40-13h00	<i>Impact of Covid-19 on Construction Businesses and their Associated Businesses Survival Practices in Zambia</i> Ephraim Zulu, Theodore Haupt	<i>Progressing Production Performance on Projects through the Adoption of Building Information Modelling</i> Abimbola Windapo, Amanda Mtya, Bhavik Ranchhod, Mwai Mataka, Thokozani Nhlapo
13h00-13h20	<i>Identifying Key Barriers Impeding Circular Built Environment Transition in Africa: An Exploratory Factor Analysis</i> Jacob Mhlanga, Theodore Haupt, Claudia Loggia	<i>A Bibliometric Review on Application of Digital Technologies in Green Building</i> Favour David Agbajor, Modupe Cecilia Mewomo
13h20-13h40	<i>Construction Project Finance for Success: SME Perspective</i> Charles Mukumba, Christopher Amoah	<i>Adoption of Building Information Modelling (BIM) by Small and Medium UK Construction Enterprises (SMEs)</i> Rafiu. D Seidu, James I. P. Rundle, Job Momoh, Obas. J. Ebohon, Bert Ediale Young, Zulfikar Adamu
13h40-14h00	<i>Factors That Influence Effective Public Procurement for Small, Medium and Micro Enterprises in the South African Construction Industry</i> Thulani Alfred Mdadane, Theodore Haupt	<i>A Systematic Review of the Adoption of Wearable Sensing Devices for Monitoring the Health of Construction Workers</i> Schivandre Tatiana Reid, Sizolwakhe Innocent Mtetwa, Lesiba George Mollo
14h00-14h40	LUNCH	

PLENARY 2: ROOM A – THORN TREE

Chair: Prof Theo Haupt

Nelson Mandela University

14h40-15h20

Keynote Address: Diversity, Leadership and Innovation in the South African Engineering and Built Environment: Bridging the Gap Between Academia and Industry through Focused Research

Kolosa Madikizela

PhD Candidate at the Department of Construction Economics and Management, Faculty of Engineering, University of Cape Town

Chair: Wayne Draai

Nelson Mandela University

VENUE: ROOM A – THORN TREE

Sub-Theme: Development

Chair: Nishani Harinarain

University of Kwa-Zulu Natal

VENUE: ROOM B - WARTHOG

Sub-Theme: Development

15h20-15h40

An Investigation and Comparison of the Mental Health of the Construction Industry Workforce Prior To and During The Pandemic in UK

Ali Bayyati, Katie Hewitson, Ruoyu Jin, Rafiu Seidu, Obas Ebohon

Emerging Black Businesses Participation in the South African Public Sector Property Management Portfolio

Kahilu Kajimo-Shakantu, Tsotiso Koalane, Charles Mukumba

15h40-16h00

The Growth and Performance of Construction Firms in South Africa: Does Leadership Style Make a Difference?

Abimbola Windapo, Lynelle Moodley, Yachna Seelchun, Kehinde Alade, Lindelani Matshidze, Johnson Adetooto

The Potential of Industry 4.0 to Enhance Project Delivery in the Zimbabwean Construction Industry

Hannah Mago, Benviolent Chigara, John Smallwood

TEA WILL BE A WORKING TEA SERVED IN THE FOYER

16h00-16h20

Affordable Housing Development by the Private Sector: A Conceptual Framework

Christiana Ekpo, Manya Moore

Leadership Style and its Influence on Job Satisfaction of South African Quantity Surveyors

Rudolf Coetzee, Janita Stroebel, Gerrit Crafford

16h20-16h40

Built Environment Students and Enterprise Education: Attitudes and Perceptions

Mariam Akinlolu, Syeda Syeda Rahimunnessa

Challenges of the Supply Chain Management in The Construction Industry: An Analytical Study

Ahmed Shafik, Ayman Ahmed Ezzat Othman, Ahmed Hussein Ibrahim, Nishani Harinarain

16h40-17h00

Assessing the Mental Well-being of the Construction Workforce in South Africa using the World Health Organisation (WHO-5) Wellness Index Measure

Mohlomi Raliile, Theo Haupt, Kahilu Kajimo-Shakantu

Construction Infrastructure Project Cost Overrun and Cost Control/Management Techniques

Rafiu Dimeji Seidu, Maurisha Shani Allen, Ruoyu Jin, Yuting Chen, Bert Ediale Young, Obas John Ebohon

17h00-17h20	<i>Barriers Facing Retrofitting of Existing Building in Developing Countries: A Review of Literature</i> Cyril Chinonso Ejidike, Modupe Cecilia Mewomo	<i>The Implementation of Building Information Modelling in the Quantity Surveying Profession</i> Michael Venter, Roy Cumberlege, Chris Allen
17h20-17h40	<i>Supply Chain Management Practices and Factors Affecting Project Quality in Zambia</i> Ephraim Zulu, Theodore Haupt	<i>Quantity Surveyor's Level of Knowledge Relating to Sustainable Building Principles</i> Ryan Boy, Roy Cumberlege
17h40-18h00	<i>An Overview of BIM as a Material Management Tool in the Construction Industry</i> James Olaonipekun Toyin, Modupe Cecilia Mewomo, Iseoluwa Joanna Mogaji	<i>Effects of COVID-19 on Employees in the Construction and Consulting Engineering Companies in the Small and Medium Sector, South Africa</i> Sinothi Ndlovu, Modupe Cecilia Mewomo
18h00-18h20	<i>Utilization of Corn Cob Ash as Partial Replacement of Cement in Concrete: A Review</i> Margaret Damilola Oyewole, Modupe Cecilia Mewomo, James Olaonipekun Toyin	<i>Simplicity Principle as a Solution for Complexity within the Architectural Design Process: A Scientometric Study</i> Sohaila Samy, Ayman Ahmed Ezzat Othman, Fatma O. Alamoudy, Nishani Harinarain
19h00-LATE	CONFERENCE DINNER – VENUE: LOBOLA	

08h30-09h00	REGISTRATION, MORNING TEA & NETWORK
	PLENARY 3: ROOM A – THORN TREE Chair: Wayne Draai
09h00-09h10	WELCOME AND RECAP OF MONDAY Prof John Smallwood
09h10-09h50	Keynote Address: Making the Modern Construction Management Professional <i>Graham Teede</i> Graham Teede Building & Construction Services, Perth, Australia
09h50-10h30	Keynote Address: The Construction Industry & its Processes, Past, Present & Future <i>Bob Hindle</i> Past President of CIOB Southern Africa
10h30-11h00	Teaser Campaign – One Minute Slide Presentations for Day 2
11h00-11h20	MORNING TEA
11h20-13h00	Round Table Discussion (all delegates to attend): An Epidemiological Analysis of the Construction Industry Chair: Bob Hindle Panel: Don Ward, Theo Haupt, Graham Teede, Kolosa Madikizela, Hilti, SACPCMP, CIDB
13h00-13h40	LUNCH
13h40-14h20	Keynote Address: Strategies to Promote Sustainability and Resilience in African Cities. Grassroots Approaches towards Self-reliance in South Africa <i>Prof Claudia Loggia</i> University of Kwa-Zulu Natal
14h30-15h30	SACPCMP/ASOCSA – Private Meeting VENUE: BOARDROOM

PLENARY 4: Chair: Dr Ephraim Zulu <i>Copperbelt University</i> VENUE: ROOM A – THORN TREE Sub-Theme: Development		Chair: Dr Progress Chigangacha <i>Nelson Mandela University</i> VENUE: ROOM B - WARTHOG Sub-Theme: Disaster/Disruption	
14h20-14h40	<i>Impact of Ethics and Professional Conduct on the Quality of Services Rendered by Construction Project Managers</i> Kgolla Phalane, Mart-Mari Els	14h20-14h40	<i>Hand-arm Vibration Syndrome (HAVS) in Developing Countries. A Bibliometric Analysis</i> Progress Chigangacha, Theodore Haupt
14h40-15h00	<i>A Critical Review of the Cost Implications of Sustainable Construction</i> Liezl Le Roux	14h40-15h00	<i>E-Learning Challenges Faced by Construction Management Students in South African Institutions During Covid-19 Pandemic</i> Pindile Sohuma, Modupe Cecilia Mewomo
15h00-15h20	<i>Sustainable Infrastructure Development Approaches in Sub-Sahara Africa – the Case of Zambia</i> Kabwe Chimanga	15h00-15h20	<i>The Utilization of Implementing Agents in Providing Infrastructure Management Capabilities in South African Municipalities: Emerging Lessons</i> Luyanda Ngomane, Nthatisi Khatleli
15h20-15h40	<i>Structural Efficiency and Energy: A Consideration for Sustainable Construction in South Africa</i> Bonga Praisegod Khuzwayo, Wolf Bernhardt	15h20-15h40	<i>Eliciting Key Enablers of Development and Sustainability of Small and Medium-sized Contractors: A Case of Namibia</i> Tinoapei Dhlwayo, Innocent Musonda, Trynos Gumbo
15h40-16h00	<i>Sustainable Construction Developments for Low-income Housing Projects: Lessons for South Africa in Local Governments</i> Kgashane Stephen Nyakala, Kemlall Ramdass, Sekou Dolly Ramoroka	15h40-16h00	<i>Digital Technologies for Enabling Construction 4.0 in the South African Context</i> K'Homotho Mokhojane, Fidelis Emuze
16h00-16h20	<i>An Investigation into the Potential Benefits of e-Tendering to the South African Construction Industry</i> Morena William Nkomo, Lincoln Hlungwane, Molusiwa Stephan Ramabodu, Emmanuel Emem Obong Agbenyeku	16h00-16h20	<i>The Influence of Different Personality Types Relating to the Quantity Surveyor within a Design Team to Facilitate Effective Communication in the Construction Industry</i> Tascha Bremer, Maria Coetzee
16h20-16h40	<i>Decentralized Treatment for Waste Water: Practices towards Sustainability in Wastewater Management</i> Happison Muzioreva	16h20-16h40	<i>Leveraging IoT to Mitigate Information Management & Communication Lapses on Construction Sites</i> Shadrack Khorombi, Aghaegbuna Ozumba
16h40-17h00	<i>An Integrated Framework for Catalysing Development and Sustainability of Small and Medium-sized Contractors: A Case of Namibia</i> Tinoapei Dhlwayo, Innocent Musonda, Trynos Gumbo	16h40-17h00	<i>An Audience Analysis on Financial Feasibility Studies in Construction</i> Rolien Terblanche

17h00-17h20

An Investigation into the Potential Benefits of e-Tendering to the South African Construction Industry

Lincoln Hlungwane, Morena William Nkomo, Molusiwa Stephan Ramabodu, Emmanuel Emem-Obong Agbenyeku

Deconstructing Female Recruitment and Retention Insufficiencies

Nondumiso Sangweni, Aghaegbuna Ozumba

17h30-18h30

PLENARY 5: ROOM A – THORN TREE

Chair: Prof Theo C. Haupt

Conference Closure & Drinks

Thank you for your attendance.