

**Creative Construction Conference 2018 June 30, 2018 - July 3, 2018 - Ljubljana, Slovenia**  
**Detailed Program**

**Saturday - June 30, 2018**

14:00		Registration
19:00	21:00	Welcome Reception

**Sunday - July 1, 2018**

8:45	9:00	Welcome and Introductions: <b>Miklós Hajdu</b> , Chair of the International Organizing Committee (Lecture room: Maximus 2-3)		
9:00	9:45	<b>Keynote Speech 1</b> <b>Jesus M. de la Garza</b> : Shortcomings in Plain Vanilla CPM Schedules (Lecture room: Maximus 2-3)		
9:45	10:00	Disperse to sessions		
10:00	11:00	<b>Creative Management: Edgar Small</b> Lecture room: Maximus 2-3 <b>Teng Hooi Tan</b> : Opportunities and challenges in adopting higher strength reinforcement bars in reinforced concrete structures	<b>Creative Technology and Materials: Žiga Turk</b> Lecture room: Lencia 1-2 <b>Keith A. Rahn</b> , Kelli A. Polzin: Potential impact of phase change materials on energy reduction in Army buildings	<b>Automation and Robotics in Construction: Mirosław Skibniewski</b> Lecture room: Maximus 1 Cheng Zhou, <b>Rui Chen</b> , Liewun Ding: Lunar construction solution: Chinese Super Mason
		<b>J. Mark Taylor</b> , David G. McTier, Darren Olsen, Paul Holley: Entrepreneurship in the construction industry: key themes and factors to success	Scott Kramer, <b>Junshan Liu</b> , Guillermo Provencio: Advantages and disadvantages of trenchless construction approach as compared to the traditional open cut installation of underground utility systems	<b>Saurav Dixit</b> , Satya N. Mandal, Joseph V. Thanikal, Kinshuk Saurabh: Critical analysis of factors affecting the on-site productivity in Indian construction industry
		<b>Radan Tomek</b> : Advantageous bridge construction with prefabrication Gul Polat, <b>Harun Turkoglu</b> , Atilla Damci: An integrated multi-attribute-decision making approach for selecting structural system: a case study	<b>Håvard Østlid</b> : Tunnels between continents Daniel Fleck, <b>Scott W. Kramer</b> : Maintaining building function during a fire event: Analysis of hospital fire and smoke control systems	<b>Mohammadali Heidari</b> , Erfaneh Allameh: Smart Technologies in the future housing constructions <b>Borja García de Soto</b> , Isolda Agustí-Juan, Samuel Joss, Jens Hunhevicz, Guillaume Habert, Bryan Adey: Rethinking the roles in the AEC industry to accommodate digital fabrication
11:00	11:30	<b>Coffee break</b>		
11:30	12:45	<b>Creative Management: Keith Rahn</b> Lecture room: Maximus 2-3 Gul Polat, <b>Harun Turkoglu</b> , Atilla Damci: Detection of unbalanced bids: a case study	<b>Sustainable Construction, Health and Safety: John Smallwood</b> Lecture room: Lencia 1-2 <b>Chakkrit Luangcharoenrat</b> , Singh Intrachooto: Assessment of green building standards: Identifying aspects/opportunities for future improvements	<b>Automation and Robotics in Construction: Thomas Bock</b> Lecture room: Maximus 1 Rongbo Hu, <b>Wen Pan</b> , Thomas Bock: A novel approach to develop vertical city utilizing construction automation and robotics
		<b>Ruben Vrijhoef</b> : Improving efficiency and environmental impact applying JIT logistics and transport consolidation in urban construction projects	<b>Nokulunga X. Mashwama</b> , Hildah Kale, Clinton O. Aigbavboa: Investigating the hindrances of implementation of Occupational Health and Safety among Small Medium Enterprise's in the Gauteng province of South Africa	<b>Wen Pan</b> , Bahriye Ilhan, Thomas Bock: Process information modelling (PIM) for public housing construction project in Hong Kong
		Lingling Wang, <b>Tsunemi Watanabe</b> : Factors enhancing practitioners' motivation in small local constructor in Japan	<b>Gina Matias</b> , Isabel Torres, Filipe Rei, Filipe Gomes: Ecological and functional technical mortars with rubber	Darren Olsen, <b>Mark Tatum</b> : Integrating software and hardware to enhance classroom BIM instruction
		<b>Yu Wang</b> , Hiromasa Suzuki, Yutaka Ohtake, Takayuki Kosaka, Shinji Noguchi: Generating a visual map of the crane workspace using top-view cameras for assisting operation	<b>Babak Rahmani Mirshekarlou</b> , Irem Dikmen, M.Talat Birgonul: An investigation of the most waste-prone materials and waste causes in prefabricated steel structure building projects	<b>Jie Xu</b> , Liewun Ding: Volume - forming 3D concrete printing using a variable - diameter square nozzle
		<b>Robert Susset</b> , Borja García de Soto, Claus Maier: Determination of a classification tool for IFC data models based on a predefined classification system	Santiago Fernandez, Ignacio Lázaro, Aitor Arnaiz, <b>Gulben Calis</b> : Application of heart rate variability for thermal comfort in office buildings in real-life conditions	<b>Shen Xu</b> , Weizi Li, Llewellyn CM Tang, Lin Yang, Qiang Tang: Artificial intelligence assisted professional work in BIM: A machine reasoning extension (CANCELLED TALK)
12:45	14:00	<b>Lunch</b>		
14:00	14:45	<b>Keynote Speech 2</b> <b>Daniel Castro-Lacouture</b> : Better (and within reason) design-construction interactions in a BIM world: challenges and opportunities (Lecture room: Maximus 2-3)		
14:45	15:00	Disperse to sessions		
15:00	16:00	<b>Creative Management: Borja García de Soto</b> Lecture room: Maximus 2-3 <b>Hao Wang</b> , Xianhai Meng, Patrick J. McGettrick: Involving knowledge of construction and facilities management in design through the BIM approach	<b>Creative Technology and Materials: Levente Mályusz</b> Lecture room: Lencia 1-2 <b>Mohamed Abdel-Raheem</b> , Ofsmán Quintana, Jennifer Cortina, Hector Flores: Initial investigation of generating electricity from concrete	<b>Automation and Robotics in Construction: Daniel Castro-Lacouture</b> Lecture room: Maximus 1 <b>AbdAllah Abou Yassin</b> , Farook Hamzeh, Fatima Al Sakka, Hasnaa Alhussein: Simulating the workflow of robotic steel and concrete 3D printers to build organic shaped structures
		Taekyu Ko, Joonghwan Shin, <b>Soonwook Kwon</b> , S. Callejas-Sandoval, Heesung Park, Jaewoo Park: A study on adjustment method of finishing work schedule based on image detection for high-rise building construction	Fatima El Sakka, <b>Mohammad Hasan Senan</b> , AbdAllah Abou Yassin, Farook Hamzeh: Optimizing 3D printing path to minimize the formation of weak bonds	Jennifer Li, David Greenwood, <b>Mohamad Kassem</b> : Blockchain in the built environment: analysing current applications and developing an emergent framework
		<b>Won Jin Woo</b> , Seung-Heon Han, Woosik Jang: Country portfolio model considering market uncertainties in construction industry	Omkar Gadgil, <b>Scott W. Kramer</b> : Variable Refrigerant Flow (VRF) systems in the South-Eastern United States	<b>Nuno D. Cortiços</b> : Automation for building performance and maintenance efficiency
		<b>Edgar Small</b> : Using RFID's for job-site productivity evaluation of labor and crews	<b>Jeffrey Kim</b> : A study to investigate using mobile devices in the construction management classroom as rationalized by the needs of industry	Stephen Oliver, <b>Farzad Pour Rahimian</b> : Are computers agents? Considering the implication of classifying computers as occupants on energy consumption and proximity-asutility equipment scheduling
16:00	16:30	<b>Coffee break</b>		

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16:30	17:45	<b>Creative Management: István Hajnal</b> Lecture room: <b>Maximus 2-3</b>	<b>Sustainable Construction: John Smallwood</b> Lecture room: <b>Lencia 1-2</b>	<b>Visualization, BIM: Miklós Hajdu</b> Lecture room: <b>Maximus 1</b>
		<b>Berenger Yembi Renault</b> , Nazem Ansary: Identifying factors of risk management for the construction industry	<b>Andrzej Foremny</b> , Wojciech Dorabalski: Review of collusion and bid rigging detection methods in the construction industry	<b>Mai Sherif</b> , Somayah Asadi, Ebrahim Karan: Quantitative ways of measuring client's preferences: a step toward creating an intelligent architectural design agent
		<b>Mohsin Ali Soomro</b> , Tania Ali Soomro: Attributes of farmers' willingness in participatory irrigation infrastructure management	<b>Keith A. Rahn</b> , Aaron Schuff: Feasibility and practicality of replacing hydroelectric dams with wind turbines	<b>Sonia Ahmed</b> , Petr Dlask: The gradual transition to BIM in Syrian companies
		Larissa Rubio, <b>Alfredo Serpell</b> , Ximena Ferrada: Measuring the performance of risk management in construction projects: a preliminary model	<b>Jongko Choi</b> , Bonsung Gu, Sangyoon Chin: Development of the prediction model of workers with fatal accident at construction site using machine learning	<b>Veronika Bolshakova</b> , Annie Guerriero, Gilles Halin: Identification of relevant project documents to 4D BIM uses for a synchronous collaborative decision support
		<b>Edgar Small</b> : Opportunities for UAV's in construction planning, performing and contract close-out	<b>Erfaneh Allameh</b> , Mohammadali Heidari: Designing city installations for socially and environmentally responsible behavior	<b>Yi-Jao Chen</b> , Yong-Shan Lai, Chung-Wei Feng: The development of BIM-based augmented reality system for fire safety equipment inspection
		Kristina Williams, Anoop Sattineni, <b>Robert A Bugg</b> : Correlation between contract type selection and cost growth in U.S. Army corps construction projects	Mohamad Hajj-Hassan, <b>Hiam Khoury</b> : Behavioral and parametric effects on energy consumption through BIM, BEM, and ABM	Hyeon Seung-Kim, <b>Sang Mi-Park</b> , Jae Hee-Lee, Leen Seok-Kang: Application of 4D CAD system for infrastructure projects with construction schedules and distance coordinates

**Monday - July 2, 2018**

8:45	9:30	<b>Keynote Speech 3 Ghassan F. Aouad: The art and science of leadership in construction (Lecture room: Maximus 2-3)</b>		
9:30	9:45	Disperse to sessions		
9:45	10:45	<b>Creative Management: Farzad Pour Rahimian</b> Lecture room: <b>Maximus 2-3</b>	<b>Creative Technology and Materials: Ghassan F. Aouad</b> Lecture room: <b>Lencia 1-2</b>	<b>Creative Management: Adel Francis</b> Lecture room: <b>Maximus 1</b>
		<b>Saurav Dixit</b> , Satya N Mandal, Joseph V Thanikal, Kinshuk Saurabh: Construction productivity and construction project performance in Indian construction projects	<b>Mohamed Abdel-Raheem</b> , Ofsmán Quintana, Melissa Morales, Yahaira Marroquin-Villa, Dalinda Ramos, Sylvia Hernandez: Construction methods used for controlling temperature in mass concrete structures	Neslihan Atabeyli, Merve Kuru, <b>Gulben Calis</b> : Using historical data of economic variables for investigating variations in building construction cost index
		<b>Atle Engebø</b> , Marie Hammer Iversen, Leif Daniel Houck, Ola Lædre, Jardar Lohne: Trust: Work-related crime in the AEC-industry	<b>Lixiong Cai</b> , Lieyun Ding, Hanbin Luo: Dry-mix autoclaved lunar concrete from lower-Ti basalt lunar regolith simulant	<b>Sangyup Kim</b> , Minju Kim, Sangmin Oh, Hunhee Cho, Kyung-In Kang: Improvement measures for the maintenance market through the current status analysis in Korea
		<b>Mathieu Fokwa Soh</b> , Daniel Barbeau, Sylvie Dore, Daniel Forgues: Design rules to improve efficiency in the steel construction industry	Jian Fan, Chuan-Chang Yang, <b>Elton J. Chen</b> , Han-Bin Luo: Preliminary structural analysis of a conceptual design for a small-scale eractable lunar habitat	<b>Sangmin Oh</b> , Minju Kim, Sangyup Kim, Hunhee Cho, Kyung-In Kang: Construction scenario for water supply infrastructure in North Korea
		<b>Djoen San Santoso</b> , Venkata S. Raju Nadimpalli: Exploring opportunities in risks of residential construction projects	<b>Nuno D. Cortiços</b> : Social housing to nZEB - Portuguese context	<b>Wesley Collins</b> , Robert Bugg, Alex Layson: Qualitative analysis of electrical-related change orders on university projects
10:45	11:15	<b>Coffee break</b>		
11:15	12:30	<b>Creative Management: Zoltán Sebestyén</b> Lecture room: <b>Maximus 2-3</b>	<b>Sustainable Construction, Health and Safety: Adel Francis</b> Lecture room: <b>Lencia 1-2</b>	<b>Visualization, BIM: Miklós Hajdu</b> Lecture room: <b>Maximus 1</b>
		<b>Niclas Andersson</b> , Jerker Lessing: Product service systems in construction supply chains	<b>Erfaneh Allameh</b> , Mohammadali Heidari: Design for sustainability in education	Emile Zankoul, <b>Hiam Khoury</b> , Diana Salhab, Soheila Antar: A review on Internet of Things solutions for enhancing construction equipment fleet productivity
		<b>Ahmed Alhiddi</b> , Allan N. Osborne, Kelechi Anyigor: Organizational culture and stakeholder success criteria in construction projects	Olga Piliipenko, Elena Skobeleva, <b>Aleksey Bulgakov</b> : Methodology for assessing the comfort of an urban environment in terms of availability analyzing	<b>Sonja Kolaric</b> , Tomáš Mandičák, Mladen Vukomanović, Peter Mesáros: BIM training in construction management educational practices in Croatia and Slovakia
		<b>Mamoon Mousa Atout</b> : Effective process of project monitoring and control	Keren Ding, <b>Yi He</b> , Wen Zeng: Research on regional characteristics and clustering protection of Shanxi historical villages and towns	Abdul-Quayyum Gbadamosi, <b>Abdul-Majeed Mahamadu</b> , Patrick Manu, Olugbenga Akinade, Francisco Sierra, Thep Thanh Lam, Ammar Alzaatreh: A BIM based approach for optimization of construction and assembly through material selection
		<b>Bankole Awuzie</b> : Appraising the utility of Internet-mediated communication for qualitative data collection in built environment research	<b>Tamás Horváth</b> : Energetic analysis of complex modernizations of educational buildings	<b>Sandra T. Matarneh</b> , Mark Danso-Amoako, Salam Al-Bizri, Mark Gaterell, Rana Matarneh: Developing an interoperability framework for building information models and facilities management systems
		<b>István Hajnal</b> : The impact of view-restriction: a Delphi case study from Budapest	Shiva Hoseini Ramandi, <b>Hammed Kashani</b> : A framework to evaluate the resilience of hospital networks	<b>Alessandro Carbonari</b> , Leonardo Messi, Berardo Naticchia, Massimo Vaccarini, Massimiliano Pirani: Development of a BIM-based cyber-physical system for facility management of buildings
12:30	13:30	<b>Lunch</b>		

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13:30	14:15	<b>Keynote Speech 4 Tarek Bahgat: Risk management and governance of mega projects (Lecture room: Maximus 2-3)</b>		
14:15	14:30	Disperse to sessions		
14:30	15:45	<b>Creative Management: Levente Mályusz</b> <b>Lecture room: Maximus 2-3</b> <b>Olanrewaju Abdul Balogun</b> , Justus Agumba, Nazeem Ansary: The predicating determinants accessibility of credit small and medium enterprise in the construction industry in South Africa <b>Thippawan Boonyaperm</b> : Factors affecting readiness of Thai contractor in approaching Asean Economic Community (AEC) <b>Azzam Raslan</b> , Georgios Kapogiannis: The integrated collaborative environment and its value to the procurement process in the Kingdom of Saudi Arabia Hasnaa Alhussein, Farook Hamzeh, <b>Abdallah Abou Yassin</b> : Analysis of improvisation in construction through agent-based modelling <b>Elodie Hochscheid</b> , Gilles Halin: A model to approach BIM adoption process and possible BIM implementation failures	<b>Sustainable Construction, Health and Safety: Miklós Hajdu</b> <b>Lecture room: Lencia 1-2</b> <b>Ali M. S. Kashkooli</b> , Parisa Mahya, Amin Habibi, Hamid R. Sharif: Developing of evolution analysis algorithms in regenerative design and decision-making; Demonstrated through a case study in Shiraz, Iran <b>Francisco Sierra</b> , Lamine Mahdjoubi, Bill Gething, Abdul-Majeed Mahamadu, Ammar Alzaatreh: Heritage Building Information Modelling (HBIM) to make informed decisions when retrofitting <b>John Smallwood</b> : Preventing the collapse of Reinforced Concrete (RC) structures, and support work during construction: A support work manufacturer's perceptions Alenka Temeljotov-Salaj, <b>John Smallwood</b> : Designing for construction ergonomics in Slovenia <b>Alon Uralainis</b> , Igal M. Shohet: Probabilistic risk appraisal and mitigation of critical infrastructures for seismic extreme events	<b>Creative Management: István Hajnal</b> <b>Lecture room: Maximus 1</b> P. Tod Smyrichinsky, <b>Scott W. Kramer</b> : Practical application challenges for construction submittals in a paperless contract file <b>Jiseop Lee</b> , Jin Woo Won, Jeonghun Lee, Seung-Heon Han: Collaboration strategy for ODA project using social network analysis <b>Murenden Liphadzi</b> , Clinton O. Aigbavboa, Wellington D. Thwala: Leadership development in the construction industry <b>Ming Luo</b> , Hongqin Fan, Guiwen Liu: Comparative analysis of regional construction labor cost variations via panel data modeling: the evidence of Mainland China <b>Nokulunga X. Mashwama</b> , Winnie S. Mushatu, Clinton O. Aigbavboa: Challenges faced by stakeholders in the road construction projects in the Gauteng province of South Africa
15:45	16:15	<b>Coffee Break</b>		
16:15	17:45	<b>Creative Management: Keith Rahn</b> <b>Lecture room: Maximus 2-3</b> <b>Glumur Orri Högnason</b> , Paulos Abebe Wondimu, Ola Lædre: Best Value Procurement – The first experiences from Norway <b>Olanrewaju Abdul Balogun</b> , Nazeem Ansary, Justus Agumba: Identification factors influencing accessibility of credit for small and medium contractors in the construction industry <b>Layth Kraidi</b> , Raj Shah, Wilfred Matipa, Fiona Borthwick: Analyzing the critical risk factors in oil and gas pipelines projects regarding the perceptions of the stakeholders <b>Berenger Yembi Renault</b> , Nazeem Ansary: The relationship of risk assessment with project success: an empirical study of small and medium contractors in South Africa	<b>Visualization, BIM: John Smallwood</b> <b>Lecture room: Lencia 1-2</b> Jordan Davidson, John Fowler, Charalampos Pantazis, Massimo Sannino, Jordan Walker, <b>Farzad Pour Rahimian</b> : Virtual reality applications in architecture: Bill of quantities & virtual reality <b>Yuan Ren</b> , Zhiliang Ma, Xuefeng Song: A system framework for RCM-based facility maintenance management in a park area <b>Marco L. Trani</b> , Manuele Cassano: A comparison between different approaches for 5D BIM in construction site surveying <b>Žiga Turk</b> : Should BIM change the language of engineering education? <b>Lei Lei</b> , Ying Zhou, Hanbin Luo: Mobile-based 3D reconstruction of building environment <b>Berardo Naticchia</b> , Alessandra Corneli, Alessandro Carbonari: Development of a framework to support the information flow for the management of building	<b>Creative Scheduling: Jesus M. de la Garza</b> <b>Lecture room: Maximus 1</b> <b>Gunnar Lucko</b> , Yi Su, Richard C. Thompson, Jr.: Influence of network structure on schedule performance – Extending criticality index to capture ripple effect of delays B. Naticchia, <b>A. Carbonari</b> , M. Vaccarini: A simulation-based approach for optimal construction planning and scheduling <b>Chung-Wei Feng</b> , Fernando Enrique Mixco, Yi-Jao Chen: Employing critical chain and lean concepts to develop the planning and control framework for linear construction projects <b>Orsolya Bokor</b> , Laura Florez, Allan Osborne, Barry J. Gledson: A framework for modelling masonry construction using hybrid simulation approaches Thibault Mazars, <b>Adel Francis</b> : Dynamic 4D space planning using chronographical modeling <b>Miklós Hajdu</b> , Levente Mályusz, Vattai Zoltán: New precedence relationships for modelling so far unsolvable projects: a theoretical review with a practical example
18:15	23:00	<b>Gala dinner in the Ljubljana Castle</b>		
8:45	15:00	<b>Tuesday - July 3, 2018</b> <b>Excursion to Postojna cave with lunch</b>		