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Editorial

Preface of the Second International Conference on Maintenance and Rehabilitation of Constructed Infrastructure Facilities (MAIREINFRA2) †

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† All papers published in the volume are presented at the Second International Conference on Maintenance and Rehabilitation of Constructed Infrastructure Facilities, Honolulu, HI, USA, 16–19 August 2023.

1. Conference Overview

The Second International Conference on the Maintenance and Rehabilitation of Constructed Infrastructure Facilities (MAIREINFRA2; Chairman: Hosin "David" Lee, Professor of University of Iowa, Associate Editor of the MDPI journal *Infrastructures*, Immediate Past President of iSMARTi and the Founding Board of Trustees of the Seoul Institute of Technology), was organized by the International Society for Maintenance and Rehabilitation of Transport Infrastructures (iSMARTi) in Honolulu, Hawaii, USA, from 16 to 19 August 2023.

The MAIREINFRA2 is for sustainable infrastructure engineers, smart city designers, disaster resilience professionals, intelligent transportation engineers, construction managers, maintenance engineers, consulting engineers, government employees, and academic researchers involved in designing and managing sustainable infrastructures worldwide.

The objective of this series of conferences is to provide a forum for researchers, government employees, consultants, and contractors to exchange technological advancements and innovations with regard to maintaining and rehabilitating sustainable and resilient infrastructures, which include roads, bridges, rails, and buildings.

The sustainable and resilient maintenance and rehabilitation of constructed infrastructure facilities is the backbone of economic prosperity and public welfare. But the aspects of sustainability and resiliency challenge constructors and managers to respond creatively to a new paradigm shift in rehabilitating and maintaining constructed infrastructure facilities in the most environmentally friendly manner by lowering energy costs, enhancing safety, and minimizing air and water pollution. The three main themes of MAIREINFRA2 are (1) the maintenance and rehabilitation of pavements, (2) the automation/innovations in bridge/building construction, and (3) safety, disaster resilience and sustainability.

This conference features the following:

World-famous keynote speakers presenting in opening and plenary sessions and three technical tracks.

Over eighty papers from sixteen countries in three technical tracks: (1) asphalt pavements, (2) concrete pavements/bridges/buildings, and (3) safety resilience and sustainability.

Many networking opportunities, including Wednesday's welcoming reception at the Rainbow Suite and Patio; Thursday's lunch and welcoming dinner; and Friday's lunch and closing banquet on the sixth floor of the Mid-Pacific Conference Center located on top of the parking lot.

2. Conference Committee

- Organizing Committee:

  Taha Ahmed, Australian University—-Kuwait, Kuwait
  Ioannis Brilakis, Univerity of Cambridge, UK
  Filippo Giustozzi, RMIT University, Australia

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Kyong Ju Kim, Chung-Ang University, Korea
Seong-Min Kim, Kyung-Hee University, Korea
Tae-Hwan Kim, Yong-In University, Korea
Soo-Ahn Kwon, KICT, Korea
Mike LaViolette, HDR, USA
Hosin "David" Lee, University of Iowa, USA
Seonha Lee, Kongju University, Korea
Davide Lo Presti, University of Palermo, Italy
Joao Merighi, Latersolo, Ltda, Brazil
Byungkyu Moon, ARA, Inc., USA
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- Technical Committee:

Serji Amirkhanian, University of Alabama, USA
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Aravind Swamy, Indian Institute of Technology Delhi, India
Jeb Tingle, US Army ERDC, USA
David Woodward, Ulster University, UK
Zhanping You, Michigan Tech., USA
Kyong-Ku Yun, Kangwon National University, Korea
Xiong Zhang, Missouri S&T, USA

3. Technical Program

The technical program of MAIREINFRA2 consists of more than 80 speakers from 16 countries (Italy, UK, France, Portugal, Netherlands, Australia, New Zealand, Kuwait, India, Singapore, Japan, Korea, Canada, Brazil, Chile and USA).

- Track A: Asphalt Pavements and Maintenance.

- Track B: Concrete Pavements, Bridges and Buildings.
- Track C: Traffic Safety, Resilience and Sustainability.

Keynote Presentations presided by Imad Al-Qadi, University of Illinois at Urbana-Champaign:

John Harvey (Professor of Civil and Environmental Engineering at the University of California, Davis, and Director of the UC Pavement Research Center and the City and County Pavement Improvement Center); presentation title: "Improving Pavement Sustainability through Integrated Design, Construction, Asset Management, LCA, LCCA, and S-LCA".

Ed Sniffen (Director of Hawaii department of Transportation). He has served as the chair of the AASHTO Committee on Transportation System Security and Resilience). Presentation title: "Driving Innovation: The Influence of Forecasted Conditions and State Priorities on Project Selection, Design, and Material choice".

Session A.1 Asphalt Materials:

Session Chair: Davide Lo Presti, University of Palermo.

- A.1.1 Preliminary mechanical characterization of HMA mixtures with a high content of recycled materials. Giulia Tarsi and Cesare Sangiorgi, University of Bologna, Italy.
- A.1.2 Bio-oils as asphalt bitumen rejuvenators. Amir Tabaković, Netherlands Organization for Applied Research (TNO)/Delft University of Technology, Netherlands; Dave van Vliet, Kirsten Roetert Steenbruggen, and Greet Leeghwater, Netherlands Organization for Applied Research (TNO), Netherlands.
- A.1.3 Development of Plant-Mix Type Modified Mixture with Excellent Flexibility and Stress Relaxation Property for Ensuring High Resistance to Cracking. Nhat Thanh Tran and Masashige Aoki, Taisei Rotec Corporation, Japan.
- A.1.4 Design and Evaluation of Ultra-Thin Overlay with High Viscosity and High Elasticity. Yijia Chen, Zhi Liao and Lide Chen, Road Intellitech Co., China; Tao Ma, Southeast University, China; Susan Tighe and Li Ningyuan, McMaster University, Canada.

Session B.1 Bridge Construction and Evaluation:

Session Chair: Seok Hong Lee, SN Construction Co.

- B.1.1 Full Load Test for the Sheikh Jaber Al-Ahmad Al-Sabah Causeway Bridge (PSC Girder: 35M). Kwangsoo Kim, AI Safety Institute; Dooyong Cho, Chungnam National University, Korea; Raechul Lee and Sangcheol Lee, SQ Engineering; Joungyong Park, Korea Construction Disaster Prevention Research, Korea; Wonrak Jang, AI Safety Institute, Korea.
- B.1.2 Accelerated Bridge Construction on Maui's Hana Highway. Sean Oroho, HDR Inc., USA and Tom Kubicz, Federal Highway Administration, USA.
- B.1.3 Field Application of Hydro-Demolition and Dry-Mix Shotcrete for Repairing the Understructure of Bridge Deck. Kyong-Ku Yun, Seunghak Choi, Taeho Ha, Changseok Song, Mohammad Shakhawat Hossain, and Valerii Panov, Kangwon National University, Korea; Yonggon Kim, Daesang E&C, Korea.
- B.1.4 Accelerated Construction of Unbraced Network Arch Bridge Using SPMTs. Mike LaViolette, HDR., Inc., USA.

Session C.1 Asset and Risk Management:

Session Chair: Ji Yun Lee, Washington State University.

- C.1.1 Asset Management Decision Support Tools: Computational Complexity, Transparency and Realism. Babatunde Atolagbe, University of Delaware, USA; Sue McNeil, University of Delaware, USA, and University of New South Wales, Australia.
- C.1.2 Multi-Parametric Delineation Approach for Homogeneous Sectioning of Asphalt Pavements. Naga Siva Pavani Peraka, GMR Institute of Technology, India; Krishna Prapoorna Biligiri and Satyanarayana N. Kalidindi, Indian Institute of Technology Tirupati, India.

- C.1.3 A Framework for Smart Pavements in Canada, Pejoohan Tavassoti. Hassan Baaj, Moojan Ghafurian, University of Waterloo, Canada; Omran Maadani and Mohammad Shafiee, National Research Council Canada, Canada.
- C.1.4 Development and Implementation of a Multihazard Risk Management System for Road Networks: volcanic, seismic and hydrometeorological hazards in Chile. Alondar Chamorro, Pontifica Universidad Católica de Chile, Chile.

Invited Presentation:

Lori Kahikina (Executive Director and CEO, Honolulu Authority for Rapid Transportation (HART)) and Huy Huynh (Director of Core Systems, Honolulu Authority for Rapid Transportation (HART)); presentation title: Honolulu Rail Transit Project Update.

Session A.2 Asphalt Pavement Texture and Aging:

Session Chair: Haifang Wen, Washington State University.

- A.2.1 Re-evaluating the Risk of Using Higher Skid Resistance Aggregates. David Woodward, Phillip Millar, and Paul Sargent, Ulster University, UK.
- A.2.2 Toward the Determination of the Appropriate Capturing Resolution of Surface Textures in Relation to Pavement Friction. Malal Kane and Minh-Tan Do, Université Gustave Eiffel, France.
- A.2.3 Rheological and Aging Characteristics of Polymer-modified Asphalt with Addition of Sulfur. Ana Luiza Rodrigues, Caio Falcão and R. Chris Williams, Iowa State University, USA.
- A.2.4 Sun Damage on Roads: from UV Radiation to Bituminous Binders and the Protecting Effect of End-of-Life Tires. Marie Enfrin, RMIT University, Australia; Jaffer Bressan Borinelli, Johan Blom and Cedric Vuye, University of Antwerp, Australia; Filippo Giustozzi, RMIT University, Australia.

Session B.2 Sensing and Machine Learning for Structures:

Session Chair: Lu Gao, University of Houston.

- B.2.1 3D Printing Technique for Passive Wireless Strain Sensing. Joshua Dyogi, Xi Song, University of Hawaii at Manoa, USA; Sung-Hwan Jang, Hanyang University, Korea; Sang-Hyeok Nam, ENGSOFT Co., Korea; and Chunhee Cho, University of Hawaii at Manoa, USA.
- B.2.2 CNN-based Automatic Mobile Reporting System and Quantification for Concrete Crack Size of Precast Members of OSC Construction. Ali Akbar, James Mugo Njoroge, Seojoon Lee, Younghee Chang and Soonwook Kwon, Sungkyunkwan University, Korea.
- B.2.3 Prediction of Ultimate Bond Strength between UHPC and Titanium Alloy Bars using a Machine Learning Approach. Mahesh Acharya, Idaho State University, USA; Luis Bedriñana, Universidad de Ingenieria y Tecnologia, Peru; Jared Cantrell, Ankit Bhaukajee and Mustafa Mashal, Idaho State University, USA.
- B.2.4 Optimizing Pothole Detection in Pavements: A Comparative Analysis of Deep Learning Models. Tiago Tamagusko and Adelino Ferreira, University of Coimbra, Portugal.

Session C.2 Traffic Safety:

Session Chair: Ghim Ping Ong, National University of Singapore.

- C.2.1 Safety Assessment of Cooperative Platooning in Mixed Traffic. B. Brian Park, University of Virginia, USA; Hyejin Lee, Seoul National University, Korea; Ilsoo Yun, Ajou University, Korea; Jeehyung Park, The Korea Transport Institute, Korea.
- C.2.2 Comparison Between Two Different Deployment Types of Road-side Devices Reducing Incident-Related Potential Conflicts. Jae-Hyeong Lee and Jin-Tae Kim, Korea National University of Transportation, Korea.
- C.2.3 Analysis of LDWS Recognition Rate According the Aging of Road Marking. Soon Yong Park and Sung Bum Yun, Seoul Institute of Technology, Korea.
- C.2.4 Infrastructure Measures to Protect the Unrecognized Vulnerable Road User: Motorcyclists. Georgene M Geary, GGfGA Engineering, USA.

Session A.3 Asphalt Pavement Evaluation:
Session Chair: Orazio Baglieri, Politecnico di Torino.

- A.3.1 Study of Long-Term Field Performance of Chip Seal in Washington. Angelique Umutoniwase, Washington State DOT, USA; Haifang Wen and Kevin Littleton, Washington State University, USA.
- A.3.2 Evaluation of Longitudinal Irregularity in Airport Pavements and unpaved Runway. Livia Merighi, Claudia Pereira, and Jose Schiavon, Aeronautics Institute of Technology, Brazil.
- A.3.3 Laboratory Evaluation of Recycled Asphalt Pavement and Engineered Polymer Binder for Small Airfield Repairs. William D. Carruth, Webster C. Floyd, and Jeb S. Tingle, U.S. Army Engineer Research and Development Center, USA.
- A.3.4 Optimized Selection of Pavement Maintenance and Rehabilitation Techniques: A Comparative Life Cycle Assessment. Imad L. Al-Qadi and Qingwen Zhou, University of Illinois Urbana-Champaign, USA.

Session B.3 Innovative Bridges and Buildings:
Session Chair: Tom Kubicz, Federal Highway Administration.

- B.3.1 Pullout Behavior of Titanium Alloy Reinforcing Bars in Ultra-High Performance Concrete. Mahesh Acharya, Jared Cantrell, and Mustafa Mashal, Idaho State University, USA.
- B.3.2 Benchmarking Material Use Efficiency for Building Projects. Jiyong Choi, Myungjin Chae, and Namhun Lee, Central Connecticut State University, USA.
- B.3.3 ABC Components of the Commonwealth Avenue Superstructure Re-Placement Project. Charles Swanson, HDR, Inc., USA.

Session C.3 Traffic Data Analysis:
Session Chair: Taha Ahmed, Australian University of Kuwait.

- C.3.1 Driving speed analysis using real-time traffic light status information at signalized intersections. Eunjin Choi, Hyangmi Han, Ockhee Jeon, Seungcheol Lee, and Kwangyoung Ko, Korean Road Traffic Authority, Korea.
- C.3.2 Data-Driven Analysis for Road Traffic Condition Using Digital Tachograph Data. Sung Bum Yun and Soon Yong Park, Seoul Institute of Technology, Korea.
- C.3.3 A Study on Artificial Neural Network-Based Real-Time Traffic Signal Timing Design Model Utilizing Smart Intersection Data. Sang-Tae Oh and Jin-Tae Kim, Korea National University of Transportation, Korea.
- C.3.4 Deep learning and clustering-based analysis of text narratives for identification of traffic crash severity contributors. Cristian Arteaga and JeeWoong Park, University of Nevada Las Vegas, USA.

Feature Presentation:

Yongho Sohn (Pegasus/Lockheed Martin Professor, University of Central Florida); presentation title: Renaissance Engineering via Additive Manufacturing.

Keynote Presentations Presided by Sue McNeil, University of Delaware/University of New South Wales:

Ioannis Brilakis (Laing O'Rourke; Professor of Construction Engineering and the Director of the Construction Information Technology Laboratory at the University of Cambridge); presentation title: Digital Twinning for the Built Environment (co-presented with Tim Embley).

Susan Tighe (Provost and Vice-President (Academic) and a Professor of Civil Engineering at McMaster University, Canada, and a past President of the Canadian Society for Civil Engineering (CSCE)); presentation title: High Performance Materials and Management Systems to Support Resilient Pavement infrastructure.

Invited Presentations Presided byFilippo Giustozzi, RMIT University:

Massimo Losa (Full Professor of Road, Railway, and Airport Engineering; Chief of the University Road Research Laboratory; and Vice-Director of the Department of Civil

and Industrial Engineering at the University of Pisa); presentation title: The bad story and positive effects of the collapse of an iconic Italian bridge: a critical literature review.

Jorge Pais (Associate Professor, University of Minho, Portugal, and co-chairman of the 10th International Conference on Maintenance and Rehabilitation of Transport Infrastructures (MAIREPAV10) held in Guimarães, Portugal, on 24–26 July 2024); presentation title: Pavement rehabilitation in the XXI century.

Session A.4 Asphalt Pavement Construction QA/QC:
Session Chair: Jon Young, Hawaii Asphalt Paving Industry.

- A.4.1. Unveiling the Benefits of Engineered Crumb Rubber for Asphalt Mixtures by Means of Performance-Related Characterization: Rutting Behavior. Usman Ghani, Silvia Milazzo, Gaspare Giancontieri, Chiara Mignini, Gabriella Buttitta, University of Palermo, Italy; Fan Gu, Changsha University of Science and Technology, China; Davide Lo Presti, University of Palermo, Italy.
- A.4.2 Systematic Evaluation of the Field Constructability and Performance of Asphalt Mixes Containing High Percentage Recycled Asphalt. Logan Cantrell, Granite Construction, USA; Haifang Wen, Washington State University, USA.
- A.4.3 Application of Road Compaction Quality Control System to Road Pavement Construction for Advanced Quality Control. Kei Sasaki and Hiroaki Aoki, Taisei Corporation, Japan; Masakazu Jomoto, Taisei Rotec Corporation, Japan; Yasuhiro Mori, Soil and Rock Engineering Corporation, Japan.
- A.4.4 Real-time Field Quality Management System for Asphalt Pavement Using Cloud. Kyu-Dong Jeong, Dong-Hyuk Kim, Jae-Won Kim and Soo-Ahn Kwon, KICT, Korea; Nam-Ho Kim, Korea University of Technology and Education, Korea; Sung-Do Hwang, KICT, Korea.

Session B.4 Concrete Pavement Repairs:
Session Chair: Mike LaViolette, HDR., Inc.

- B.4.1 Materials and Methods for Expedient Repairs of Concrete Pavements. Jeb S. Tingle, Charles E. Williams Jr., William D. Carruth, and Caitlin M. Tibbetts, U.S. Army Engineering Research and Development Center, USA.
- B.4.2 Prediction of Blow-up Potential due to Concrete Pavement Growth. Young Kyu Kim, Hui Rak Ahn, and Seung Woo Lee, Gangneung-Wonju National University, Korea.
- B.4.3 Construction and Design guidelines for Lightweight Cellular Concrete as Pavement Subbase. Abimbola Oyeyi, University of Waterloo, Canada; Frank Ni, University of Florida, USA; Susan Tighe, McMaster University, USA.
- B.4.4 A Data-Driven Approach for Fatigue Damage Prediction in Jointed Plain Concrete Pavement Subjected to Superloads. Yongsung Koh, Halil Ceylan, Sunghwan Kim, and In Ho Cho, Iowa State University, USA.

Session C.4 Resilience and Sustainability:
Session Chair: S. Sonny Kim, University of Georgia.

- C.4.1 Progress Toward More Resilient Infrastructures: Review of Recent Efforts. Amir Golalipour, Federal Highway Administration, USA.
- C.4.2 Quantifying and Reducing Uncertainty in Transportation System Resilience Assessment: A Dynamic Bayesian Network Approach. Vishnupriya Jonnalagadda and Ji Yun Lee, Washington State University, USA.
- C.4.3 Important Sustainability Determinants Meeting Sustainability Goals of California Infrastructure Construction Projects. Joseph J. Kim and Patricia McCarthy, California State University Long Beach, USA.
- C.4.4 Towards Positive Energy Districts: Defining a New Role for Sustainable Governance. Savis Gohari, Norwegian University of Science and Technology, Norway.

Poster Session—3D Laser, CFRP Dowel, AI detect Pothole, IoT QM, NOx Removal:

- P.1. Damage Detection and Monitoring of a Concrete Structure Using 3D Laser Scanning. Manik Das Adhikari, Gangneung-Wonju National University, Korea; Tae-Hwan

Kim, Yongin University, Korea; Sang-Guk Yum, Gangneung-Wonju National University, Korea; Joon-Yeong Kim, SQ Engineering Co., Korea.

- P.2. Large-scale Test Setup of Concrete Pavement Slabs Jointed by Carbon Fiber-Reinforced Polymer Dowel Bars as Load Transfer Devices. Taha Ahmed, Ahmad Saad and Abdulhadi Kazem, Australian University of Kuwait; Ali Radwan, International University of Kuwait; Ali AlMutairi and Sarah Ashkanani, Australian University of Kuwait.
- P.3 Investigation on the process of eliminating abnormal objects from the road for the creation of an AI program that can automatically detect potholes. Moonsup Lee, Taehoon Lee, Younghan Park and Seungyeon Han, KICT, Korea; Nuri Lee and Chulki Kim MOLIT, Korea.
- P.4 IoT(Internet of Things) Based Pavement Quality Management System Platform. Suwan Chung, Tae-wook Kang and Byungkon Kim, KICT, Korea.
- P.5 NOx Removal of Pervious Concrete Pavement Materials with TiO_2. Cheolwoo Park, Minsoo Cho, Dong Jun Kim, Ui Dae Park Yong Sik Kwon, Minkyu Ju and Seungwon Kim, Kangwon National University, Korea.

Session A.5 Asphalt Pavement Design and Recycling:
Session Chair: Omar Smadi, Iowa State University.

- A.5.1 Investigation of Long-Term Performance of Waste-Plastics Modified Asphalt Mixtures. Sin-Mei Lim, Gengren Hao, National University of Singapore, Singapore; Anggraini Zulfiki, Land Transport Authority of Singapore, Singapore; Ghim Ping Ong, National University of Singapore, Singapore.
- A.5.2 Performance Life using Mechanistic-empirical Analysis of Asphalt Mixtures in Arid Climatic Conditions-Case of Kuwait. Taha Ahmed and Aditya Singh, Australian University, Kuwait; Elie Hajj, University of Nevada, Reno, USA; Ahmad Saad, Australian University, Kuwait.
- A.5.3 Establishing Density Based Mix Design for Cold Recycled Asphalt Mixes. Mansour Solaimanian and Scott Milander, Pennsylvania State University, USA.
- A.5.4 Plastic Recycling in Asphalt Concrete Pavements: Preliminary Observations from Hawaii's Pilot Project. A. Ricardo Archilla, University of Hawaii at Manoa, USA.

Session B.5 Soil Stabilization:
Session Chair: David Woodward, Ulster University.

- B.5.1 Use of Ground Penetrating Radar to Detect Cement Content on Cement Stabilized Subgrade. Zack Hall and S. Sonny Kim, University of Georgia, USA.
- B.5.2 Machine Learning-based Slope Failure Prediction Model Considering Uncertainty of Prediction. Junhyuk Choi, POSTECH, Korea; Yongkyu Cho, Kangnam University, Korea; Yongjin Kim, Smartgeotech, Korea; Yongseong Kim, Bongjun Ji, Kangwon National University, Korea.
- B.5.3 Study of different stabilizers to dry sludge for use in confined landfill and ditches. Rita M. Fortes, post-graduate at Federal Institute of São Paulo, Brazil; A.S. Pinto, T.M. Gomes, Environmental Management of the Environmental Manaus; L. Rabelo, DD&L Consultores, Brazil; M. Dos Reis Paulista University, Brazil.
- B.5.4 Expeditionary Ground Rehabilitation for Military Vehicle Traffic. Haley Bell, Lulu Edwards, and John Rushing, U.S. Army Engineer Research and Development Center, USA.

Session C.5 Sustainable Pavements:
Session Chair: Halil Ceylan, Iowa State University

- C.5.1 Innovative Design of Paving Cold Mix and Cohesive Overlays for Sustainable Pavement Maintenance. Xiang Chen and Xiaohu Wang, Road Intellitech Co., China; Tao Ma, Southeast University, China; Susan Tighe, Li Ningyuan, McMaster University, Canada.
- C.5.2 Life Cycle Assessment of a Sustainable and Innovative Solution for Unpaved Rural Roads. Leonardo Urbano, Lucia Tsantilis, Pier Paolo Riviera and Orazio Baglieri, Politecnico di Torino, Italy; Ezio Santagata, Politecnico di Torino, Italy/Qatar University, Qatar.

- C.5.3 Consistent Foamed Asphalt Contents Needed for Cold In-place Recycled Pavement Layers in Practice. Hosin "David" Lee, University of Iowa; Byungkyu Moon, ARA Associates, USA; Ashley Buss, Iowa DOT, USA; Charles T. Jahren, Iowa State University, USA.
- C.5.4 Improving fatigue and rutting resistance of road pavements by using aramid fibers. George Pais, University of Minho, Portugal.

Session A.6 Pavement Maintenance and Management:
Session Chair: Mansour Solaimanian, Pennsylvania State University.

- A.6.1 Data-driven Approach to Decision-making for Pavement Preservation. Sara Arezoumand, Alireza Sassani, and Omar Smadi, Iowa State University, USA.
- A.6.2 Advancement of Pavement Management System for Efficient Management of National Highway in Korea. Seungyeon Han, Hyungmog You, Myeongill Kim and Moonsup Lee, KICT, Korea; Nuri Lee and Chulki Kim, Ministry of Land, Infrastructure and Transport, Korea.
- A.6.3 Automated Distress Detection, Classification and Measurement for Asphalt Urban Pavements Using YOLO. Paulina Gómez-Conti and Alelí Osorio-Lird, Federico Santa María Technical University, Chile.
- A.6.4 Combined Use of GPR and PMS Data for Composite Pavement Assessment. Tae-Soo Kim, Chul-Ki Jung, Young-Mi Yoon, Byeong-Seok Kwak, and Jung-Hun Lee, Roadkorea Inc., Korea.

Session B.6 Rail and Autonomous Vehicles:
Session Chair: B. Brian Park, Professor of University of Virginia.

- B.6.1 Is Maintaining a Train Network in New Zealand Worth the Cost? Eric Scheepbouwer and Daniel Van der Walt, University of Canterbury, New Zealand.
- B.6.2 Evaluating Remediation Techniques for Fouled Ballast on Army Installations. Charles E. Williams Jr. and Thomas J. Beasley, U.S. Army Engineering Research and Development Center, USA.
- B.6.3 Implementing Public Service Features in Autonomous Vehicles in Seoul, Hyerim Cho, SoonYong Park, Junchul Kim, and Seol Young Lee, Seoul Institute of Technology, Korea.
- B.6.4 Evaluating the demand for truck-only toll lanes in Southern California freeways with both owner-operator and company truck drivers. Jose Arroyo-Turcios and Joseph J. Kim, California State University Long Beach, USA.

Session C.6 Traffic Safety Features:
Session Chair: Adelino Ferreira, University of Coimbra.

- C.6.1 Study on Traffic Incident Management Boundary Based on GIS and Its Historical Travel Time Data. Donghyeop Kim and Jin-Tae Kim, Korea National University of Transportation, Korea.
- C.6.2 Simplified Deterioration Modeling for Highway Sign Support Systems. Myungjin Chae, Lucas Voghell and Jiyong Choi, Central Connecticut State University, USA.
- C.6.3 On-board evaluation of pavement wetness from water spray. Ebrahim Riahi, Wiyao Edjeou, Manuela Gennesseaux, Sebastien Buisson, Veronique Cerezo and Minh-Tan Do, Univ Gustave Eiffel, France.

Feature Presentation:

Krishna Prapoorna Biligiri (Associate Professor and Head of Civil and Environmental Engineering, Indian Institute of Technology, Tirupati; Chairman of Second International Conference on Smart Cities (ICSC2) in Tirupati, India, held from February 19 to 21, 2025); presentation title: Integrating Mechanistic Roadway Designs with Lifecycle Assessment: Moving Towards Achieving Sustainability in Roadway Technology & ICSC2.

Jorge Pais (Associate Professor, University of Minho, Portugal); presentation title: Presentation of MAIREPAV10, 24–26 July 2024.

4. Organizers and Sponsors

The MAIREINFRA2 is supported by the following organizations (Figures 1–3):

Figure 1. Co-organizers.

Figure 2. Sponsors.

Figure 3. Official endorsements.

Conflicts of Interest: The author declares no conflicts of interest.