

# SEEDS 2024



LEEDS  
BECKETT  
UNIVERSITY

INTERNATIONAL SUSTAINABLE  
ECOLOGICAL ENGINEERING  
DESIGN FOR SOCIETY



Loughborough  
University



University  
of Suffolk

ONLINE AWARDS

TUESDAY 27<sup>TH</sup> AUGUST 2024

# AI-Driven Sustainable Design: From Concepts to Real-World Applications

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HIGHLY COMMENDED

## #482 – Unlocking Brownfield Project Delays by Leveraging on the Nexus of Digital Technologies: A Review

**K'homotho Nester Mokhojane, Fidelis Abumere Emuze, John Smallwood**



# CIB TG96 - Accelerating Innovation in Construction

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## #474 - Sustainable 3D Printing for Construction: Cement Choices, Structural Components, and Real-World Insights

**Vishaal Raghu Nath Dharmalingam, Anjali  
Santhosh Kumar, Jayjit Kachari, Mohan  
Dungrani & Arman Hashemi**

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# CIB TG96 - Accelerating Innovation in Construction

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## #488– Internet of Things (IoT) Implementation in Malaysian Construction Industry

**Sylvester L. Manege, Amera Irrisya Binti Fadzil Akhma, Adebusola Ateloye, Deogratias Aloyce**

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# Data-Driven Ecological Engineering: Enhancing Sustainability through Digitalization

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## #531 – Seasonal Variations in Exposure to Indoor Air Quality in Existing UK Social Housing Dwellings

**Rajat Gupta, Yuanhong Zhao**

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# Data-Driven Ecological Engineering: Enhancing Sustainability through Digitalization

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## #521 – The Role of Digital Workflows for Lowering the Climate Impact of Residential Buildings: a Case Study in Northern Sweden

**Marcus Sandberg, Sofia Lidelöw**

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# Ethical Dilemmas in Ecological Engineering: Navigating Sustainability's Moral Landscape.

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#545 – Under the Concrete Cloak: Exposing the  
Construction Mafia's Hold in South Africa's Eastern  
Cape Industry

**Ziyanda Siteto, Gerrit Crafford, Shemondalay  
Jonas**

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# Future-Proofing Cities: Sustainable Infrastructure for Growing Urban Populations

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**#542 – Application Areas and Potential Benefits of Blockchain-Smart Contract in Infrastructure Public Private Partnership (PPP) Projects**

**Emmanuel Chidiebere Eze, Ernest Effah  
Ameyaw, David Greenwood**

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# Future-Proofing Cities: Sustainable Infrastructure for Growing Urban Populations

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## #513 – Integrating DfMA and BIM for Sustainable Infrastructure: Industry Perspective

**Chathuri Widanage, Ki Pyung Kim, J. Jorge Ochoa, Ke Xing**

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# Innovation and Tradition in Sustainable Organisation: A Holistic Approach

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## #572 – Determinants and Barriers in Facilities Management Innovations

**Albert Adusei, Chaminda Malalgoda, Eziri Hayat, Frederick Amoako Sarpong, Kwame Kyeretwie, Baffour Owusu Asare**

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# Smart Cities and Environmental Sustainability: The Role of Digital Solutions

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#557 – Investigating the Impact of BIM Implementation on Mitigating Construction Delays in Building Projects in Bangladesh

**Asma Akter, Alireza Moghayeddi**

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# Sustainability and Social Responsibility: Creating Equitable, Eco-Friendly Solutions

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**#481 – Environmental and Socio-Economic Effects of Oil Exploration: Strategies for Sustainable Regeneration of the Niger Delta**

**Oviemuno Otame, Julius Kofi Akotia and  
Mihaela Anca Ciupala**

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# Traditional Building Techniques Meet Modern Sustainability Standards

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## #530 – Assessing and Mitigating Building Defects in the UK Construction Industry: Trends, Causes, and Sustainable Solutions

**Mark Wilson**

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