

18th IRF WORLD MEETING & EXHIBITION SCIENTIFIC PROGRAM

Dubai, UAE

November 7-10, 2021

ROADS TO TOMORROW





18th IRF World Meeting & Exhibition Scientific Program

Block 1 – Sunday, November 7, 10:00 AM

- 1.1. Pavement Testing
- 1.2 Asphalt Pavement Innovations
- 1.3 Road Safety Leadership
- 1.4 Road Financing Strategies
- 1.5 Bridge & Structure Management (Virtual)

Block 2 – Sunday, November 7, 1:30 PM

- 2.1 Case Studies in ITS Deployment
- 2.2 Traffic Planning & Forecasting 1
- 2.3 Safe Roads by Design
- 2.4 Integrated Transport Planning

Poster Session 1: Monday, Sunday, 3:00 PM

Block 3 – Sunday, November 7, 3:30 PM

- 3.1 Greening Road Projects
- 3.2 Practical Applications of Big Data Science
- 3.3 Long Term Pavement & Asset Performance 1
- 3.4 Road Safety Risk Diagnosis 1

Block 4 – Monday, November 8, 8:30 AM

- 4.1 Maintenance Strategies 1
- 4.2 Decarbonizing Road Transport
- 4.3 Long Term Pavement & Asset Performance 2
- PS1 Korea's Road Safety Policy and Technology

Block 5 – Monday, November 8, 10:30 AM

- 5.1 Street & Highway Design for CAVs
- 5.2 Maintenance Strategies 2
- 5.3 Vulnerable Road Users
- 5.4 Safe Roads by Design 2 (Virtual)
- PS2 Advances in Fiber Reinforced Concrete Asphalt



Poster Session 3: Monday, November 8, 12:00 PM

Block 6 – Monday, November 8, 1:00 PM

- 6.1 ITS Design & Implementation Strategies
- 6.2 Road Pricing & Tolling
- 6.3 Driver Behaviour Strategies
- 6.4 Transport Responses to the Pandemic

Block 7 – Monday, November 8, 3:00 PM

- 7.1 New Approaches to Performance Delivery
- 7.2 Traffic Planning & Forecasting 2
- 7.3 Multi-Stakeholder Transportation Strategies
- 7.4 Street & Highway Design for CAVs - 2

Poster Session 3: Monday, November 8, 3:00 PM

Block 8 – Tuesday, November 9, 8:30 AM

- 8.1 Innovations in Road Materials
- 8.2 Climate Resilient Road Design 1

Block 9 – Tuesday, November 9, 10:30 AM

- 9.1 Impacts of Transport Investments
- 9.2 Climate Resilient Road Design 2

Poster Session 4: Tuesday, November 9, 12:00 PM

Block 1 – Sunday, November 7, 10:00 AM

1.1 Pavement Testing (Dubai E)

- *153 - Experiences with NDT methods in QA/QC and LCC analysis of asphalt and unbound pavement structure*
Timo Saarenpää
- *181 - A new low-activity nuclear density gauge for compaction control of asphalt, concrete, soil, and aggregate layers in road construction*
Robert Troxler
- *309 - Structural health monitoring, damages identification and durability assessment of constructions by sensors and smartphone-based devices.*
Soughah ALSamahi
- *311 - Investigation into economic benefits of using non-destructive road condition measurement devices to optimise network and project level remedial strategies during road pavement life cycle*
Herman Visser

1.2 Asphalt Pavement Innovations (Dubai B)

- *124 - Paths to Successful Asphalt Road Structures - Composition- vs. Performance-based Specifications*
Bernhard Hofko
- *141 - Factors to Consider for Observing Bitumen Microstructure with Microscopy*
Johannes Mirwald
- *148 - Uberbinder: sustainable organic polymer binder for paving.*
Phillip Blankenship
- *204 - Sustainable Use of Cool Pavement and Reclaimed Asphalt in The City of Phoenix*
Ryan Stevens
- *205 - Multi-Lane/Multi-Truck Shear Load Effects in Pavement Design and Asset Management*
Curtis Berthelot
- *291 - Estimating Asphalt Film Thickness in Asphalt Mixtures Using Microscopy to Further Enhance the Performance of UAE Roadways*
Ghazi Al Khateeb
- *238 - Optimizing the adhesion quality of asphalt binders based on energy parameters derived from surface free energy*
Alex Alvarez* recorded contribution available through the World Meeting app
- *326 - Effect of Crumb Rubber and Polymer modifiers on performance related properties of Asphalt Binders*
Joseph Dib* recorded contribution available through the World Meeting app

1.3 Road Safety Leadership (Dubai C)

- *268 - Road Safety Management - Abu Dhabi Emirate Case Study*
Sumaya Al Neyadi
- *369 - Role of Lead Agency in Designing Safer Roads*
Umang Champaklal Modi
- *170 - Safe Road Design - A case of developing and Low - Income countries Uganda in particular*
James Akena
- *272 - Challenges in implementation of Motorcycle Helmet Standards in Nepal*
Ashish Gajurel
- *316 - Evaluation of Road Safety Interventions at the Salga Black Spot on Nakuru-Eldoret Road*
Timothy Oketch
- *261 - ISO 39000 series of standards*
Peter Hartzell
- *239 - Assessment of Roadway Traffic Accidents: An Evaluation of Road Safety Measures in Cambodia*
Marie P. Louis* recorded contribution available through the World Meeting app

1.4 Road Financing Strategies (Dubai D)

- *186 - Is a Further Increase in Fuel Levy in Kenya Justified?*
Evans Ochola & Jennaro Boniface Odoki
- *251 - PPP tender: FDBOMT of the streetlighting network in the Northern Emirates*
Majid Ideisan
- *285 - UAE National PPP Policy*
Ahmed Alsabbah
- *362 - Alternative and Innovative Road Financing for African Road Maintenance Funds*
Ali Ipinge

1.5 Bridge & Structure Management – Virtual Session

- *Overview of Integral Abutment Bridge Applications in the United States*
Amin Akhnoukh* recorded contribution available through the World Meeting app
- *Reinforcement of Scoured Pile Group Bridge Foundation with Spun Micro Piles*
Apichai Wachiraprakarnpong* recorded contribution available through the World Meeting app
- *Repair of Settled Pile Bent Bridge Foundation with Spun Micro Piles*
Apichai Wachiraprakarnpong* recorded contribution available through the World Meeting app
- *Aerial Robotic System for Complete Bridge Inspections*
Antidio Viguria* recorded contribution available through the World Meeting app

Block 2 – Sunday, November 7, 1:30 PM

2.1 Case Studies in ITS Deployment (Dubai C)

- *182 - Advances in Centralized Preemption and Priority Systems*
Marshall Cheek
- *199 - New York City ITS Deployment*
Mohamad Talas
- *225 - Real time multi-object detection and tracking on urban cameras*
Timur Aslyamov
- *331 - The Benefits of Using Connected Vehicles on Traffic Delay and Safety at Urban Signalized Intersections*
Ahmed Elawady
- *335 - Effective Advanced Warning for Connected Safety Applications*
Gregory Baumgardner* recorded contribution available through the World Meeting app
- *151 - Pacemaker Lighting application to prevent traffic congestion at the deepest point and the following section of a V-Shaped Tunnel: A case study: Eurasia Tunnel*
Aşkın Kaan Kaptan* recorded contribution available through the World Meeting app

2.2 Traffic Planning & Forecasting 1 (Dubai B)

- *161 - A Case Study of Rural Freight Transport – Two Regions in North Carolina*
Daniel Findley
- *264 - Mode Choice Modeling to Shift Car Travelers Towards Park and Ride Service in the City Centre of Karachi*
Irfan Ahmed Memon
- *265 - High-precision satellite-inertial navigation system for vehicles in open spaces and indoors (Constellation PLUS)*
Dmitry Chickrin
- *341 - Traffic Delay Evaluation and Simulation of Sustainable Solutions for Congested Signalized Roundabouts*
Mohamad Yaman Fares

2.3 Safe Roads by Design (Dubai E)

- *299 - Ascendi's Safety Barriers Upgrading Program*
Telma Silva
- *312 - Proper Longitudinal Barriers for Sharp Radius Curves. Making Roads Safer for All Users*
John Griffith

- *342 - Effectiveness of Cable Median Barriers in Preventing Cross Median Crashes and Related Casualties in the United States: A Systematic Review*
Deogratias Eustace
- *378 - New “Low Forces” Bridge Barrier: An example on how simulation can make a dream come true*
Joseph Marra
- *271 - A Comparative Evaluation of the Safety Performance of Median Barriers on Rural Highways; a case-study*
Victoria Gitelman

2.4 Integrated Transport Planning (Dubai D)

- *189 - Challenges in Transportation Projects in Urbanized Territories: An Integrated Water Resources Management Approach*
Ali Osman Atahan
- *231 - Savings potential in highway planning and construction using BIM – German experience*
Veit Appelt
- *144 - Development of BIM System for Roads and Infrastructure Projects in Abu Dhabi City*
Jamal El Zarif
- *269 - A Location – Allocation Model for Pedestrian Footbridge Infrastructure: A Case Study on the South Africa’s National Roads Agency Limited (SANRAL) Network in Gauteng*
Malesiba Mabe
- *410 - World-Class Delivery of Road Projects: Selecting the Right Delivery Method and Administering Projects Effectively to Maximize Performance*
Mounir El Asmar
- *171 - Transforming Infrastructure Projects Using Agile*
Nihal Erian* recorded contribution available through the World Meeting app
- *324 - Demonstrating connectivity and exchange of data between BIM and Asset Management Systems in road infrastructure asset management*
Sukalpa Biswas* recorded contribution available through the World Meeting app

Block 3 – Sunday, November 7, 3:30 PM

3.1 Greening Road Projects (Dubai B)

- *178 - Yavuz Sultan Selim Bridge-Marine Pollution Detection Project*
Meltem Akyuz
- *192 - Road Construction Using Locally Available Materials*
Ahmed Abdelkader
- *388 - Adaptive Road Lighting*
Thomas Baenziger
- *159 - Abu Dhabi Sustainable Public Lighting Strategy: Applications & Outcomes*
Eiman Alameri
- *197 - Asphaltic Waste Recycling And Road Base Improvement Through Bituminous Stabilized Materials*
Musa Saidu
- *256 - A Solution for Road & Aggregate Industries to Contribute "Green Deal" by Reducing Co2, Energy And Cost*
Gulay Malkoc

3.2 Practical Applications of Big Data Science (Dubai D)

- *398 - A Glimpse into the near Future: Digital Twins and the Internet of Things*
Howard Shotz & James Birdsall
- *401 - Impact of Automotive Sensors and Big Data in the world of Road Management*
Jacopo Alaimo
- *252 - Improving traffic safety by using Waze user reports*
Raitis Steinbergs
- *214 - Benefits and challenges of a digital operation, empowered by GIS solutions*
Alvaro Soares
- *250 - Development of a Prototype of a Mobile Mapping System for Road Asset Data Collection and Evaluation of the Rural Road Network*
Nutvara Jantarathaneewat* recorded contribution available through the World Meeting app

3.3 Long Term Pavement & Asset Performance 1 (Dubai E)

- *146 - Field Monitoring of Road Pavement Responses and their Performance in Thailand*
Auckpath Sawangsuriya
- *163 - Supplementary Cementitious Materials in Concrete Industry - A New Horizon*
Amin Akhnoukh

- *330 - Degradation of Friction Performance Indicator over time in Highways Using Linear Mixed Models*
Adriana Santos
- *187 - Long-term Anti-corrosion Measures for Magosaki Viadut by Cover Plate Method*
Hiromasa Kobayashi
- *376 - Effect of an antioxidant compound on the fatigue performance of asphalt binder*
Ingrid Gabrielle do Nascimento Camargo

3.4 Road Safety Risk Diagnosis (Dubai C)

- *202 - Application of an innovative network-wide road safety assessment procedure based on Human Factors*
Andrea Paliotto
- *247 - Real-time intelligent modelling of Personal Attribute and Road Environment conditions to predict the riskiest cyclists infrastructure type*
Faheem Malik
- *344 - Analyzing factors contributing to motor vehicle injury and fatal crashes using the overrepresentation factor method*
Deogratias Eustace
- *346 - Investigating Underlying causes of crashes involving food delivery motorcyclists in the Emirate of Abu Dhabi*
Arif Mehmood
- *399 - An iRAP Based Risk Impact Analysis at National Highway-1 for a Proposed Route Connecting Coastal Areas of Bangladesh*
Armana Huq
- *140 - Application of IRC Code guidelines to conduct Road Safety Audit at Design Stage . Case Study National Highway-34 India*
Shawon Aziz* recorded contribution available through the World Meeting app
- *263 - Micro Level Road Safety Assessment using iRAP Analysis - Case Study from Georgia (Europe)*
Shawon Aziz* recorded contribution available through the World Meeting app
- *283 - A Review of the Spatial Analysis Techniques for the identification of Road Accident Black Spots and its application in context to India*
Shawon Aziz* recorded contribution available through the World Meeting app
- *288 - Road network safety screening of non-urban road network. The case of the Province of Brescia (Northern - Italy)*
Michela Bonera* recorded contribution available through the World Meeting app

Block 4 – Monday, November 8, 8:30 AM

4.1 Maintenance Strategies 1 (Dubai B)

- *203 - Improving Pavement Condition at an Accelerated Pace: The City of Phoenix Accelerated Pavement Maintenance Program*
Ryan Stevens
- *173 - intelligent PAVement system (iPAVEs) for Thailand Pavement Preservation and Maintenance Management Program*
Auckpath Sawangsuriya
- *206 - Structural Asset Management of Urban Road Infrastructure*
Jody Berthelot
- *286 - Pavement & Bridge management systems (research and implementations)*
Soughah ALSamahi
- *276 - Smart Infrastructure Asset Management System on Metropolitan Expressway in Japan*
Hiroataka Nakashima* recorded contribution available through the World Meeting app
- *292 - Study of IRI measurement method for suitable pavement maintenance management system in Vietnam*
Hodaka Okajima* recorded contribution available through the World Meeting app

4.2 Decarbonizing Road Transport (Dubai D)

- *215 - Replacing Petroleum Diesel with Renewable Diesel in Oregon Would Reduce Greenhouse Gas Emissions by 69 Percent*
Keith Wilson
- *237 - Electromobility and clean energy in Chile: The ongoing progress to achieve a green economy*
Christian Vine & Cristian Gonzalez
- *350 - Charging And Parking On Slovenian Motorways*
Bojan Banfi
- *387 - Green energy sources based on thermo-electrochemical cells for electricity generating from transport, engineering buildings and environment waste heat*
Igor Burmistrov

4.3 Long Term Pavement & Asset Performance 2 (Dubai C)

- *241 - Prospects and effects of the application of geopolymers binders from recycled industrial waste for the construction of transport infrastructure facilities*
Stanislav Mamulat
- *307 - Effect of different Aggregate Gradations on Rutting Performance of Asphalt Mixtures for UAE Roadways*
Khalil Almbaidheen

- *310 - Contribution to the study of the improvement of water resistance of the Bituminous concrete surface layer with nanotechnology*
Kaouther Machta
- *318 - An Approach to Estimate Pavement's Friction: Correlation Between PCI, IRI and Skid Number*
Carlos J. Obando
- *327 - Evaluation of AASHTO Mechanistic-Empirical Design Guide Inputs to the Performance of Tennessee Pavements*
Mbakisya Onyango
- *322 - Quantification of Pavement Fatigue Performance Considering Uncertainty in Vehicular Loads*
Chandrasekhar Ratti* recorded contribution available through the World Meeting app
- *354 - Guideline for Rural Road Mechanistic Design*
Koson Janmonta* recorded contribution available through the World Meeting app

Block 5 – Monday, November 8, 10:30 AM

5.1 Street & Highway Design for CAVs - 1 (Dubai E)

- *207 - A Review on Safety and Security Issues for Self-Driving Vehicles*
Ali Atahan
- *365 - San Diego Bus Rapid Transit using Connected and Autonomous Vehicle Technology*
Daniel Lukasik
- *229 - Contrast Ratio of Road Markings in Poland: Evaluation for Machine Vision Applications Based on Naturalistic Driving Study*
Anton Pashkevich
- *260 - Connected and Automated Vehicle Deployments in Las Vegas*
Brian Hoeft

5.2 Maintenance Strategies 2 (Dubai B)

- *319 - Asset Management Systems*
Oleg V Pekerman
- *375 - Comparison of Asset Management Practices in the Norwegian Oil & Gas and Tunnel Industry*
Syed Taha
- *361 - Integrating Flexible Pavement Surface Macrotecture to Pavement Management System to Optimize Pavement Preservation Treatment Recommendation Strategy*
Seng Hkawn N-Sang
- *372 - Similarity Between an Optimal Budget in Pavement Management and an Equilibrium Quantity of Demand-Supply Analysis in Economics*
Ponlathep Lertworawanich* recorded contribution available through the World Meeting app
- *245 - A Sustainable & Practical Approach to Rural Road Asset Data Collection*
Mark Thriscutt* recorded contribution available through the World Meeting app

5.3 Vulnerable Road Users (Dubai C)

- *179 - Safe Pedestrian Access Through Work Zones*
Tim Cox
- *185 - Delivering Safer School Zones for Local Municipalities in South Africa*
Basil Jonsson
- *281 - Unregulated pedestrian crossing*
Karlen Mirakyan
- *402 - Making Cycling Safer: Cyclists Also Need Pavement Markings*
Gernot Sauter

5.4 Safe Roads by Design 2 (virtual)

- *345 - Stiffening Guidance for Temporary Concrete Barrier Systems in Work Zone and Construction Situations*
Karla Lechtenberg* recorded contribution available through the World Meeting app
- *213 - MASH TL-3 Development and Evaluation of the Thrie-Beam Bullnose Attenuator*
Robert Bielenberg* recorded contribution available through the World Meeting app
- *280 - Benefits and Challenges of Designing Modern Roundabouts - A Nominal Safety Measure*
Anoosh Hafezi* recorded contribution available through the World Meeting app
- *236 - A Synthesis of MASH Crashworthy, Non-Proprietary, Weak-Post, W-beam Guardrail Systems*
Scott Rosenbaugh* recorded contribution available through the World Meeting app
- *314 - The Safety and Highway Geometry Relationship Based on Unbalanced Centripetal Acceleration*
Creso De Franco Peixoto* recorded contribution available through the World Meeting app
- *347 - Safety Performance Evaluation of a Non-Proprietary Type III Barricade for use in Work Zones*
Karla Lechtenberg* recorded contribution available through the World Meeting app
- *216 - In-Service Performance Evaluation of Iowa's Sloped End Treatments*
Cody Stolle* recorded contribution available through the World Meeting app
- *208 - Safety Performance Evaluation of Modified Thrie-Beam Guardrail*
Robert Bielenberg* recorded contribution available through the World Meeting app
- *217 - Working Widths of the MGS on Lower-Speed Roads, With and Without Curbs*
Mojdeh Asadollahi Pajouh* recorded contribution available through the World Meeting app
- *235 - A Synthesis of 787-mm Tall, Non-Proprietary, Strong-Post, W-beam Guardrail Systems*
Scott Rosenbaugh* recorded contribution available through the World Meeting app

AK1 Advances in Fiber Reinforced Concrete Asphalt (Dubai D)

- Professor **Kamil Kaloush**, FORTA Professor in Pavement Engineering, Arizona State University
- **Joe Abi-Saleh**, President, Heavy Equipment Solutions
- Dr. **Amin Akhnoukh**, Associate Professor, East Carolina University
- Dr. **Shane Underwood**, Associate Professor, North Carolina State University
- Eng. **Ramy Samir Bahig**, Ministry of Transportation, Egypt

Block 6 – Monday, November 8, 1:00 PM

6.1 ITS Design & Implementation Strategies (Dubai C)

- *183 - Integrated Analytics that Lead to Regional Success*
Brian Hoeft
- *226 - Unified ITS environment in the Republic of Tatarstan*
Maria Dagaeva
- *253 - ITS Mobility & Traffic Management in UAE Federal Network*
Habiba Aflatoon
- *149 - A neutral V2X platform: a necessity in a multi-vendor C-ITS eco-system*
Gary Lin
- *338 - Sustainability in the US ITS Framework*
Robert Jaffe
- *303 - Future of Smart Mobility - Art of the Possible*
Andy Palanisamy

6.2 Road Pricing & Tolling (Dubai D)

- *232 - Piloting virtual gantries in a running MLFF operation*
Pedro Pinto
- *329 - Modeling Lane-Choice Behavior and Public Willingness to Pay for HOT Lanes: A Neural Network Approach*
Mahmoud Khalil
- *336 - Introducing exact distance-based charging of tolls in Greece*
Jannis Nassoulis
- *366 - Tolling, Congestion Pricing and Road Use Fees: Transportation Technologies and The Current State-of-the Art*
Joseph Averkamp
- *340 - Would Bali need a toll road? A multifactor analysis of backbone requirement for Bali Toll as part of Bali-Nusa Tenggara Tourism Corridor*
Samsi Gunarta

6.3 Driver Behavior Strategies (Dubai E)

- *180 - No More Distracted Driving!*
Tim Cox
- *210 - Posted Road Speed Limits in Abu Dhabi: Are They Too High? Should They Have Been Raised?*
Daniel Albuquerque

- *383 - Evaluating the safety impact of raising speed limits on rural freeways*
Deo Gratias Eustace
- *339 - Decade of Road Markings and Road Signs Quality Testing in Republic of Croatia*
Anđelko Scukanec & Darko Babić
- *403 - Nighttime Visibility of Overhead Signs in Abu Dhabi*
Gernot Sauter

6.4 Transport Responses to the Pandemic (Dubai B)

- *130 - Micromobility - Perspectives on the Mess and Success of a New Mode of Urban Transport*
Jonathan Spear
- *191 - The impact of COVID-19 on mobility behavior in Istanbul*
Ali Atahan
- *380 - Implications of COVID-19 for the Future of Ridehailing: An Analysis of US Longitudinal Survey Data*
Denise Capasso da Silva
- *257 - The Evaluation of the Impacts on Traffic of the Countermeasures on Pandemic in Istanbul*
Halit Özen, Mahmut Esad Ergin

Block 7 – Monday, November 8, 3:00 PM

7.1 New Approaches to Performance Delivery (Dubai D)

- *142 - Implementing Value Engineering for Abu Dhabi Road & Infrastructure Projects*
Eman Alkubaisi
- *370 - Road Asset Management: Innovative Approaches*
Fernando Varela
- *133 - From Reactive to Proactive Maintenance in Road Asset Management*
Timo Saarenketo
- *274 - Observing How Influence of Nature Phenomena Against Inside Tunnel by Air Pressure Information*
Yumi Watanabe

7.2 Traffic Planning & Forecasting – 2 (Dubai E)

- *137 - Departments of Transportation Constructability Review Practices: Limitations and Recommendations*
Amin Akhnoukh
- *364 - Modelling New Technologies*
Stephen Bennett
- *383 - Multilayer Perceptron Modelling of Travelers towards Park-and-Ride Service in Karachi*
Irfan Ahmed Memon
- *397 - Reversible Express Lanes: Design, Operation, and Management*
Abolfazl Mohammadian
- *386 - Congestion-Mitigation on Canada's busiest highway*
Abdul Basith Siddiqui* recorded contribution available through the World Meeting app
- *258 - A Novel Method for Aggregate Tour-Based Modeling with Empirical Evidence*
Yanling Xiang* recorded contribution available through the World Meeting app

7.3 Multi-Stakeholder Transportation Strategies (Dubai C)

- *193 - Co-creation as a key for the turning of a NIMBY into a YIMBY - The case of the completion of the Antwerp Ring Road*
Dirk Lauwers
- *371 - The Challenges of Setting Up Road Transport Autonomous Agencies in Developing Countries: A Case Study in Liberia*
Eric Gabriel Jenn
- *391 - A holistic approach for the road sector in Sub-Saharan Africa*
Yana Tumakova
- *379 - Strategic Initiative for A Comprehensive Multi-Modal Transportation System for Kuwait*
Suha J. Ashkanani & Rasin K. Mufti

- *129 - Disruption Ahead: The Role of Transport Agencies in Responding to and Shaping Future New Technology and Service Models*
Jonathan Spear

7.4 Street & Highway Design for CAVs - 2 (Dubai B)

- *381 - How Will Use of Autonomous Vehicles for Running Errands Affect Future Autonomous Vehicle Adoption and Ownership?*
Irfan Batur
- *174 - Driver Perception-Reaction Times in Level 3 Automated Vehicles*
Audrey Demicoli
- *352 - Analyzing automated vehicles' safety using observed driving data*
Suyi Mao
- *122 - High performance pavement markings enhancing Camera and LiDAR detection*
Gernot Sauter

Block 8 – Tuesday, November 9, 8:30 AM

8.1 Innovations in Road Materials (Dubai B)

- *240 - Technologies of production and application of induction-healing materials*
Stanislav Mamulat
- *294 - Rheological Properties of Rubber-Modified Asphalt Binder in the UAE*
Mohammed Ismail
- *357 - Asphalt Modified with Recycled Waste Plastic in South Africa*
Herman Visser
- *194 - Experimental Investigation of Use of Glass Cullet as Asphalt Mixture Aggregate*
Tewodros Nigatu
- *353 - Case Study of Evaluating Asphalt Pavements Containing RAP in Harsh and Hot Climate*
Jolina Karam
- *326 - Effect of Crumb Rubber and Polymer modifiers on performance related properties of Asphalt Binders*
Joseph Dib* recorded contribution available through the World Meeting app
- *315 - Recycling Waste Rubber Tires in Pervious Concrete: Evaluation of Hydrological and Strength Characteristics*
Sahil Surehali* recorded contribution available through the World Meeting app
- *317 - Upscaling of CFRP and GFRP in pervious concrete pavements*
Akhil Charak* recorded contribution available through the World Meeting app

8.2 Climate Resilient Road Design 1 (Dubai E)

- *298 - Investigation of Historical and Future Air Temperature Changes in the UAE*
Reem Hassan
- *135 - Impact of Temperature and Atmosphere on Bitumen Ageing*
Kristina Hofer
- *188 - GIS-aided vulnerability assessment for roads*
Ali Osman Atahan
- *333 - Climate teleconnections contribution to seasonal precipitation forecasts using hybrid intelligent model*
Rim Ouachani
- *373 - Development of Climate and Weather Integrated Database (CWID) for Tropical Regions: Incorporation into Flexible Pavement Design Framework*
Chaitanya Gubbala* recorded contribution available through the World Meeting app

Block 9 – Tuesday, November 9, 10:30 AM

9.1 Impacts of Transport Investments (Dubai B)

- *363 - Abu Dhabi's Approach to Quantifying the Impacts of Infrastructure Investment*
Andrew Clarke
- *160 - Impacts of Transportation Infrastructure Investments and Options for Sustainable Funding*
Daniel Findley
- *134 - Experiences of High Capacity Transport in Finland*
Vesa Mannisto
- *282 - Development of Accelerated Construction in the Gulf Countries*
Frederic Legeron

9.2 Climate Resilient Road Design 2 (Dubai E)

- *313 - Urban Cooling + First/Last Mile Strategies in Los Angeles - Canoga Park*
Adel Hagekhalil
- *152 - Climate Resilient Urban Mobility by Non-Motorized Transport*
Kigozi Joseph
- *154 - Resilient transport infrastructure to extreme events – RESIST*
Adewole Adesiyun
- *164 - Climate Resiliency Measures for Infrastructure in the Sierra Nevada, California*
Gordon Keller

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