International Conference on "Digitalisation Construction for Sustainable Development: Transforming though Innovation"

Date: 25th November 2020 - Time Zone: GMT + 7
Venue: National University of Civil Engineering, Hanoi, Vietnam

Session 1:	Building Information Modelling, Big Data and Data Management	Room 1 (14:00 - 18:00)
Session 2:	Disruptive & Innovative Technologies in Construction and Civil Engineering	Room 2 (14:00 - 18:00)
Session 3:	Smart, Sustainable Cities and Infrastructure	Room 3 (14:00 - 15:30) & Room 4 (14:00 - 18:00)
Session 4:	Automation in Engineering & Construction	Room 5 (14:00 - 18:00)
Session 5:	Digital Ecosystem for Engineering & Construction Management	Room 6 (14:00 - 18:00)
Session 6:	Education and Training for Transformation towards Industry 4.0	Room 3 (16:00 - 18:00)

Time (GMT+7)	Room 1 (31H3) Items	Presenters	Chair	Room 2 (32H3) Items	Presenters	Chair	Room 3 (33H3) Items	Presenters	Chair
14:00-14:15	150. Enhancing the Diffusion of BIM through Implementation Experiences of Pilot Projects in Vietnam	Quynh To Thi Huong	Binh Ta	29. Improving the Accuracy of Daylight Calculation with Impact of Sun-Shading Devices for the Russian Standard	Nguyen Thi Khanh Phuong	Joseph Lai	48. Towards Developing the Smart Cultural Heritage Management of the French Colonial Villas in Hanoi, Vietnam	Khoi Minh Doan	Quynh-Hoa Ta
14:15-14:30	47. Barriers of BIM Implementation in Vietnamese Contractors: A Preliminary Survey	Hoang-Minh-Huy Tran		171. Lighting Enclosed Interior Corridors by Borrowed Daylight	Narjes S. M. Abuzarifa		42. Reconceptualizing the Public Spaces of New Urban Areas in Hanoi: The End or The New of Public-making?	Chu Ngoc Huyen	
14:30-14:45	135. Automatic Extraction of Daily Concrete Requirements from 3D BIM and Project Schedules	Van Hoan Pham		116. Retrofitting the Ruined Buildings and the Urban Public Spaces from Oblivion - Applicability to the Sustainable Renovation and Refurbishment of Sapa Town	Vu Thi Huong Lan		32. Adaptive Reuse of Old Public Buildings Constructed between 1954 and 1986 in Hanoi from the Perspective of Sustainable Urban Development	Nguyen Duc Vinh	
14:45-15:00	89. A Critical Review of the Challenges and Barriers to an Effective Use of BIM in Green Building Assessment	Ahmed Sherif Alsehrawy		102. HBIM and Digital Documentation for Development Reliable Parametric Models on Complex Systems	Anna Dell'Amico		58. Sustainable Development of Shophouse in Hanoi's New Urban Areas Towards Compatibility with the Criteria of Smart Cities	Tung Hoang Nguyen	
15:00-15:15	17. Solutions for Vietnam affordable housing database management	Nguyen Khanh Dung		TEA BREAK			66. The Application of Topological Geometry to Architectural Concept Design Process in the Flow of Digitalization	Thuy Nguyen Thi Minh	
15:15-15:30	11. Application of Autodesk Software for Designing and Managing Planning Projects on Conceptual Stage	Nguyen Giang Son		103. Developing a Methodological Framework for Adopting Digitalization for Deconstruction Planning	Ruoyu Jin		43. Evolution of Commercial Facilities in New Urban Areas of Hanoi: Potential of Sustainable Neighborhood-Level Third Place Making	Chu Ngoc Huyen	
15:30-15:45	62. Critical Factor Focusing on Strategy Implementation for Building Information Modelling (BIM) in Facilities Management (FM)	Muhammad Safwan Tusiman		94. Machine Learning Models for Inferring the Axial Strength in Short Concrete-Filled Steel Tube Columns Infilled with Various Strength Concrete	Ngoc-Tri Ngo		TEA BREAK		
15:45-16:00	TEA BREAK		John Spillane	147. Support Vector Machine for Regression of Ultimate Strength of Trusses: A Comparative Study	Viet-Hung Truong	Kenneth Park			Clara Cheung
16:00-16:15	34. Application of Long Short-Term Memory (LSTM) Networks for Rainfall-Runoff Simulation in Vu Gia–Thu Bon Catchment, Vietnam	Duy Vu Luu		25. Assembled Steel - The Dry Construction Method in the Building Industry in Vietnam Today	Nguyen Viet Huy		18. Relation between Residential Building Types and Public Health of Migrant Workers in Industrial Parks – Case Studies from North Thang Long Industrial Park in Hanoi	Le Lan Huong, Nguyen Thuy Trang	
16:15-16:30	124. Fast Survey and Digital Databases of Fortified Systems for the Tale of Venetian "Stato da Mar"	Silvia La Placa		69. Knowledge Management Model for Construction Design Consulting Companies	Phan Nghiem Vu		142. Malaysian Polytechnic Architecture Students' Readiness Toward BIM Adoption: A Pilot Study	Nurhidayah Azhar	
16:30-16:45	129. Multi-Objective Genetic Algorithm (NGSA II) Based Simulation for Building Cost-Effective and Energy Performance Improvement	Thanh Truc Le-Gia		107. Mechanical Evaluations of Bioinspired TPMS Cellular Cementitious Structures manufactured by 3D Printing Formwork	Vuong Nguyen-Van		27. Influence of Social-Demographic Factors on Recognition and Actions towards COVID-19 Epidemic Digitalization Prevention: Taiwan Case	Chi-Tz Kuo	
16:45-17:00	101. The Development of Information Systems for the Construction of Digital Historical Centers, the Case Study of Bethlehem	Sandro Parrinello		111. Application of BIM and 3D Laser Scanning for Quantity Surveying and Quality Management in Construction Projects	Pham Thi Truong An		161. CADA – Innovative Teaching Method in Architect Training in Vietnam at the 4.0 Era	Nguyen Thi Hanh Nguyen	
17:00-17:15	104. BIM-based Ontology for Sustainability-Oriented Building Construction	Danh Toan Nguyen		24. Smart City: An Approach from the View of Smart Urban Governance	Hung Viet Ngo	Eric Lou	75. Establishing the Key Elements and Outcomes of Incorporation 4th IR in Construction Education: A Mixed Bibliographic and Bibliometric Analysis	Alireza Moghayedi	
17:15-17:30	19. Digitalization of Construction Life Cycle: A Systematic Review of Building and Reliability Information Modelling (BRIM)	Dania Abideen		170. Building Information Modeling Adoption as a Business Decision	Le Hung Tien		38. Autonomy of Higher Education Institutions in the Context of Vietnam: A Full Set of Assessment Indicators as a Key Preparation for the Future Development of Universities	Quang Minh Nguyen	
17:30-17:45	158. Applying BIM and Related Technologies for Maintenance and Quality Management of Construction Assets in Vietnam	Quynh To Thi Huong		130. A Need Assessment on the Regulations of Recognitions to Facilitate the Movement for BIM Human Resources	Thuy-Ninh Dao		120. Competence-targeted Education for BIM Professionals: a Case Example of the Vietnamese Construction Industry	Tuan Anh Nguyen	
17:45-18:00	Contingency			Contingency			Contingency		
18:00	CLOSING								

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Time (GMT+7)	Room 4 (34H3) Items	Presenters	Chair	Room 5 (35H3) Items	Presenters	Chair	Room 6 (36H3) Items	Presenters	Chair
14:00-14:15	44. Management of Urban Greenery System in Vietnam in the Era of Industry 4.0	Pham Anh Tuan	Duc-Hoc Tran	31. Research on Urban Land Use Change in Hanoi, Vietnam Using Remote Sensing and GIS for Planning Oriented Work	Le Thi Minh Phuong	Changsu Shim	155. Solutions in the Efficiency Improvement of Maintenance Management in Road Traffic Development in Vietnam	Pham Thi Tuyet	Po-Han Chen
14:15-14:30	175. Establishing an Assessment Criteria System for Architectural Heritage of Colonial Schools in Hanoi	Quoc-Bao Tran		63. Factors Affecting the Adaptation of Prefabricated Prefinished Volumetric Contruction (PPVC) in Malaysia Industry	Loh Seng Yap		114. Systematic Review of Organizational Change Management for BIM Implementation	Thi Kim Dung Vu	
14:30-14:45	53. Green Building Certification as a Policy to Promote Green-Building – a Study of Singapore, Taiwan, Australia, UK, US and Lessons for Vietnam	Pham Thuy Loan		179. Performance Improvement in Geographic Routing Using Expected Movement Duration for Urban Vehicular Networks	Phouthone Vongpasth		112. Application of Discrete Event Simulation in Estimating Productivity of Shotcrete Method in Divider Wall Construction	Dean Ashton Plamenco	
14:45-15:00	108. Life Cycle Assessment with BIM Towards Sustainable Energy Policy-Making: The Case of Urban Transformation in Istanbul	Alperen Yayla		54. Numerical Modeling of a Hemp-lime Blocks Wall Subject to Horizontal In-Plane Loads	Chiara Moletti		125. Developing an Organizational Readiness Framework for BIM Implementation in Large Design Companies in Vietnam	Nguyet Tong	
15:00-15:15	73. Impacts of Digitalisation on Travel Behaviour in Hanoi City Centre	Truong Thi My Thanh		TEA BREAK			133. Management of Contractual Risks in a BIM-Enabled Project	Shaun Kok Zhen Xiong	
15:15-15:30	167. Sustainability Assessment of Urban Spaces in Developing Countries: The Nigerian Case	Job Momoh					168. BIM Adoption as a Perceived Source of Competitive Advantages and Competitive Strategies for Construction Consultancy SMEs: Evidences from Vietnam	Vu Nam Ngoc	
15:30-15:45	TEA BREAK		Ruoyu Jin	144. Structural Assessment Using Terrestrial Laser Scanning Point Cloud	Linh Truong-Hong	Manwoo Park	TEA BREAK		Mohammed Berawi
15:45-16:00				162. Efficient Machine Learning Methods for Real Estate Market Analysis and City Development	Stanimir Kabaivanov				
16:00-16:15	13. Exploring Social Dimensions of Achieving Energy Efficiency in Urban Housing Design - A Case Study from Hanoi (Vietnam)	Quang Minh Nguyen		122. Automating the Design and Assembly Process of Timber Block Construction System	Nguyen Xuan Man		20. Modelling Techniques for Occupational Health and Safety Management in Construction: A Systematic Literature Review	Ruifeng Cao	
16:15-16:30	16. Green Building Certification and Its Correlation to Building Energy Index: Malaysia Commercial Green Buildings	Vignes Ponniah		174. Real-Time Landslide Forecasting System: An Application of IoT Technology	Duc-Nghiem Nguyen		49. Sustainable Symbiotic Relationship in the Human Ecosystem in the Development of Public Spaces (Case of Hanoi Historical Inner-City Area)	Khoi Minh Doan	
16:30-16:45	10. Perception of Lecturers and Students Regarding the Illuminance in the Lecture Theatres and Tutorial Rooms: Case Study in Universiti Tunku Abdul Rahman (UTAR)	Shalini Sanmargaraja		TEA BREAK		JongWoong Park	132. Flexible Pavement Life Cycle Cost Analysis by Using Monte-Carlo Method and the Suggestions for Developing Countries	Nguyen Huu Dung	
16:45-17:00	126. Formulating Weather-Responsive Traffic Management Strategies for Ho Chi Minh City	Nguyen Thi Thanh Huong		100. A Proposal for Electronic Ticketing Based on Travel Behavior, Towards the Integrated Public Transport for Smart City in Hanoi, Vietnam	Thi My Thanh Truong		121. Evolutionary Model of e-Procurement Adoption: Case of Vietnam Construction Industry	Tran Quang Dung	
17:00-17:15	22. Social Housing for Workers in Industrial Zones in Vietnam - Models and Feasible Solutions towards Sustainable Development: the Case Studies of Hanoi City	Ta Quynh Hoa		14. Propagation of Own Non-Axisymmetric Waves in Viscoelastic Three-Layer Cylindrical Shells	Teshaev Muhsin Khudoyberdiyevich		64. Adoption of Construction Industry 4.0 Among Small and Medium Sized Contractors in Malaysia	Eeydzah binti Aminudin	
17:15-17:30	7. Strategic Solutions for E-Logistics Services in Ho Chi Minh City	Dinh Tuan Hai		169. Digital Twins to Monitor Physical Resources at Construction Sites with Web Application	Caroline Silva Araújo		159. A Case Study of BIM Application in a Public Construction Project Management Unit in Vietnam: Lessons Learned and Organizational Changes	Quoc Viet Dao	
17:30-17:45	40. Life Cycle Carbon Dioxide Emissions Assessment as a Tool for Decision-Making in the Design Phase: a Case of a Green Building in Vietnam	Dinh-Linh Le		15. Mathematical Modeling of Non-Stationary Vibrational Processes in Two-Layer Viscoelastic Cylindrical Bodies	Teshaev Muhsin Khudoyberdiyevich		8. An Analysis of Value Chain in the Vietnam Construction Industry	Nguyen Van Tam	
17:45-18:00	Contingency			Contingency			Contingency		
18:00	CLOSING								