



The 11th International Conference on
Construction Engineering and Project Management

ICCEPM 2025

November 17th (Mon)–20th (Thu)

Sono Calm, Jeju, South KOREA

Program Book

*Advancing Global Construction Research:
Innovations, Technologies, and
Sustainable Solutions for the Built Environment*

Organized by Korea Institute of Construction Engineering and Management

Supported by International Consortium of Construction Engineering and Project Management

Contents

01	Overview	2
02	Welcome	3
03	Organizing Committee	4
04	Technical Program Committee	5
05	Organized by & Supported by	6
06	Keynote Speakers	7
07	Program at a Glance	8
08	Special Sessions	9
09	Sessions	10
10	Floor Plan	18
11	Shuttle Bus	19
12	Sponsors	20
13	Contact Us	22



Overview

01

Title

The 11th International Conference on Construction Engineering and Project Management (ICCEPM 2025)

Theme

Advancing Global Construction Research: Innovations, Technologies, and Sustainable Solutions for the Built Environment

Date

17th – 20th November 2025

Venue

Sono Calm, Jeju, South Korea

Organized by

Korea Institute of Construction Engineering and Management (KICEM)

Supported by

International Consortium of Construction Engineering and Project Management (ICCEPM)



Welcome

02

We are excited to announce that the 11th International Conference on Construction Engineering and Project Management (ICCEPM) will be held in Jeju, South Korea.

We invite you to attend and participate in various conference activities, including academic paper presentations, business seminars and workshops, networking sessions, a dinner banquet, and a post-conference excursion. These activities will be highly educational, practical, and enjoyable for students, academics, and practitioners.

Unlike traditional academic conferences, ICCEPM is uniquely designed to blend creative ideas from academia with innovative practices from the industry. Conference participants will experience the powerful synergy between academia and industry, shaping the future direction of the construction industry.



Organizing Committee

03

Conference Chair



Youngcheol KANG

Yonsei University

Members

Changbum Ryan Ahn	Seoul National University
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Youngjib Ham	Seoul National University
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Minhyun Lee	Hong Kong Polytechnic University
Seulbi Lee	Incheon National University
Kyung-Mo Park	Korea Institute Of Construction Technology Education
JoonOh Seo	Hong Kong Polytechnic University



Technical Program Committee

04

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Ajou University



JeongWook SON
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Jinwoo KIM	Kumoh National Institute of Technology
Minkoo KIM	Chungbuk National University
Namgyun KIM	Texas A&M University, USA
Taehoon KIM	Seoul National University of Science & Technology
Taewoo KO	Kookmin University
Bogyong LEE	Dong-A University
Jeehee LEE	Chung-Ang University
Jeonghoon LEE	Gyeongsang National University
Kyeongsuk LEE	Western New England University, USA
Seulki LEE	Kwangwoon University
Nan LI	Tsinghua University, China
Jeeyoung LIM	Kyung Hee University
Jacob Je-Chian LIN	National Taiwan University, Chinese Taipei
Seonghyeon MOON	Gyeongsang National University
Sungkon MOON	Ajou University
Sayaka NISHINO	Kyoto University, Japan
Koji TANAKA	Circle Field Associates, UK
Bin XUE	Chongqing University, China
Kanghyeok YANG	Chonnam National University
Zhenhua ZHU	University of Wisconsin - Madison, USA



Organized by

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Keynote Speakers

06

Keynote Speech 1

• 2025-11-18, 10:00~10:30 • West Tower_6F Grand Ballroom



The Safety Management of Existing Buildings : the Explorations of the Mainland China

Guiwen LIU

Professor
Chongqing University

Keynote Speech 2

• 2025-11-18, 10:30~11:00 • West Tower_6F Grand Ballroom



Decades of Progress, But Limited Results : Challenges and Opportunities for Construction Research

William J. O'BRIEN

Professor
The University of Texas at Austin

Keynote Speech 3

• 2025-11-19, 10:00~10:30 • West Tower_6F Grand Ballroom



From Digital Transformation to Sustainable Innovation : Rethinking the Future of Construction Engineering

Shang-Hsien HSIEH

Professor
National Taiwan University

Keynote Speech 4

• 2025-11-19, 10:30~11:00 • West Tower_6F Grand Ballroom



Visualization, Information Modelling, and Simulation (Digital Twin AR/VR, BIM)

Won Jo JUNG

Digital Twin Group Leader
Naver Labs



Program at a Glance

07

DAY	TIME / Room	West Tower_6F	East Tower_1F		East Tower_2F		
		Grand Ballroom	Diamond	Emerald	Ruby	Sapphire	Opal 1
11/17 (Mon)	16:30-17:00		Registration				
	17:00-19:00		Welcome Reception				
11/18 (Tue)	09:30-11:00	Registration (1)					
	09:30-10:00	Opening Ceremony					
	10:00-10:30	Keynote Speech 1					
	10:30-11:00	Keynote Speech 2	Registration (2)				
	11:00-11:20		Networking Break				
	11:20-12:20		S1-D -1~4	SS: CERIK	S1-R -1~4	S1-S -1~4	S1-O -1~4
	12:20-13:50		Lunch (West Tower_5F)				
	14:00-15:15		S2-D -1~5	S2-E -1~5	S2-R -1~5	S2-S -1~5	S2-O -1~5
	15:15-15:45		Networking Break				
	15:45-17:00		S3-D -1~5	S3-E -1~5	S3-R -1~5	S3-S -1~5	S3-O -1~4
11/19 (Wed)	09:30-17:00		Registration				
	09:30-10:00	Sponsor Spotlight Presentation					
	10:00-10:30	Keynote Speech 3					
	10:30-11:00	Keynote Speech 4					
	11:00-11:20		Networking Break				
	11:20-12:20		S4-D -1~4	SS: Int'l Seminar	SS: KICT	S4-S -1~4	S4-O -1~4
	12:20-13:50		Lunch (West Tower_5F)				
	14:00-15:30		S5-D -1~5	S5-E -1~6	S5-R -1~6	S5-S -1~5	S5-O -1~4
	16:00-18:00	Closing Ceremony & Farewell Dinner					
11/20 (Thu)	10:00~15:30	Technical Tour					

- ※ **[Session Information]** S1-D -1: Session 1 - Diamond room - First Speaker
- ※ SS: Special Session & Presenting Institutions
- ※ The presentation schedule is subject to change due to circumstances, so please check the conference website regularly for updates.
- ※ Please note that the program is subject to change on the day of the conference.



Special Sessions

08

• 2025-11-18, 11:20~12:20 • East tower_1F Emerald

► CERIK (Construction & Economy Research Institute of Korea)

S1-E -1 Governance for Construction Transformation: CERIK's Industrial Policy Agenda

Minju Kim

S1-E -2 Evolution of Construction Management and Technology Policy: The Past, Present, and Future of CERIK

Suwan Chung

S1-E -3 CERIK's Journey in Economic, Financial, Housing, and Urban Research: Past and Present

Taehee Lee

• 2025-11-19, 11:20~12:20 • East tower_2F Ruby

► KICT (Korea Institute of Civil Engineering and Building Technology)

Title: Construction Policy and Management in the Next Generation

S4-R -1 Construction Cost Estimation Standard in Republic of Korea

Taeseok Song

S4-R -2 Development of a DATS-Based Intelligent Monitoring System for Hydrogen Pipeline Networks

Dongjun Yeom

S4-R -3 A High-Resolution Integrated Assessment Platform for Climate-Responsive Construction Policy and Management

Minsu Son

• 2025-11-19, 11:20~12:20 • East tower_1F Emerald

► ICCEPM International Seminar

Title: Open Data in Construction and Infrastructure Management

S4-E -1 Advanced Construction Image Dataset Suite: From Data to Ecosystem

Dr. Hung-Lin Chi

S4-E -2 OpenConstruction: Building an Open Platform for Knowledge Sharing and Reuse in the AEC Community

Dr. Ruoxin Xiong



01. Industry Case Studies

- S5-S -4 Usability Evaluation and Analysis of Automated Quality Control Systems in Earthwork Sites
Hyunchul Oh, Suyeul Park , Seok Kim, Hwirang Kang
- S5-S -5 Benefits of 360-Degree Capture Technology in Construction Management : A Consultant's Perspective
Marwan ABUEBEID, Maged ELHAWARY

02. Construction Material and Methods

- S3-S -1 A Study for Proposed Test Methods and Analysis Criteria for Evaluating the Impact Resistance of Free-form Concrete Panels by Reviewing Previous Studies
Minje JO, Kyeongtae JEONG, Sungjin KIM, Donghoon LEE

03. Advanced Contracting and Project Delivery Systems

- S3-S -2 Does the GMP structure support the collaborative project delivery methods?
Yong-Woo KIM, Byong-Duk Rhee
- S3-S -3 A preliminary examination of PPP risk allocation and pricing approaches
Yu-Chi LIANG, Jyh-Bin YANG
- S3-S -4 Application of Advanced Work Packaging (AWP) and Digital Construction Block (DCB) in Data Center Construction Projects
ChangYoung SHON, Yogesh SRIVASTAVA, Daniel CANNING

04. Advanced Project Management and Control (Scheduling, Estimating, QA/QC, Risk/Safety Management)

- S5-R -4 Data-Driven Framework for Enhancing Strategic Highway Safety Planning
Jiyong CHOI, Namhun LEE
- S1-R -2 Implementing Blockchain Technology to improve Transmittal of information in Construction Projects
Hashem ALTABTABAEI, Abdulrahman SATI
- S1-R -3 Improving the Efficiency of Building Production Processes by Introducing openBIM®
Mayuko MINAKUCHI, Kazuya SHIDE
- S1-R -4 A Comparative Analysis of Manual and Automated Cost Estimation Methods in BIM Workflows
Syed Haseeb SHAH, JinA PARK, Inhan KIM
- S2-R -1 Assessing the Effectiveness of AI-Specific Risk Mitigation Strategies in Construction Project Management
Hanzhang ZHAN, Bon-Gang HWANG, Jolyn Xin Yin CHIA
- S2-R -2 Constructing Safety Policy as a Cultural Carrier: A Three-Dimensional Conceptual Framework
Yiqin YU, Wenqi LI, Dongping FANG



- S2-R -3** AI-Driven Safety Management for Building Operation and Maintenance: A Systematic Review
Yiran XU, Liying WANG, Dongping FANG
- S2-R -4** Forecasting of Construction Project Completion Time Based on Actual Progress Using Polynomial Regression and Linear Regression
Bangun Marpaung, Wei-Tong Chen, Ying-Hua Huang
- S2-R -5** Analysis of Effective IT Tools by Construction Incident Patterns: Mitigating Risks and Reducing Workplace Accidents
Narendra Chalamala, Joseph J. Kim, Jeeyoung Lim
- S3-R -1** Why Understanding Knowledge Management Practices Matters for South Korean SMEs in Overseas Projects?
Hyeonju WANG, Youngcheol KANG
- S3-R -2** Digital Ecosystem for Plant Facility Asset Management (P-FAM): Variables for Theory and Implementation, focusing on Advanced Work Packaging (AWP)
Seunghee Kang, Zhenhui Jin, Yunsub Lee, Youngsoo Jung
- S3-R -3** Autonomous UAV Swarm Path Assignment for 3D Mapping of Construction Site: PACMAN
Jaehyun MYUNG, Dohyeong KIM, Dongmin LEE
- S3-R -4** Construction Workers' Safety Knowledge and Cognitive Control in Response to Hazards
Myeongjun KIM, Seongtaek LEE, Eugene HWANG, Hyemin SHIN, Jeongmi LEE, Moonseo Park, Changbum AHN
- S3-R -5** Performance and Key Variable Analysis of Construction Accident Prediction Model Incorporating Periodic Features
Hyungtaek Sim, Taeyeon Chang, Jaehyun Jeong, Seonghyeon Moon
- S5-R -1** A BPMN-based Framework for Real-time Rebar Arrangement Inspection on Construction Sites
Nomgon Ochirsuren, Gi-Tae KIM, Jin-Bin IM, Rong-Lu HONG, Lijing XU, Ju-Hyung KIM
- S5-R -2** A Systematic Approach to Analyzing Construction Constraints for a Streamlined Project Planning Process
Taewoo Ko, Seulbi Lee, Namgyun Kim
- S5-R -3** Construction Conflict Resolution Strategies Focused on Two-level Game Theory : A Case Study Analysis
Enlian ZHANG, Seung-Won CHOI, Jin-Bin IM, Young-Gun BEAK, Ju-Hyung KIM, Kyung-Tae LEE
- S1-R -1** Site Condition-based Risk Assessment Model of NATM Tunnel Project
HyunBee KIM, ByungSoo KIM

05. Industrialized and Modular Construction

- S2-0 -1** Requirements and Barriers for Introducing DfMA in Japan's Construction Industry - A Comparative Study with Singapore
Sora TAKAYAMA, Kazuya SHIDE
- S2-0 -2** Industrial modularization: Comprehensive literature review on industry reports and academic papers
Kiran MOKTAN, Woobin KWON, Jin Ouk CHOI



- S2-O -3** A Review on Rapid Generation Methods of Precast Structural Designs from Traditional Structural Designs in BIM
Chun-Hsiao LAI, Jyh-Bin YANG
- S2-O -4** i-SMR Construction Schedule Analysis through Modularization Based on Large Nuclear Power Plant Data
Soonyong CHA, Wooyong JUNG
- S2-O -5** Performance Assessment Framework for Radiant Heating and Flooring: Comparative Study of Off-site and On-site Construction
Tianxin Li, Zhongfu Li

06. Sensing and Data Analytics for Construction (AI & Data Science)

- S1-D -1** A Large-Scale Scene Graph Dataset for Construction Scene Understanding: Development and Benchmarking
Yichuan DENG, Huimin LI, Hui DENG, Zhou ZHANG, Ronglong YAN
- S1-D -2** Monocular 3D Object Detection via YOLO and Depth Estimation for Smart Construction Monitoring
Thang Huu NGUYEN, Syed Farhan Alam ZAIDI, SungKuk HWANG, Chansik PARK, Doyeop LEE
- S1-D -3** Generative Learning Enabled Automated Construction Site Layout Planning Integrating Temporary Road
Rongyan Li, Hung-Lin Chi, Fangzheng Li, Roy Dong Wang, Shixian LI, Wen YI
- S1-D -4** Generative design for tower crane layout planning in modular constructions using a masked variational autoencoder (VAE) model
Fangzheng Li, Hung-Lin Chi, Rongyan Li, Roy Dong Wang
- S2-D -1** From Text to Insight: Automating Drug-Involved Crash Detection Using Large Language Modeling
Niloy Das, Malak Mahdy JeeWoong Park, Pramen Shrestha
- S2-D -2** Modeling Latent Human Factors in Construction Reports through ReAct-Based Reasoning
Unmesa RAY, JeeWoong PARK, Brian A. ANDERSON, Namgyun KIM
- S2-D -3** A Knowledge Graph-Based Question Answering System for Construction Schedule Delay Risk Management
Yeon Ju SHIN, Eu Wang KIM, Kyong Ju KIM
- S2-D -4** Strategies and Challenges in Performance Enhancement of Construction Contract Review Using LLM- and RAG-Based Approaches
Eu Wang KIM, Sandar Shwe TUN, Yeon Ju SHIN, Kyong Ju KIM
- S2-D -5** Decoding LLM decisions on ethical dilemmas of construction safety management : A comparative study of GPT, Gemini and DeepSeek
Wenqi LI, Yiqin YU, Dongping FANG
- S3-D -1** A Framework for UAV-Based Concrete Crack Segmentation and Critical Crack Width Estimation Using Improved-YOLOv11 and Morphological Analysis
Syed Farhan Alam ZAIDI, Emmanuel Charles KIMITO, Usman ASIM, Hankwang CHO, Chansik PARK, Doyeop LEE



- S3-D -2** Construction Workers' Work State Monitoring Based on Inertia Measurement Unit
Jeonghyeun CHAE, Moobin KIM, Youngcheol KANG
- S3-D -3** Generative AI for Construction Image Synthesis: Automatic Label Generation and Quality Refinement
Seungjun Shin, Sejun Park, Dongmin Lee
- S3-D -4** Evaluating Ergonomic Risk Assessment in Construction via 2D-3D Human Pose Estimation Comparison
Junhee JEONG, Seungjun SHIN, Dongmin LEE
- S3-D -5** Automated Detection and Measurement of Slab Rebar Geometry by Introducing Mobile LiDAR and Transformer-Based Deep Learning
Rong-Lu HONG, Enlian ZHANG, Seunghye SHIN, JongHyeok LEE, Seung-Hyeon WANG, Ju-Hyung KIM
- S4-D -1** Deep Learning-based Multimodal Analysis of EEG-EDA for Human Responses to Construction Noise Exposure
Md Samdani AZAD, Young Beom JU, Min Gi KANG, Sungchan LEE, Sungjoo HWANG, Minji CHOI
- S4-D -2** Improving Generalization of Deep Learning Models in MEP Point Cloud Segmentation Through Synthetic Data Augmentation
Festus Basimtaal Ayembilla, Mathanraj Rajendran, MinKoo Kim
- S4-D -3** Performance Enhancement of Building Crack Defect Detection Using Super-Resolution Methods for Drone Inspection Images
Huiyoung Yun, Kanghyun Lee, Dongmin Lee
- S4-D -4** Identifying Habituation of Construction Workers to Fall-From-Height Risk Using Multi-Physiological Data and Virtual Reality
Sachiel Adom Junior ANKRAH, Francis Xavier DUORINAAH, MinKoo KIM
- S5-D -1** Multi-View Deep Learning-based Penetrability Analysis for Identifying Irrelevant Clashes in BIM models
Wonbok Lee, Youngsu Yu, Hyunwoo Lee, Donguk Shin, Bonsang Koo
- S5-D -2** Optimizing Synthetic Data Volume for Façade Classification using LoRA-Based Stable Diffusion
Youngseo HWANG, Seunghyeon WANG, Namhyuk HAM, Kyubyung KANG, Sungkon MOON
- S5-D -3** Investigating the Effect of Traffic Loading Patterns on the Deterioration of Asphalt Pavements
Ehitabezahu N. MEKONNEN, Azam AMIR, Michael HENRY
- S5-D -4** Impact of geometric and photometric augmentation in deep learning for solar panel fault detection
Wonjun GAO, Minhyun LEE, Ruixiaoxiao Zhang, Lijie Huang

07. Visualization, Information Modelling, and Simulation (Digital Twin AR/VR, BIM)

- S2-E -1** Study on a Continuous Point Cloud Integration Workflow Using VPS at Construction Sites
Jumpei ITO, Kazuya SHIDE



- S2-E -2** Safety Monitoring Using Animation-Based Construction Simulation and Geofencing Technology
Myungjin CHAE, Jaeho CHO, Younggi Hong
- S2-E -3** Evaluating the Readability of VR-based Construction Safety Training Materials Using Optical Character Recognition
Ki Hun CHOI, Jin Gang LEE
- S2-E -4** A Systematic Review of Implementing AI-Driven Generative Design on BIM Platforms
Sining LI, Shuhan YANG, Seonghyeun KIM, Heejoung KIM, Suzi KANG, Jung In KIM
- S2-E -5** Automated Safety Compliance Code Checking System: A case of Gas Compressor Station Construction Project
Pooja D. Chavan, Derek Bernal, Joseph J. Kim
- S3-E -1** System Requirements Analysis for a Digital Twin Platform for Geotechnical BIM-Based Maintenance
Jungwon LEE, Yuri KIM, Seunjun AHN, Taesik KIM
- S3-E -2** BIM-Based Mixed Reality System for Real-Time Inspection of Factory-Built Modular Units
Saddiq Ur REHMAN, Jiyoung KIM, Kyung-Eun HWANG, Inhan KIM
- S3-E -3** BIM Object Simplification and Spatial Indexing: A Framework for Optimizing LLM Agent Data Exploration
Yunku LEE, Inho JO, Namhyuk HAM, Jae-jun KIM
- S3-E -4** International Comparative study on Policies for Promoting Architectural and Urban Digitalization; Cases from Canada, Singapore, and Japan
Atsushi TAMURA, Masaki MUTO, Tomohiko SAKATA, Satoru TAKAHASHI
- S3-E -5** Towards Automated As-Built BIM modeling from Mobile LiDAR with Semantic-Driven 3D Reconstruction
Sori KIM, Seokhyeon JIN, Dongmin LEE
- S5-E -1** Beyond Visualization: Large Language Model Integration for Semantic and Statistical BIM Queries
James Mugo Njoroge, Jungtaek Hong, Goeun Choi, Soonwook Kwon
- S5-E -2** Visual Reasoning for Construction Safety Monitoring
GyeongNam Kang, Jeonghoon Lee, JeeHee Lee, Hyunsoo Kim, HyunJung Park, JungHo Jeon
- S5-E -3** 4D+Semantic Point Cloud Model for Detached Wooden Housing Aligned with Construction
Keita KADO, Satoru TAKAHASHI
- S5-E -4** Development of Rebar 3D Modeling Technology Using Mobile LiDAR & BIM-Dynamo with Point Cloud
Hojeong Jeong, Seungha Seo, Heejun Yang, Hyeonggi Lee, Jisoo Park, Sungjin Kim
- S5-E -5** The Restorative Effects of AI-Generated Virtual Nature on Stress Recovery
Junjiang LUO, Minhyun Lee, Xuange Zhang, Xue Cui
- S5-E -6** Evaluating UAV-Based Sonar for Bathymetric Monitoring: A Case Study of Huffman Bridge on Rhodhiss Lake, NC, USA, Before and After Hurricane Helene
Quinn KEEFER, Ok-Youn YU, Song SHU, Alex O'NEILL, Ben SANCHEZ



08. Building Science (Energy Modelling, Facility Management)

- S4-S -1** Assessment of Configuration Management (CM) Information: Variables for Theory and Implementation
Youngsoo Jung, Yunsub Lee
- S4-S -2** Applicability of international standards for facility management data to domestic operation and maintenance work; Practical evaluation of the usefulness of the COBie schema in Japan
Rintaro TAKAGI, Kazuya SHIDE
- S4-S -3** LLM-Based Framework for Forecasting Building Energy Using Unstructured Schedule Data
Jaewon Jeoung, Jongbaek An, Minjin Kong, Juwon Hong, Eunseong Song, Taehoon Hong
- S4-S -4** U.S. Smart Thermostat Adopters through the Lens of Diffusion of Innovation Theory
Wooyoung JUNG

09. Automation in Construction (Robotics)

- S1-O -1** Simulation Study of an Autonomous Steel Bolting Robot
Chang-Yong YI, Jin-Young PARK, Young-Jun PARK, Yoon-Ki CHOI, Chan-Jeong PARK, Hyung-Keun PARK
- S1-O -2** On-Device Personal Protective Equipment Detection Using YOLOv11 Accelerated by NPU
Muhammad UMRAIZ, Muhamad Sibtain ABBAS, Jae-Ho PYEON, Chansik PARK, Do Yeop LEE
- S1-O -3** Science Mapping for Advances in Integration of Domain Knowledge into Autonomous Construction Robots
Zhihao REN, Ho Jin LEE, Muhammad Shoaib Khan, Xiangyi Zeng, Tae Yeon KIM, Jung In KIM
- S1-O -4** Privacy-Preserving Blockchain-Based AI Framework for Toolbox Meeting PPE Compliance
Muhammad Sibtain ABBAS, Masoomah BAHRAMI BAJGIRANI, Muhammad UMRAIZ, Chansik PARK, Doyeop LEE
- S4-O -1** Field Evaluation of Quadruped Robot Navigation in Dynamic and Cluttered Construction Environments
Liqun XU, Zhenhua ZHU
- S4-O -2** Trowel Marks Detection and 3D Unprojection for Interior Floor Finishing Robots
Joon-Hee Ham, Junbeom Park, Sung-Jae Bae, Minji Song, Jung-Yeol Kim
- S4-O -3** A Framework for Indoor UAV Localization Integrating Graph-Based Spatial Modeling and Semantic Segmentation
Hayeong Lee, Jaehoo Kim, Dongmin Lee
- S4-O -4** Synthetic Image Data for Construction Safety: Vision-based Risk Scenario Modeling using Stable Diffusion and ResNet Classification
Junhong KIM, Namhyuk HAM, Sungkon MOON



10. Education, Diversity, Inclusion and Heritage in Construction

- S3-O -1** An Adaptive Construction Safety Q&A and Quiz System Based on LLM and Machine Learning
Minjung Kim, DoHyeong Kim, Dongmin Lee

11. Human-Centered Innovations (HBI, HCI, Human-Robot Interaction)

- S5-O -1** Personality Traits as Predictors of Thermal Preference and Thermal Regulatory Intention
Gun KUK, Dahyun JUNG, Hyuna KANG, Seunghoon JUNG, Seungkeun YEOM, Jinwoo CHOI, Juui KIM, Taehoon HONG
- S5-O -2** Analyzing Factors Influencing Change Detection in Dynamic Construction Environments for Personalized Visual Guidance
Seongtaek LEE, Myeongjun KIM, Eugene HWANG, Hyemin SHIN, Jeongmi LEE, Moonseo PARK, Changbum AHN
- S5-O -3** Interaction Pressure Exerted by Two Back Exoskeletons on Wearers During Construction Lifting Tasks
Ting LEI, Kelvin Holam HEUNG, Joon Oh SEO
- S5-O -4** A Virtual Reality Platform to Enhance Human Competencies in Collaborative Robotic Construction
Ali Akbar, Jinwoo Song, Younghee Chang, Jaeyoon Kim, Soonwook Kwon

12. Organizational Issues

- S3-O -2** Predicting Unexplored Relationships Between Team Cohesion and Project Factors Through Meta-Analysis
Jinyoung KIM, Hoonyong LEE
- S3-O -3** Exploring Digital Technology Adoption in Construction Organizations: An Integrated Technology -Organization-Environment (TOE) framework, Diffusion of Innovation (DOI) theory and Institutional Theory Approach
Yu-Xin FENG, Seokho CHI, Bon-Gang HWANG

13. Project Planning and Design

- S5-R -5** Developing a Checklist for Implementing Autonomous Mobile Robots (AMRs) in Healthcare Facilities
Namho CHO, Catherine MCCLURG-HEFEL
- S5-R -6** Evaluating Expeditionary Construction for Improving Traditional Construction Logistics
Patrick C. SUERMANN



14. Sustainable Construction and Resilient Infrastructure/ Cities/ Communities

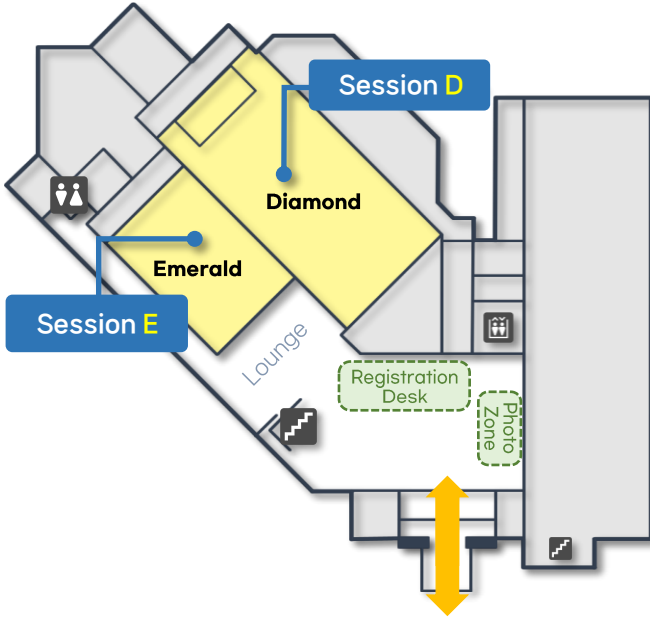
- S1-S -1** Trends and Analysis of Smart City Policies in Japan
Koko KOJIMA, Hiroto IWAMORI, Kazuya SHIDE
- S1-S -2** Rethinking Smart Buildings - A Comparative Analysis of Current Use Cases and User Needs for Smart Building Guidelines
Hiroto IWAMORI, Kazuya SHIDE, Koko KOJIMA
- S1-S -3** Developing a Carbon Emission Assessment Framework for Road Engineering Using Material Flow Analysis
Wei Shiang Huang, Hung Yu Chou, Yu Te Wei
- S1-S -4** Conceptualizing "Appropriate Construction Volume": A Theoretical Framework for a Sustainable Construction Industry
Sayaka NISHINO, Atsushi TAMURA, Sayuri HAYAKAWA
- S2-S -1** Building Information Modelling for Resilient Transport Infrastructure: A Systematic Literature Review
Hyunjung YOO, Weiwei CHEN, Tim BROYD
- S2-S -2** A ZKP-Based Consensus Algorithm with Reinforcement Learning for Sustainable Blockchain in Construction Carbon Management
Masoomeh BAHRAMI BAJGIRANI, Dohyeong KIM, Dongmin LEE
- S2-S -3** Evolving Focus on Sustainability in Construction: Insights from a Systematic Literature Review (2015–2024)
Melati Balla Rantelembang, Bangun Marpaung, Muhammad Mubasher, Wei-Tong Chen
- S2-S -4** Deep Learning - GIS integrated Risk Assessment of Infrastructure Deterioration Induced by Climate Change
Moobin Kim, Jeonghyeon Chae, Youngcheol Kang
- S2-S -5** A Study on Multi-Criteria Analysis Based on Trend Examination of Life Cycle Impact Assessment of Building Exterior Materials Using LIME
Yosuke TANAKA, Yoshiyuki SUZUKI, Kensuke KOBAYASHI, Kazuya SHIDE
- S5-S -1** PSInSAR-Based Monitoring of Urban Infrastructure Integrity to Support Sustainable and Resilient City Development
Manik ADHIKARI, Kim SeongWuk, Choi SeungHyuk, Song MoonSoo, Yum SangGuk
- S5-S -2** Improving Solar Energy Justice: A Spatial-Economic Analysis of Regional Disparities in Residential Photovoltaic (PV) Adoption in Hong Kong
Shiqi MEI, Minhyun LEE, Ruixiaoxiao ZHANG, Lijie HUANG, Lili XU
- S5-S -3** The Sustainability Debate: Nuclear Energy vs Hydrogen Fuel
Mahdis MAZHARI, Fatemeh PARVANEH, Mai GHAZAL, Ahmed HAMMAD



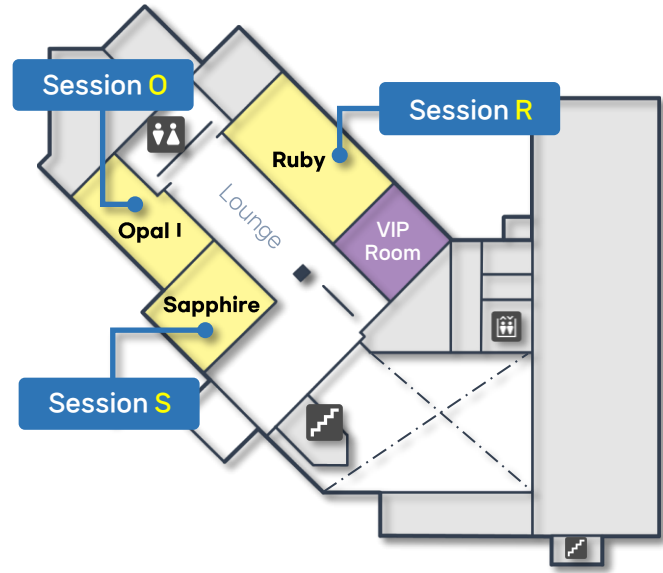
Floor Plan

10

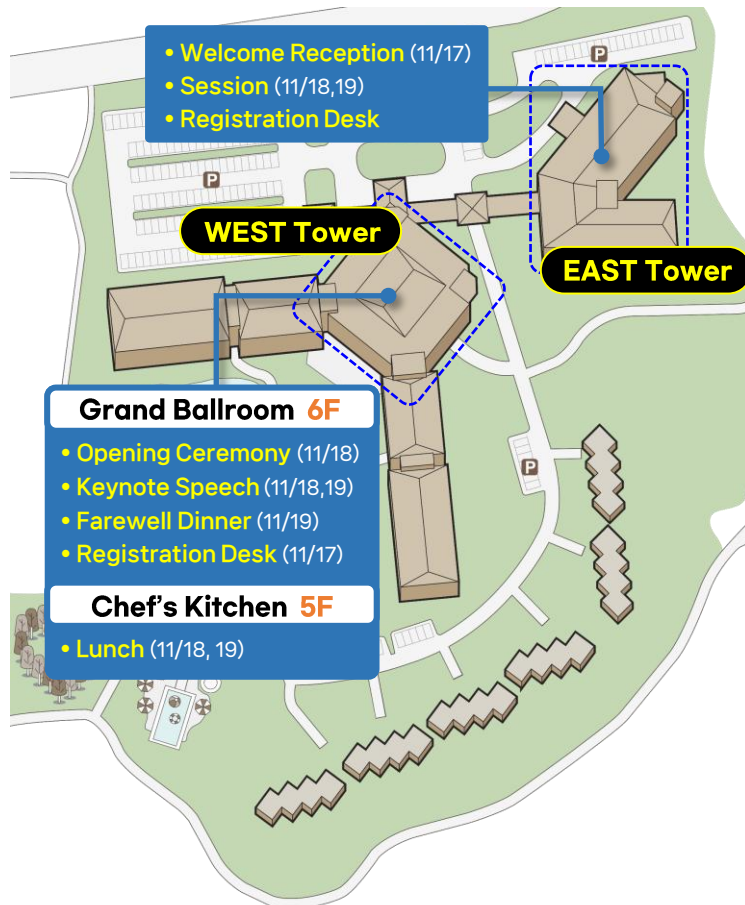
East Tower 1F



East Tower 2F



Toward the West Tower

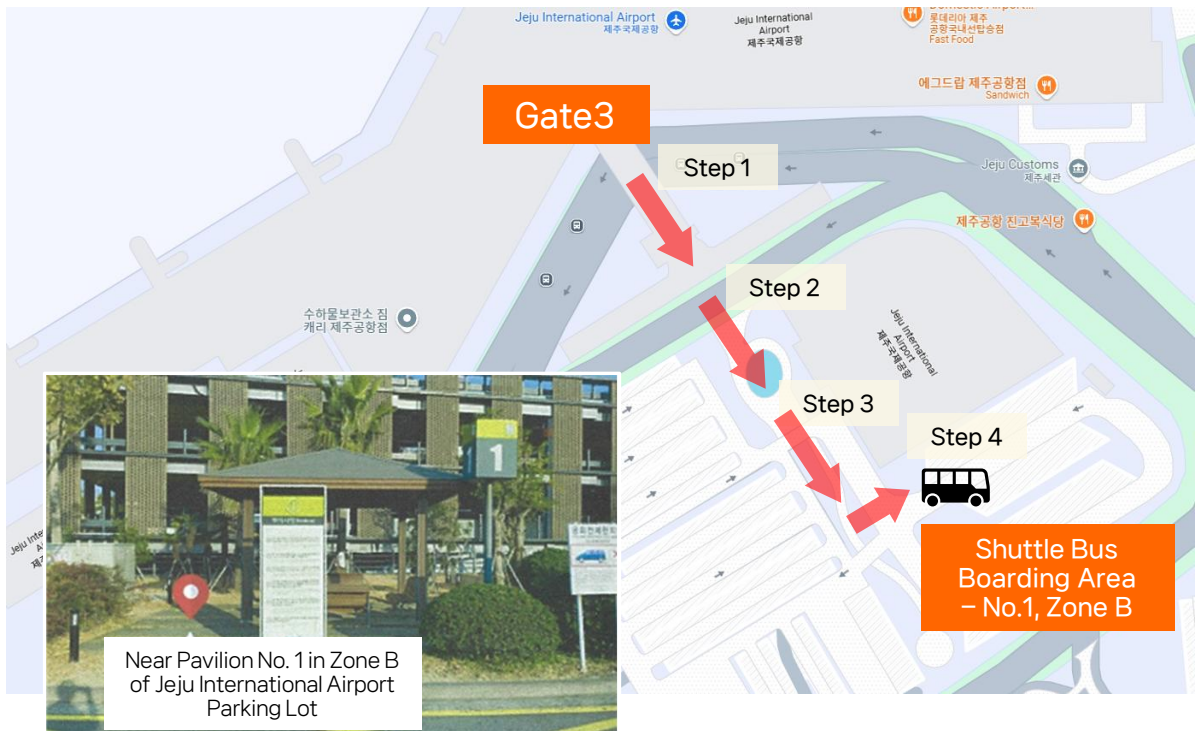


Shuttle Bus

- Shuttle bus service will be provided for the convenience of participants. Please refer to the boarding time and location details below, and feel free to use the shuttle service when coming to the venue. (Estimated travel time: about 1 hour)
- Please note that the schedule below may change depending on the program.
- We appreciate your understanding that the bus has a maximum capacity of 44 passengers for each scheduled departure.

Date	Departure time [2 times]	Departure → Arrival	Drivers & Plate number
November 17 (Mon)	[1st] 14:00 ~ [2nd] 15:00 ~	Airport → Sono Calm	[1st] 제주79바 3715 JONGGON, KIM / 010-8145-1266
November 18 (Tue)	[1st] 08:00 ~ [2nd] 08:30 ~	Airport → Sono Calm	[2nd] 제주79바 4554 JUNYEONG, CHOI / 010-3692-5873
November 19 (Wed)	[1st] 17:00 ~ [2nd] 19:00 ~	Sono Calm → Airport	

Boarding location (Airport)



Step 01



After arriving at Jeju Airport, proceed to Gate 3.

Step 02



Cross the crosswalk and continue straight ahead.

Step 03



Walk straight along the sidewalk.

Step 04



When you see the crosswalk, turn left and go to Parking Lot Zone B1 to board the shuttle bus.



Royal

EGA ACM Architects

EGA ACM Architects is a construction management firm offering integrated services that span the entire building lifecycle—including project planning, development, design management, construction supervision, and facility operations. With a proven track record in both public and private sector projects—such as the Government Complex Busan and the Pohang International Exhibition & Convention Center—the company effectively balances public value with business profitability.

EGA ACM continues to expand its role in private development and partnership-driven initiatives, extending its services into urban development, regeneration, and engineering. Under its core vision of "SMART ACM," the firm has developed and applied cutting-edge technologies, including BIM-based scheduling, a proprietary CM system (APIS), and a site-specific inspection solution (Con-Check), to improve quality, safety, and project efficiency.

Through technology-driven project control and data-informed decision-making, EGA ACM aims to strengthen its position as a trusted partner in construction management—delivering value through innovation, transparency, and technical expertise.

Diamond

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SAMOO.CM, founded in 1976, has led the advancement of Korea's construction industry for half a century across all sectors, including PM, CM, and architectural design. Recognized for its achievements, SAMOO.CM has ranked No.1 a total of six times in the national CM Capability Assessment since 2016, securing consecutive top rankings in 2024 and 2025 to solidify its leadership in the industry. With its proprietary construction-specialized AI system, "SAI," SAMOO.CM delivers innovative management services and, in 2025, became the first in the industry to receive the Smart Construction AI Award.



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12

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13

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