

CETRA 2026

9<sup>th</sup> International  
Conference  
on Road and Rail  
Infrastructure

27–30 May 2026  
Bol, Island Brač, Croatia

Final  
Programme

ORGANIZER

University of Zagreb  
Faculty of Civil Engineering  
Department of Transportation



SUPPORTING ORGANIZATIONS



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University of Zagreb

**Prof. emer. Željko Korlaet**  
University of Zagreb  
Faculty of Civil Engineering

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## WELCOME TO CETRA 2026 AND WELCOME TO BOL

The CETRA conference has established a strong reputation as a forum for exchanging scientific and professional knowledge in road and rail infrastructure. From the beginning, its guiding principle has been to forge connections between research organizations and industry. Gatherings like this are ideally suited to bridging the gap between academia and the business world, fostering communication, and building the mutual trust that leads to collaboration on new projects – particularly those that enhance competitiveness.

The presentations at the conference will highlight compelling technical solutions and new insights into transport infrastructure, based on projects worldwide that have been completed, are being planned, or are under construction. In addition to contributions from the academic community, industry experts will present their work and impressive projects, ensuring the closest possible alignment between theory and practice. While the transport needs of individual nations differ in specifics, there is significant value in sharing both research outcomes and practical experience.

CETRA aims to provide a platform for discussion on key questions across all disciplines and aspects of the road and rail sectors. Its central purpose is to close the divides separating researchers from experts in the design, construction, maintenance, and management of transport infrastructure – an aim that has become increasingly urgent given the growing demand for sustainable and resilient transport systems. Such systems must minimize environmental impact while remaining capable of withstanding disruption and adapting to changing conditions, including climate change.

CETRA 2026 has attracted a substantial number of papers and presentations from 40 countries and 127 institutions, including 61 universities. Of the 244 submissions received, more than 170 papers will be presented at the conference and have been compiled in the proceedings under the title Road and Rail Infrastructure IX, organized into fourteen chapters.

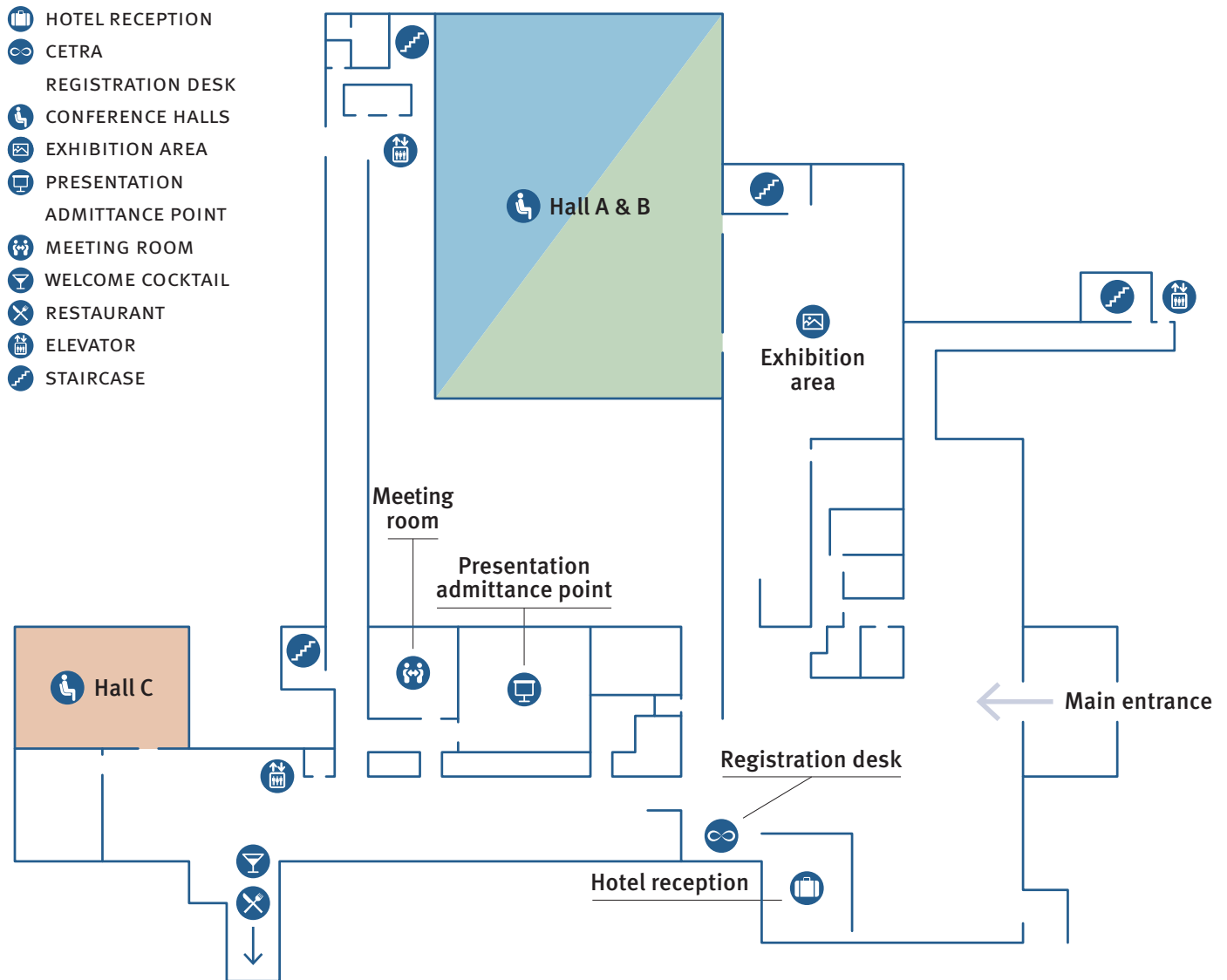
The organizers extend their gratitude to all the companies and institutions whose support has made this conference possible. The dedication of the organizers, along with the commitment of the authors who have agreed to present their valuable scientific findings and engaging professional projects before a live audience, demonstrates that only through joint effort can we meet the challenges society inevitably faces.

We welcome you to Bol and wish you a productive and memorable CETRA 2026 Conference.



*Lakušić S. Korlaet*

Stjepan Lakušić and Željko Korlaet  
Chairmen of CETRA 2026 Conference



## ORGANIZER



**Faculty of Civil Engineering**  
 University of Zagreb  
 Department of Transportation  
 Kačićeva 26, Zagreb, Croatia  
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## SUPPORTING ORGANIZATIONS



**International Road Federation**  
[www.irf.global](http://www.irf.global)



**Forum of European National Highway Research Laboratories**  
[www.fehrl.org](http://www.fehrl.org)

**REMARK:** Official languages of the conference are Croatian and English. We kindly ask the participants to acquire devices for simultaneous translation that will be available in front of congress hall A.

**NAPOMENA:** Službeni jezici konferencije su hrvatski i engleski. Ljubazno molimo sudionike konferencije da koriste uređaje za simultano prevođenje koji će biti dostupni u konferencijskoj dvorani A.

## CONFERENCE PROGRAMME – SHORT VERSION

### DAY 1 – Wednesday, May 27<sup>th</sup>

17:00 – 20:00	Registration of the Participants – Hotel Lobby
20:00 – 21:00	A Welcome Cocktail for Participants and Guests – Hotel Terrace

### DAY 2 – Thursday, May 28<sup>th</sup>

08:00 – 09:00	Registration of the Participants – Hotel lobby		
	Hall A	Hall B	Hall C
09:00 – 10:00	Opening Ceremony – Hall A		
10:00 – 10:30	<b>Keynote Lecture</b> DIGITISATION OF DIAGNOSTICS FOR CRITICAL PARTS OF THE TRACK SUPERSTRUCTURE <b>Assoc. Prof. Otto Plášek, University of Brno, Czech Republic</b>		
10:30 – 11:00	Coffee Break		
11:00 – 12:30	Plenary Session – Hall A		
11:00 – 11:30	<b>Keynote lecture</b> DATA-DRIVEN BRIDGE ANALYSIS USING TRAFFIC LOAD MEASUREMENTS <b>Prof. Aleš Žnidarič, Slovenian National Building and Civil Engineering Institute, Slovenia</b>		
11:30 – 12:00	<b>Keynote lecture</b> ADVANCED METHODOLOGIES AND DATA COLLECTION TECHNIQUES IN URBAN TRAFFIC DYNAMIC NOISE MODELING <b>Prof. Gaetano Licitra, University of Pisa, Italy</b>		
12:00 – 12:30	<b>Keynote Lecture</b> TOWARD SUSTAINABLE AND RESILIENT ROADWAY INFRASTRUCTURE <b>Prof. Hao Wang, Rutgers University, United States of America</b>		
12:30 – 14:00	Lunch Break		
14:00 – 15:30	<b>A1: Strategic and Sustainable Rail Infrastructure: Planning, Design, (Re)construction, and Management</b>	<b>B1: Special Session: Sustainable and Resilient Pavements (Part 1)</b>	<b>C1: Urban Traffic Systems: Modelling Operational Performance</b>
15:30 – 16:00	Coffee Break		
16:00 – 17:30	<b>A2: Railway Transport: Capacity, Operations, and Performance Management</b>	<b>B2: Special Session: Sustainable and Resilient Pavements (Part 2)</b>	<b>C2: Traffic Noise and Vibroacoustics: Measurement, Modelling, and Mitigation</b>

### DAY 3 – Friday, May 29<sup>th</sup>

	Hall A	Hall B	Hall C
09:00 – 10:30	<b>A3: Resilient Transport Infrastructure: Road and Rail Systems</b>	<b>B3: Special Session: Advanced Assessment and Monitoring of Bridges (Part 1)</b>	<b>C3: Rail Superstructure: Monitoring, Condition Assessment, and Predictive Maintenance</b>
10:30 – 11:00	Coffee Break		
11:00 – 12:30	<b>A4: Transport Infrastructure: Policy, Planning, and Digital Transformation</b>	<b>B4: Special Session: Advanced Assessment and Monitoring of Bridges (Part 2)</b>	<b>C4: Dynamics and Digitalization of Railway Tracks: From Numerical Models to Digital Twins</b>
12:30 – 13:30	Lunch Break		

Continues on the next page

### DAY 3 – Friday, May 29<sup>th</sup> (continued)

	Hall A	Hall B	Hall C
13:30 – 15:00	<b>A5: Transport Infrastructure: Design, Rehabilitation, and Engineering Solutions</b>	<b>B5: Transport Systems: Safety and Risk Management</b>	<b>C5: Special Session: Advances in Noise and Vibration-Based Approaches for Rail Infrastructure Condition Monitoring (URITMIS Workshop, Part 1)</b>
15:00 – 15:30	Coffee Break		
15:30 – 17:00	<b>A6: Road Systems: Network Performance and Infrastructure Assessment</b>	<b>B6: Road Traffic: Engineering, Flow Theory, and Network Operations</b>	<b>C6: Special Session: Advances in Noise and Vibration-Based Approaches for Rail Infrastructure Condition Monitoring (URITMIS Workshop, Part 2)</b>
20:30 – 24:00	<b>Gala Dinner</b>		

### DAY 4 – Saturday, May 30<sup>th</sup>

	Hall A	Hall B	Hall C
09:00 – 10:30	<b>A7: Vehicle Systems Engineering: Design, Safety, and Management</b>	<b>B7: Pavement Engineering: Innovation and Green Technologies</b>	<b>C7: Rethinking Urban Mobility: Intermodality, Safety, and Human Behaviour</b>
10:30 – 11:00	Coffee Break		
11:00 – 12:30	<b>A8: Railway Technologies: New Approaches for a Low-Carbon, Sustainable, and Safe Future</b>	<b>B8: Pavement Design and Analysis: From Materials to Performance</b>	<b>C8: Smart and Multimodal Urban Transport: Data-Driven Planning</b>
12:30 – 13:00	<b>Closing Ceremony – Hall A</b>		



## CONFERENCE PROGRAMME – DETAILED VERSION

DAY 2 – Thursday, May 28 <sup>th</sup>		
Thursday, May 28 <sup>th</sup> 14:00 – 15:30		<b>Session A1: Strategic and Sustainable Rail Infrastructure: Planning, Design, (Re)construction, and Management</b> Moderators: Maja Ahac & Stefano Ricci
Time	Sub. ID	Paper Title / Author(s)
14:00 – 15:30	2065	RECONSTRUCTION OF THE LJUBLJANA RAILWAY STATION – DESIGN AND IMPLEMENTATION <b>L. Šošo, J. Raspor &amp; A. Mandić (30' Invited Lecture)</b>
	1822	COMPLEX LARGE-SCALE INFRASTRUCTURE DEVELOPMENT IN BUDAPEST: NEW TRAM LINE BETWEEN DISTRICTS INCLUDING AN INTERMODAL JUNCTION AT RÁKOSRENDEZŐ <b>T. Marcingós, G. Pál &amp; G. Dávid</b>
	1935	CASH FLOW MONITORING DURING THE CONSTRUCTION OF INFRASTRUCTURE PROJECTS <b>E. Gashi, R. Kijak &amp; Y. Binaku</b>
	1827	A METHODOLOGY FOR TASK IDENTIFICATION AND SELECTION FOR THE OPTIMIZATION OF INVESTMENTS IN RAILWAY NETWORKS <b>P. Franke-Wasowski &amp; M. Jacyna</b>
	1993	THE ROLE OF DESIGNATED BODIES IN RAILWAY INFRASTRUCTURE AUTHORISATION <b>B. Belinić, S. Seražin Korper &amp; M. Vajdić</b>
	1943	UNDER SLEEPER PADS AND UNDER BALLAST MATS: ENHANCING RAILWAY SUPERSTRUCTURE PERFORMANCE <b>Z. Perčin, L. Kaiser &amp; I. Haladin</b>
	1809	RAIL INNOVATION AND GREENTEC STEEL FOR TOMORROW'S SUSTAINABLE MOBILITY <b>S. Baltić</b>
15:30 – 16:00	Coffee break	
Thursday, May 28 <sup>th</sup> 14:00 – 15:30		<b>Session B1: Special Session: Sustainable and Resilient Pavements (Part 1)</b> Moderators: Josipa Domitrović & Miomir Miljković
Time	Sub. ID	Paper Title / Author(s)
14:00 – 15:30	2107	UNDERSTANDING THE RESILIENCE OF ASPHALT THROUGH ITS INTERNAL STRUCTURE <b>M. Miljković (30' Keynote Lecture)</b>
	1779	USE OF RECYCLED WALL CERAMIC WASTE IN BITUMINOUS MIXTURES <b>M. Karacasu, H. Koca, M. Šimun &amp; D. Marković</b>
	1865	LABORATORY AND ENVIRONMENTAL ASSESSMENT OF WARM ASPHALT MIXTURES MODIFIED WITH PLASTIC WASTE <b>V. Scaramucci, G. Ferrotti, A. Graziani, A. Grilli &amp; F. Cardone</b>
	1968	EVALUATION OF THE METHODS FOR DETERMINING MIXING AND COMPACTION TEMPERATURES OF MODIFIED BITUMEN <b>L. Ržek &amp; M. Miljković</b>
	2039	CONTRIBUTION TO THE RESEARCH ON THE POSSIBLE APPLICATION OF HEAT ENERGY RECOVERY IN THE AGGREGATE PREPARATION PROCESS IN THE PRODUCTION OF ASPHALT MIXTURES <b>Z. Cimbola, Z. Dolaček-Alduk &amp; S. Dimter</b>
	2046	ENHANCEMENT AND UPGRADE OF POLYMER MODIFIED BITUMEN FOR DURABLE ASPHALT PAVEMENT: „MULTIFUNCTIONAL ADDITIVE“ – A NEW APPROACH <b>O. Fleischel &amp; W. Schatz</b>
	2101	ACOUSTIC PERFORMANCE AND DURABILITY OF LOW-NOISE STONE MATRIX ASPHALT (SMA8 LA) WEARING COURSE <b>R. Pacholak &amp; W. Gardziejczyk</b>
15:30 – 16:00	Coffee break	

Thursday, May 28<sup>th</sup>  
14:00 – 15:30

**Session C1:**  
**Urban Traffic Systems: Modelling Operational Performance**  
Moderators: Danijela Barić & Ivica Stančerić



Time	Sub. ID	Paper Title / Author(s)
14:00 – 15:30	1757	ANALYSIS OF TRAFFIC PATTERNS AND INTERSECTION PERFORMANCE AT RETAIL FACILITY ACCESS POINTS <b>A. Deluka-Tibljaš, S. Šurdonja &amp; L. Milosavljević</b>
	1759	URBAN ROUNDABOUTS NEAR SIGNALISED INTERSECTIONS: REVIEW AND PRELIMINARY MICROSIMULATION FINDINGS <b>M. Klobučar, A. Deluka-Tibljaš, S. Šurdonja, I. Ištoka Otković &amp; M. Cuculić</b>
	1781	SATURATION FLOW RATE ESTIMATION METHODS AT SIGNALIZED INTERSECTIONS <b>S. Vrdoljak, D. Cvitanić &amp; B. Maljković</b>
	2072	GNSS-BASED TRAM SPEED PROFILE MODELLING: A CASE STUDY OF THE ZAGREB TRAM NETWORK <b>I. Majstorović, M. Ahac &amp; I. Haladin</b>
	1747	EFFICIENT PARKING – SHARED USE OF PRIVATE PARKING SPACES AS A DRIVER FOR SUSTAINABLE RESIDENTIAL NEIGHBOURHOODS <b>C. Hintz &amp; V. Bles</b>
	1782	KEY ELEMENTS FOR THE IMPLEMENTATION OF A MOBILITY CONCEPT FOR INNER-CITY PROJECTS <b>R. Eger</b>
	1790	APPLICATION OF MICROSIMULATIONS IN ASSESSING THE IMPACT OF A GARAGE ON THE FUNCTIONAL AND SAFETY CHARACTERISTICS OF AN INTERSECTION <b>I. Ištoka Otković, K. Lisko, A. Deluka-Tibljaš, S. Šurdonja &amp; M. Klobučar</b>
	1953	MATERIAL INFLUENCE ON THE PERFORMANCE APPEARANCES OF PASSIVELY SAFE POLES <b>V. Tkalčević Lakušić &amp; K. Vranešić</b>
	1913	MODELING THE FACTORS INFLUENCING METRO & BIKE-SHARING INTEGRATION: A CASE STUDY FROM İZMIR <b>E. Odabası, Y. Alver, P. Onelcin, T. Taner &amp; B. Özdemir</b>
15:30 – 16:00	Coffee break	

Thursday, May 28<sup>th</sup>  
16:00 – 17:30

**Session A2:**  
**Railway Transport: Capacity, Operations, and Performance Management**  
Moderators: Maja Ahac & Marjana Petrović



Time	Sub. ID	Paper Title / Author(s)
16:00 – 17:30	1812	CANCEL-RUN FRONTIERS FOR DELAYED TRAINS UNDER RAILWAY PERFORMANCE REGIMES <b>P. Asmari &amp; S. Ricci</b>
	1833	CAPACITY ANALYSIS OF BOLOGNA CENTRALE RAILWAY NODE BASED ON PUBLIC INFRASTRUCTURAL AND OPERATIONAL DATA <b>C. Musetti</b>
	1754	DELAY TRENDS IN RAIL FREIGHT TRANSPORT DUE TO TEMPORARY UNAVAILABILITY OF INFRASTRUCTURE <b>P. Umedi</b>
	1852	DEVELOPMENT AND PRACTICAL APPLICATION OF THE HIGHEST TRAIN TRAFFIC DIAGRAM LEVEL IN RAILWAY PASSENGER TRANSPORT <b>M. Dedík, Z. Bulková, J. Gašparík, L. Pečený &amp; M. Buc</b>
	1805	RELEVANT SERVICES FOR STRENGTHENING INTERMODAL TRAVEL CHAINS RAIL-AIR TRAVEL <b>B. Rüger &amp; J. Herbst</b>
	1808	INFORMATION SYSTEMS FOR PASSENGERS IN RAILWAY PASSENGER TRANSPORT IN THE SLOVAK REPUBLIC <b>M. Šmajda, V. Zitrický, E. Brumerčíková &amp; J. Mašek</b>
	1917	MITIGATING TRAM BUNCHING AND ENHANCING HEADWAY UNIFORMITY USING AN INNOVATIVE SERVICE: A SIMULATION-BASED CASE STUDY IN ZAGREB <b>H. Haramina, J. Blašković Zavada, M. Slavulj &amp; A. Wagner</b>

Thursday, May 28<sup>th</sup>  
16:00 – 17:30

**Session B2:**  
**Special Session: Sustainable and Resilient Pavements (Part 2)**  
Moderators: Josipa Domitrović & Miomir Miljković



Time	Sub. ID	Paper Title / Author(s)
16:00 – 17:30	2097	CIRCULAR ECONOMY CONCEPTUAL FRAMEWORK FOR ROADWAY INFRASTRUCTURE: SIGNIFICANCE OF RESEARCH-TO-PRACTICE <b>K. P. Biligiri (30' Keynote Lecture)</b>
	1775	VALIDATION OF PAVEMENT CONDITION EVALUATION BY USING MOBILE MAPPING SYSTEM <b>D. Koch</b>
	1786	EVALUATION OF PAVEMENT STRUCTURAL CONDITION USING FWD AND TSD MEASUREMENTS <b>A. Rudeš, Š. Bezina, L. Krnić &amp; T. Rukavina</b>
	1789	APPLICATIONS OF UNMANNED AERIAL VEHICLES IN PAVEMENT ENGINEERING: RECENT ADVANCES AND CHALLENGES <b>Š. Bezina, A. Rudeš, J. Domitrović, I. Stančerić, M. Grgić &amp; T. Rukavina</b>
	1804	NEW CONDITION INDICATOR FOR SIDEWALK MAINTENANCE MANAGEMENT <b>C. Van Geem</b>
	2062	NON-INTRUSIVE ROAD CONDITION DATA COLLECTION FOR POWERED TWO-WHEELERS: A CROATIAN CASE STUDY <b>D. Babić, D. Babić, M. Fiolić, A. Hula, R. Spielhofer, I. Erdelean, M. Ševrović, P. Saleh, C. Fürstler, G. Bauer &amp; M. Hahn</b>

Thursday, May 28<sup>th</sup>  
16:00 – 17:30


**Session C2:**  
**Traffic Noise and Vibroacoustics: Measurement, Modelling, and Mitigation**  
Moderators: Saša Ahac & Tamara Džambas



Time	Sub. ID	Paper Title / Author(s)
16:00 – 17:30	2108	RUCONBAIR – INTEGRATED AIR AND NOISE POLLUTION REDUCTION SOLUTION FOR URBAN ROAD INFRASTRUCTURE <b>Beton Lučko (Sponsor Lecture)</b>
	1909	ADVANCING IN-SITU NOISE BARRIER TESTING: INSIGHTS FROM INTERNATIONAL INTER-LABORATORY STUDIES <b>A. Fuchs &amp; M. Haider</b>
	1987	MICRO ROUNDABOUTS AS A ROAD TRAFFIC NOISE MITIGATION MEASURE <b>S. Ahac, M. Ahac &amp; D. Burkovac</b>
	2013	AN ITS SYSTEM FOR MITIGATING NOISE INDUCED BY PORT-RELATED ROAD TRAFFIC <b>G. Licitra, M. Bolognese, M. Cerchiai, D. Palazzuoli, A. Panci, A. L. Montenegro &amp; D. Vatteroni</b>
	2102	VEHICLE/ROAD NOISE AS ONE OF THE FACTORS DETERMINING THE LEVEL OF TRAFFIC NOISE IN THE VICINITY OF ROADS <b>M. Motylewicz &amp; W. Gardziejczyk</b>
	1912	REGRESSION ANALYSIS OF TRAIN OPERATING PARAMETERS INFLUENCING RAILWAY NOISE EMISSION BASED ON FIELD MEASUREMENTS <b>M. Wrótny</b>
	2103	THE EFFECT OF RAIL GRINDING AND RAIL CORRUGATION ON TRAMWAY TRACK NOISE AND VIBRATION LEVELS <b>I. Haladin, D. Medvedić &amp; K. Burnać</b>

**Friday, May 29<sup>th</sup>**  
09:00 – 10:30


**Session A3:  
Resilient Transport Infrastructure: Road and Rail Systems**  
Moderators: Saša Ahac & Gaetano Licitra



Time	Sub. ID	Paper Title / Author(s)
09:00 – 10:30	1749	VULNERABILITY ASSESSMENT FRAMEWORK FOR CLIMATE RESILIENT ROADS NETWORK IN ETHEKWINI MUNICIPALITY, KWAZULU-NATAL <b>P. Chetty &amp; M. Mostafa</b>
	1930	THE INFLUENCE OF TEMPERATURE ON STEEL PERFORMANCE IN RISK MITIGATION SYSTEMS <b>R. Luis-Fonseca, A. Roduner, M. Boričević &amp; V. Budimir</b>
	1988	ENHANCING OPERATIONAL EFFICIENCY OF CHINA-EUROPE FREIGHT TRAIN SERVICE: A CASE STUDY OF XI'AN TERMINAL <b>Y. Sun &amp; D. Tomanek</b>
	2003	IMPACT OF ROAD NETWORK CHANGES ON TRANSPORTATION ACCESSIBILITY BEFORE AND AFTER THE 2024 NOTO PENINSULA EARTHQUAKE <b>R. Arai, K. Takada, M. Fujiu, Y. Morisaki &amp; J. Takayama</b>
	1806	IMPACT OF ENVIRONMENTAL CONDITIONS ON STRAY CURRENT IN URBAN TRACK SYSTEMS <b>K. Vranešić &amp; I. Haladin</b>
	1826	DECARBONIZATION POSSIBILITIES FOR TECHNICALLY DEMANDING NON-ELECTRIFIED RAILWAY LINES: A CASE STUDY OF THE SLOVAK REPUBLIC <b>P. Morihladko &amp; A. Dolinayová</b>
	2110	CONSTRUCTION OF A NEW TRAMWAY LINE IN SARAJEVSKA STREET IN ZAGREB USING A NOVEL TYPE OF SLAB TRACK SYSTEM <b>D. Badovinac &amp; I. Haladin</b>
10:30 – 11:00		Coffee break

**Friday, May 29<sup>th</sup>**  
09:00 – 10:30

**Session B3:  
Special Session: Advanced Assessment and Monitoring of Bridges (Part 1)**  
Moderators: Aleš Žnidarič, Anđelko Vlašić & Ivan Duvnjak



Time	Sub. ID	Paper Title / Author(s)
09:00 – 10:30	1765	THE NEXT GENERATION OF BRIDGE GIRDERS AND BRIDGE ELEMENTS <b>Z. Bencze &amp; G. Kardos</b>
	1770	EXPERIMENTAL AND OPERATIONAL MODAL ANALYSIS ESTIMATION OF DAMPING RATIOS FOR STAYS OF A BRIDGE UNDER CONSTRUCTION <b>R. Gomez, M. Mendoza, R. Sanchez, M. Arenas &amp; O. Rosales</b>
	1828	COMPARATIVE ANALYSIS OF DESIGN PARAMETERS FOR EQUESTRIAN BRIDGES <b>I. Štimac Grandić &amp; A. Bjelanović</b>
	1896	ROBUST AI-BASED DRIVE-BY DAMAGE DETECTION FOR RAILWAY BRIDGES UNDER OPERATIONAL AND ENVIRONMENTAL VARIATIONS <b>C. Bragança, E. Souza, I. Ames, D. Ribeiro &amp; T. Bittencourt</b>
	1911	SEISMIC RETROFITTING OF THE GROMOVI BRIDGE IN SISAK <b>M. Skazlić, S. Lavrnić, Ž. Skazlić, M. Vujica &amp; K. Panadić</b>
	1964	IMPACT OF FLOODING ON BRIDGE CONDITION: INSIGHTS FROM TWO CASE STUDIES <b>M. Kušter Marić, T. Rinkovec, P. Uremović &amp; M. Srbić</b>
	1834	HYBRID PRECAST-CAST-IN-PLACE METHODOLOGY FOR ACCELERATED PIER TABLE CONSTRUCTION IN EXTRADOSED BRIDGES <b>Jaganath B, S. Cyriac, Rajalakshmi M &amp; I. Choi</b>
10:30 – 11:00		Coffee break

Friday, May 29<sup>th</sup>  
09:00 – 10:30

**Session C3: Rail Superstructure: Monitoring,  
Condition Assessment, and Predictive Maintenance**  
Moderators: Otto Plašek & Stefano Ricci



Time	Sub. ID	Paper Title / Author(s)
09:00 – 10:30	1846	AI-DRIVEN PREDICTIVE OPTIMIZATION FRAMEWORK FOR RAILWAY INFRASTRUCTURE MAINTENANCE <b>D. Henríquez Flores &amp; Z. Grande Andrade</b>
	1854	ARTIFICIAL INTELLIGENCE TECHNIQUES FOR FORECASTING RAILWAY TRACK PROFILE: LEIXÕES LINE CASE STUDY <b>M. Mokhtari, C. Vale, M. Lurdes Simões &amp; A. Mosleh</b>
	1871	AI-ENHANCED CONDITION-BASED MAINTENANCE FRAMEWORK FOR NRPCES - NEW REPLACEMENT POLICY CONSIDERING ENVIRONMENTAL SUSTAINABILITY PROJECT <b>A. Mosleh, C. Vale, M. Mokhtari, P. Mansouri, V. Gonçalves, M. Mohammadi, A. Gul Majidi, C. Santos, L. das Neves, E. Carvalho, P. Rosa-Santos &amp; F. Taveira-Pinto</b>
	1755	FROM TRACK GEOMETRY TO SUBSOIL: A SIGNAL PROCESSING APPROACH TO SUBSTRUCTURE CONDITION ASSESSMENT <b>T. Koch</b>
	1758	DEMONSTRATION OF A NOVEL NON DESTRUCTIVE TESTING METHOD FOR MN-13 TURNOUT FROGS IN TRACK <b>S. Eck</b>
	1955	QUANTIFICATION AND ASSESSMENT OF SHORT-WAVE RAIL CORRUGATION <b>G. Riepl</b>
	1874	COMPARATIVE ANALYSIS OF STANDARDIZED AND COUNTRY-SPECIFIC METHODS FOR CALCULATING THE TRACK QUALITY INDEX (TQI) <b>Z. Orban, D. Gusa, C. Cojocar, M. Gocica &amp; G. Kollo</b>
	1886	A DUAL-LEVEL DATA PROCESSING FRAMEWORK FOR CONDITION-BASED RAILWAY MAINTENANCE: INTEGRATING AUTONOMOUS FLEET INSPECTION AND ADVANCED PROGNOSTICS <b>J. Madejski</b>
	2004	EXTENSION OF RAIL REPLACEMENT CYCLE USING RAIL HEALTH INDEX REFLECTED ONBOARD TRAIN DATA <b>M. Hosoda &amp; T. Deshimaru</b>
10:30 – 11:00	Coffee break	

Friday, May 29<sup>th</sup>  
11:00 – 12:30

**Session A4:  
Transport Infrastructure: Policy, Planning, and Digital Transformation**  
Moderators: Saša Ahac & Sanja Fric



Time	Sub. ID	Paper Title / Author(s)
11:00 – 12:30	2105	NEW GENERAL TECHNICAL CONDITIONS FOR ROAD WORKS (OTU 2024) IN CROATIA <b>T. Dragovan &amp; M. Šimac (30' Invited Lecture)</b>
	1946	SUSTAINABLE PLANNING OF STATE ROAD NETWORK DEVELOPMENT IN CROATIA <b>G. Puž &amp; I. Budimir</b>
	2106	COMPARATIVE EVALUATION OF IRI DERIVED FROM CONNECTED VEHICLE DATA AND LASER PROFILER MEASUREMENTS <b>J. Domitrović</b>
	1932	THE CHALLENGES CROATIAN EXPERTS HAVE FACED WHEN USING VARIOUS ROAD TRAFFIC NOISE CALCULATION METHODS BEFORE AND AFTER JOINING THE EU <b>T. Džambas, A. Čudina Ivančev, V. Dragčević &amp; Š. Bezina</b>
	1999	DIGITAL TWIN OF ZAGREB AIRPORT INFRASTRUCTURE USING UNMANNED AERIAL SYSTEMS <b>M. Car, I. Stipanović, M. Bračić &amp; M. Tica</b>
	1839	LEVERAGING DATA-DRIVEN SAFETY ASSURANCE AND DIGITAL-TWIN VALIDATION FOR SAFE AND RELIABLE AUTONOMOUS PUBLIC TRANSPORT SYSTEMS <b>T. Jansen &amp; R. Graafland</b>
	1895	LEVERAGING THE TRIPLE - LAYER BUSINESS MODEL CANVAS FOR THE TRANSPORT-RELATED BIOMETHANE INDUSTRY <b>D. Nagy &amp; T. Princz-Jakovics</b>
12:30 – 13:30	Lunch break	

Friday, May 29<sup>th</sup>  
11:00 – 12:30

**Session B4:**  
**Special Session: Advanced Assessment and Monitoring of Bridges (Part 2)**  
Moderators: Aleš Žnidarič, Anđelko Vlašić & Ivan Duvnjak



Time	Sub. ID	Paper Title / Author(s)
11:00 – 12:30	1969	EFFICIENCY OF THE COMPOSITE BRIDGE SECTIONS WITH OPEN AND BOX-SHAPED THIN-WALLED STEEL GIRDERS <b>M. Srbić, A. Vlašić &amp; B. Grdović</b>
	1980	ASSESSMENT OF PERMISSIBLE SPEEDS (EN 15528) FOR RAIL VEHICLES ON THE EUROPEAN RAILWAY NETWORK REGARDING DYNAMIC VEHICLE-BRIDGE COMPATIBILITY <b>R. Behnke &amp; G. Grunert</b>
	1994	RAILWAY BRIDGE SERVICEABILITY LIMIT STATES AND RAIL STRESSES FOR TRACK-BRIDGE INTERACTION – OVERVIEW AND CASE STUDY <b>A. Vlašić, N. Mujkanović, M. Srbić &amp; G. Hrelja Kovačević</b>
	2019	PEDESTRIAN BRIDGES – A HOLISTIC APPROACH IN RATING THEIR EFFICIENT USE AND SUSTAINABLE DESIGN <b>A. Bjelanović &amp; I. Štimac Grandić</b>
	2026	STRENGTHENING OF EXISTING RAILWAY BRIDGES USING CORRUGATED STEEL PLATE SHELLS <b>C. Machelski, A. Czerepak &amp; J. Nowak</b>
	2078	TEMPERATURE-INDUCED VARIABILITY IN BRIDGE DYNAMIC RESPONSE: A PREREQUISITE FOR RELIABLE DAMAGE DETECTION <b>D. Hekič, J. Kalin, M. Herbers, A. Anžlin &amp; M. Kosič</b>
	2080	INFLUENCE OF MODE COUPLING ON PERCEIVED HEALTH OF SCOURED BRIDGES USING VIBRATION-BASED MONITORING <b>M. Kosič, L. Prendergast &amp; A. Anžlin</b>
	1845	A HYBRID PRECAST-IN-SITU APPROACH FOR PIERCAP CONSTRUCTION IN CHALLENGING INTER-TIDAL ZONES <b>Sathyanarayanan Dhandapano, Shanthi T, Ramya D &amp; Thirunavukkarasu M</b>
	1840	BRIDGING THE GAP: SUSTAINABLE EMERGENCY RESCUE AREA (ERA) DESIGN THROUGH DECK INTEGRATION <b>Jaishankar B, Sathyanarayanan D &amp; Sai Charan V</b>
12:30 – 13:30		Lunch break

Friday, May 29<sup>th</sup>  
11:00 – 12:30

**Session C4: Dynamics and Digitalization  
of Railway Tracks: From Numerical Models to Digital Twins**  
Moderators: Otto Plašek & Niyazi Özgür Bezgin



Time	Sub. ID	Paper Title / Author(s)
11:00 – 12:30	1778	DETERMINATION OF TORSIONAL RESISTANCE OF RAIL FASTENINGS AND THEIR EFFECT ON STABILITY OF THE RAILWAY TRACKS <b>N. Liegner</b>
	1811	AUTOMATED BIM MODELS GENERATION IN RAILWAY INFRASTRUCTURE <b>J. Ventura, F. Andrade, R. Gavina, R. Santos &amp; D. Ribeiro</b>
	1825	GIS-ENABLED DIGITAL INTEGRATION FOR RAILWAY MAINTENANCE <b>F. Andrade, J. Ventura, R. Gavina, R. Santos &amp; D. Ribeiro</b>
	1938	SIMULATING EFFECT OF HIGH-SPEED RAIL ON UNDERGROUND TUNNEL THROUGH SOIL STRUCTURE INTERACTION ANALYSIS AND NUMERICAL MODELLING USING PLAXIS 3D <b>M. Shah, N. Tiwari &amp; P. J. Mehta</b>
	1951	DIGITAL TWINNING FOR RAIL TRACK COMPONENTS – FROM MONITORING TO REPORTING <b>C. Tsolaki, S. Arsenis, K. Gkiotsalitis &amp; S. Triantafyllou</b>
	1756	DETECTION OF MAINTENANCE ACTIONS BASED ON RAIL WEAR ANALYSIS <b>A. Plotho</b>
12:30 – 13:30		Lunch break

Friday, May 29<sup>th</sup>  
13:30 – 15:00

Session A5:  
Transport Infrastructure: Design, Rehabilitation and Engineering Solutions  
Moderators: Meho Saša Kovačević & Mario Bačić



Time	Sub. ID	Paper Title / Author(s)
13:30 – 15:00	2076	APPLICATION OF GEOSYNTHETICS IN THE REMEDIATION OF URBAN ROADS <b>J. Dominković, K. Minažek &amp; S. Dimter</b>
	1959	DEEP SOIL STABILIZATION IN TRANSPORTATION INFRASTRUCTURE USING INDUSTRIAL BY-PRODUCTS: THE CIRCUIT PROJECT FRAMEWORK <b>M. S. Kovačević, M. Bačić, L. Librić &amp; D. Jurić Kačunić</b>
	1856	MULTI-CRITERIA ANALYSIS OF DESIGN ALTERNATIVES FOR AN URBAN SIGNALIZED INTERSECTION: A CASE STUDY FROM SPLIT (CROATIA) <b>B. Maljkovic, K. Rogulj, D. Breški &amp; M. Protrka</b>
	1982	EXIT RAMP DESIGN AT DUAL-CARRIAGEWAY INTERCHANGES: POTENTIAL IMPLICATIONS FOR OPERATING SPEEDS <b>M. Šoštarić, M. Jakovljević, J. L. Vertlberg, M. Švajda &amp; D. Gruhonjić</b>
	1942	CHALLENGES IN RECONSTRUCTING STATE ROAD DC101 IN CROATIA <b>A. Barišić, A. Čudina Ivančev, V. Dragčević, T. Džambas</b>
	1957	A MULTI-DAY THERMAL SIGNATURE AND MACHINE LEARNING FRAMEWORK FOR PREDICTING DEFECT DETECTABILITY IN PASSIVE INFRARED THERMOGRAPHY OF REINFORCED CONCRETE SLABS <b>A. Abdulridha, N. Alver, K. Shibano &amp; T. Suzuki</b>
	2042	ANALYSIS OF THE IMPACT OF REDUCING EVALUATION ITEMS ON URGENCY CLASSIFICATION IN SEWER PIPE INSPECTION <b>S. Notsu, M. Fujiu &amp; Y. Morisaki</b>
	1916	MANAGEMENT OF PORT-CITY OSMOSIS: URBAN TRANSPORT INTERMODALITY LED BY AUTONOMOUS VEHICLES <b>F. Sortino, A. Petralia, C. Lo Vecchio &amp; T. Giuffrè</b>
15:00 – 15:30	Coffee break	



Friday, May 29<sup>th</sup>  
13:30 – 15:00

**Session B5:**  
**Transport Systems: Safety and Risk Management**  
Moderators: Aleksandra Deluka Tibljaš & Dario Babić



Time	Sub. ID	Paper Title / Author(s)
13:30 – 15:00	1771	A METHODOLOGICAL FRAMEWORK FOR RAILWAY TRESPASS RISK ASSESSMENT AND PRIORITIZATION <b>A. Baldassarra, C. Marinacci &amp; S. Ricci</b>
	1788	THE FUNCTIONAL SAFETY OF ROAD INFRASTRUCTURE IN THE CONTEXT OF AUGMENTED CCAM PHYSICAL, DIGITAL AND COMMUNICATION (PDI) INFRASTRUCTURE SOLUTIONS <b>D. Kokot, P. Rosenkranz, I. Erdelean &amp; R. Vežočník</b>
	1800	WAYSIDE TRAIN MONITORING SYSTEMS FOR THE SECOND TRACK DIVAČA KOPER <b>D. Majč, M. Kosec, J. Karner &amp; A. Schöbel</b>
	1947	ROAD TRAFFIC CRASHES AND THEIR SOCIOECONOMIC IMPACTS IN SABON GARI LOCAL GOVERNMENT AREA, NIGERIA <b>N. S. Aliyu Yaro, J. Adedeji, A. Usman &amp; K. Surajo</b>
	1857	ASSESSING RISK FACTORS FOR E-SCOOTER SAFETY: A WEIGHTED RISK MODEL BASED ON EXISTING LITERATURE <b>Z. Mohammed &amp; J. Attila</b>
	1960	DESIGNING A QGIS-BASED MULTIMODAL DATABASE FOR LEVEL CROSSING MAPPING: A CROATIAN CASE STUDY <b>D. Barić &amp; S. Grabušić</b>
	1985	ANALYSIS OF VEHICLE BEHAVIOR AT UNSIGNALIZED CROSSWALKS USING A NEAR-INFRARED LASER RANGING SENSOR <b>Y. Mishima, K. Takada, T. Mukouyama &amp; K. Yanagimachi</b>
	2040	METHODOLOGY FOR MEASURING WATER FILM DEPTH ON THE ROAD SECTIONS PRONE TO AQUAPLANING UNDER THE TRAFFIC <b>F. Trpčevski, N. Milovanović, V. Ilić, D. Gavran, S. Fric, S. Vranjevac &amp; M. Lukić</b>
	1849	MACHINE LEARNING-BASED PEDESTRIAN INTENTION PREDICTION MODELS FOR COLLISION WARNING AT UNSIGNALIZED CROSSWALKS <b>S. H. Cangut &amp; Y. Alver</b>
15:00 – 15:30		Coffee break

Friday, May 29<sup>th</sup>  
13:30 – 15:00

**Session C5: Special Session: Advances in Noise and Vibration-Based Approaches for Rail Infrastructure Condition Monitoring (URITMIS Workshop, Part 1)**  
Moderators: Ivo Haladin & Abdollah Malekjafarian



Time	Sub. ID	Paper Title / Author(s)
13:30 – 15:00	2098	ONBOARD MONITORING FOR INTELLIGENT ASSESSMENT OF RAILWAY TRACKS <b>A. Malekjafarian (30' Keynote Lecture)</b>
	1829	MACHINE LEARNING METHODOLOGY TO PREDICT THREE-DIMENSIONAL WHEEL-RAIL CONTACT FORCES IN HYBRID VEHICLE-STRUCTURE INTERACTION ALGORITHM <b>E. Granato, P. Montenegro &amp; T. Bittencourt</b>
	1859	UTILIZATION OF AN FEM TURNOUT MODEL FOR SMART DIAGNOSTICS <b>L. Raif, M. Hruzíková, V. Salajka, P. Hradil, F. Kšica &amp; O. Plášek</b>
	1885	SMARTPHONE SENSOR DATA FOR MONITORING TRAM INFRASTRUCTURE - A CASE STUDY OF CLUJ-NAPOCA, ROMANIA <b>Z. Orban, S. Kollo, H. Liszka, L. Alexa &amp; F. A. Borsoszki</b>
	1956	SUSTAINABLE BALLASTED TRACK DESIGN FOR NOISE AND VIBRATION MITIGATION <b>S. Lenart, S. R. Karumanchi &amp; D. Garcia Sanchez</b>
	1970	ASSESSMENT OF DYNAMIC IMPACT FORCES GENERATED BY WHEEL FLATS: A COMPARISON OF ESTIMATES BY BEZGIN-KOLUKIRIK EQUATIONS AND MEASUREMENTS BY RUTE <b>E. Balci, O. Repeçoğlu, Y. E. Fedar &amp; Y. E. Tetik</b>
15:00 – 15:30		Coffee break

Friday, May 29<sup>th</sup>  
15:30 – 17:00

**Session A6:**  
**Road Systems: Network Performance and Infrastructure Assessment**  
Moderators: Danijela Barić & Tamara Džambas



Time	Sub. ID	Paper Title / Author(s)
15:30 – 17:00	2074	APPLICATION OF TEMPORARY ROUNDABOUTS IN ENHANCING OF ROAD BASIC CAPACITY <b>H. Dragovan, S. Dimter, Ž. Kučibradić &amp; M. Čaklovac</b>
	1768	OPTIMIZATION OF ROUNDABOUT GEOMETRY BASED ON MEASURED AND SIMULATED OPERATING SPEEDS <b>S. Šurdonja, M. Klobučar, Al. Deluka-Tibljaš &amp; I. Ištoka Otković</b>
	1894	EQUILIBRIUM CONCEPTS AND DRIVER BEHAVIOR IN TRANSPORT NETWORK OPTIMIZATION: A SYSTEMATIC LITERATURE REVIEW <b>K. Krišto &amp; J. Pašagić Škrinjar</b>
	1863	ACCESSIBILITY OF PEDESTRIAN CROSSINGS – CASE STUDY DUBROVNIK <b>V. Nivić</b>
	1914	COMPARATIVE ANALYSIS OF PEDESTRIAN CROSSING BEHAVIOUR BEFORE AND AFTER THE CONSTRUCTION OF A PEDESTRIAN OVERPASS <b>Y. Alver, P. Onelcin, E. Odabasi, Y. Karatas &amp; E. Açığöz</b>
	1983	DIRECTIONAL DISTRIBUTION ON TWO-LANE RURAL HIGHWAYS - SOME ANALYSIS AND RECOMMENDATIONS <b>I. Lovrić, B. Čutura &amp; D. Maslač</b>
	1986	ASSESSMENT OF TRAFFIC EFFICIENCY INDICATORS FOR TWO-WAY, TWO-LANE RURAL HIGHWAYS THROUGH DIFFERENT HCM METHODOLOGIES <b>M. Ahac, S. Ahac, V. Blažinić, K. Lovato &amp; I. Matoš</b>
20:30 – 24:00		Gala dinner

Friday, May 29<sup>th</sup>  
15:30 – 17:00

**Session B6:**  
**Road Traffic: Engineering, Flow Theory, and Network Operations**  
Moderators: Dario Babić & Ivica Stančerić



Time	Sub. ID	Paper Title / Author(s)
15:30 – 17:00	1760	DEVELOPMENT AND STRATEGIC FRAMEWORK OF THE MAIN CYCLING ROUTES NETWORK IN THE REPUBLIC OF CROATIA <b>Z. Klarić, M. Ćosić, I. Jujnović &amp; J. Jurak</b>
	1853	GIS APPLICATION IN MILITARY VEHICLES' ROUTE PLANNING <b>I. Gredelj, D. Gajski, S. Ahac &amp; M. Ahac</b>
	2001	IMPACT OF MILITARY MOBILITY ON THE USE OF EUROPEAN TRANSPORT INFRASTRUCTURE <b>N. Lukina, S. Vilke &amp; M. Šafran</b>
	2058	BUCKLING, QUANTS AND CONTINUITY: NEW PARADIGMS IN TRAFFIC FLOW <b>N. Bezgin, R. B. Sikar &amp; A. Saraçoğlu</b>
	1973	EVALUATING VARIATIONS OF ADVANCED MULTIMODAL SIGNAL CONTROL STRATEGIES FOR URBAN CORRIDORS <b>M. Knezevic, M. Vukojevic &amp; A. Stevanovic</b>
	1848	USER PROFILE-BASED COMPARISON OF IMPROVEMENT EXPECTATIONS IN SHARED E-SCOOTER SYSTEMS <b>I. Turker, Y. Alver &amp; D. Azik Ozkan</b>
20:30 – 24:00		Gala dinner

Friday, May 29 <sup>th</sup> 15:30 – 17:00		Session C6: Special Session: Advances in Noise and Vibration-Based Approaches for Rail Infrastructure Condition Monitoring (URITMIS Workshop, Part 2) Moderators: Ivo Haladin & Abdollah Malekjafarian	
Time	Sub. ID	Paper Title / Author(s)	
15:30 – 17:00	2109	URITMIS PROJECT OVERVIEW: VIBRATION-BASED PREDICTIVE MAINTENANCE OF URBAN RAILWAY INFRASTRUCTURE: FROM MONITORING TO DECISION SUPPORT <b>I. Haladin &amp; K. Burnač</b>	
	1803	VIBROACOUSTIC CHARACTERISATION OF BALLASTLESS TRAM TRACKS: COMPARING VARIOUS ON-SITE MEASUREMENT APPROACHES <b>K. Burnač, I. Haladin &amp; K. Vranešić</b>	
	2056	EXPERIMENTAL SETUP AND INSTRUMENTATION OF A FULL-SCALE BALLASTED RAILWAY TRACK TEST <b>M. Toprak, N. Bezgin &amp; E. Yüksel</b>	
	2079	MONITORING SCOUR AND SOIL–STRUCTURE INTERACTION IN PILE-SUPPORTED RAIL INFRASTRUCTURE USING VIBRATION-BASED DIGITAL TWINS <b>A. Ioakim &amp; L. Prendergast</b>	
	2095	TRACK INSTRUMENTATION FOR DIGITAL TWIN DEVELOPMENT IN URBAN SLAB TRACK STRUCTURES <b>F. Meštrović, I. Haladin &amp; I. Duvnjak</b>	
	2104	MACHINE LEARNING TECHNIQUES FOR LONG-TERM CONDITION MONITORING OF TRAMWAY TRACKS <b>L. Miličević, K. Burnač, I. Haladin, N. Trifunović, K. Vranešić &amp; F. Meštrović</b>	
20:30 – 24:00	Gala dinner		

DAY 4 – Saturday, May 30 <sup>th</sup>			
Saturday, May 30 <sup>th</sup> 09:00 – 10:30		Session A7: Vehicle Systems Engineering: Design, Safety, and Management Moderators: Marjana Petrović & Nándor Liegner	
Time	Sub. ID	Paper Title / Author(s)	
09:00 – 10:30	1847	STUDY OF THE STRENGTH OF AN OPEN WAGON STRUCTURE FOR LONG CARGO TRANSPORTATION <b>A. Lovska, J. Gelici, J. Dižo &amp; P. Rukavishnykov</b>	
	1851	INNOVATIVE SINGLE-AXLE BOGIE DESIGN FOR A REGIONAL RAIL VEHICLE <b>M. Bučko, D. Bata, A. Lovska &amp; J. Dižo</b>	
	1906	DESIGN OF A NEW TYPE OF SELF-LOCKING AXLE DIFFERENTIAL INTENDED FOR INSTALLATION IN LIGHT ROAD VEHICLES, DESIGNED TO INCREASE THE RELIABILITY OF FUNCTION <b>M. Blatnický, J. Dižo, I. Domanikova &amp; K. Kravchenko</b>	
	1908	DEVELOPMENT OF METHODOLOGY FOR CALIBRATION OF AN INERTIAL BRAKE TEST STAND <b>I. Domaniková, M. Blatnický, P. Slušňák &amp; K. Kravchenko</b>	
	1783	CARGO SECURING ASPECTS DEPENDING ON MILEAGE <b>P. Prochazka, M. Vlkovsky, J. Malisek &amp; A. Ilkstrom-Kravcov</b>	
	1792	EVALUATION OF THE IMPACT OF THE DISCRETIZATION ORDER OF THE PASSENGER WAGON BODY MODEL ON RIDE COMFORT <b>J. Dižo, A. Lovska, M. Blatnický &amp; M. Bučko</b>	
10:30 – 11:00	Coffee break		

Saturday, May 30<sup>th</sup>  
09:00 – 10:30

**Session B7:**  
**Pavement Engineering: Innovation and Green Technologies**  
Moderators: Tatjana Rukavina & Sanja Dimter



Time	Sub. ID	Paper Title / Author(s)
09:00 – 10:30	1824	DEVELOPMENT OF SUSTAINABLE CONCRETE USING WASTE ASHES AS RECYCLED AGGREGATES: SOLUTION FOR GREEN URBAN INFRASTRUCTURE <b>M. Mendeš, N. Štirmer, I. Carević, J. Šantek Bajto, V. Ducman &amp; M. Pavlin</b>
	1876	MECHANICAL CHARACTERIZATION OF MODERATELY WARM ASPHALT BINDER COURSE MIXES USING RUBBER-MODIFIED AND CONVENTIONAL BITUMENS <b>K. Almasy &amp; A. Vattai</b>
	1892	CONSTRUCTION AND FIELD PERFORMANCE MONITORING OF EXPERIMENTAL PERMEABLE ASPHALT PAVEMENT WITH WARM MIX ASPHALT IN A PARKING AREA <b>I. Jakubėnaitė, A. Vaitkus, J. Škuldeckė &amp; O. Šernas</b>
	1897	EFFECT OF RECLAIMED ASPHALT PAVEMENT ON LCC-BASED ROLLER-COMPACTED CONCRETE PAVEMENTS <b>V. Butle, D. Reddy &amp; S. Venkatraman</b>
	1974	SYNERGISTIC ASSESSMENT OF CARBON BLACK AND CRUMB RUBBER ON THE PERFORMANCE OF ASPHALT BINDER: PHYSICO-CHEMICAL CHARACTERIZATION AND DOSAGE OPTIMIZATION <b>A. Kumar, S. Hazim &amp; K. P. Biligiri</b>
	2091	PERFORMANCE, SUSTAINABILITY, AND FIELD IMPLEMENTATION OF RECLAIMED ASPHALT PAVEMENT-BASED GEOPOLYMER CONCRETE FOR RIGID PAVEMENT APPLICATIONS <b>A. Ghosh, G.D. Ransinchung R.N. &amp; P. Kumar</b>
	2092	FROM STORAGE TO SERVICE: AGEING-INDUCED POLYMER NETWORK DEGRADATION IN SBS-MODIFIED ASPHALT BINDERS <b>Sk. S. Islam, A. Ghosh, G.D. Ransinchung R.N. &amp; S.S. Ravindranath</b>
	1796	PAVEMENTS AS ACTIVE THERMO HYDRAULIC SYSTEMS FOR SAFETY AND SUSTAINABILITY IN HOSPITAL ENGINEERING <b>C. Ristani, A. Nora, P. Tataranni, L. Barbaresi &amp; C. Sangiorgi</b>
10:30 – 11:00	Coffee break	

Saturday, May 30<sup>th</sup>  
09:00 – 10:30

**Session C7:**  
**Rethinking Urban Mobility: Intermodality, Safety, and Human Behaviour**  
Moderators: : Sanja Fric & Hrvoje Haramina



Time	Sub. ID	Paper Title / Author(s)
09:00 – 10:30	1976	EVACUATION ROUTE PLANNING UNDER AFTERSHOCK RISK CONSIDERING BUILDING-RELATED HAZARDS AND PEDESTRIAN DENSITY <b>S. Sasaki, K. Takada, M. Fujiu &amp; Y. Morisaki</b>
	2041	DEVELOPMENT OF A TRAVEL PLANNING SUPPORT SYSTEM USING CONGESTION INFORMATION AND LARGE LANGUAGE MODELS <b>K. Yamamoto, Y. Morisaki &amp; M. Fujiu</b>
	1921	EXEMPLARY CALCULATIONS FOR NECESSARY TRAFFIC CHANGES THROUGH BEHAVIORAL CHANGES IN ORDER TO ACHIEVE EMISSION LIMITS USING THE EXAMPLE OF POTSDAM <b>A. Sauerländer-Biebl &amp; A. Sohr</b>
	1810	ASSESSMENT OF THE IMPACT OF TRAFFIC SIGNALIZATION ON THE BEHAVIOR OF VULNERABLE ROAD USERS <b>M. Šimunović &amp; I. Ištoka Otković</b>
	1838	MECHANICAL-CLINICAL MAPPING OF INJURY PATTERNS IN BICYCLE AND MOTORCYCLE CRASHES <b>R. Sikar, E. Ferhatlar, N. Bezzin &amp; B. Demirci</b>
	1860	GAZE PATTERNS OF E-SCOOTER RIDERS AT URBAN INTERSECTIONS: A REAL-WORLD EYE-TRACKING STUDY <b>S. Rizehbandi, M. Fiolčić, M. Ferko, T. Cvahte Ojsteršek &amp; D. Babić</b>
	10:30 – 11:00	Coffee break

Saturday, May 30<sup>th</sup>  
11:00 – 12:30

**Session A8: Railway Technologies: New Approaches  
for a Low-Carbon, Sustainable, and Safe Future**  
Moderators: Niyazi Özgür Bezgin & Hrvoje Haramina



Time	Sub. ID	Paper Title / Author(s)
11:00 – 12:30	1821	OPTIMIZATION OF A HYDROGEN-ENABLED MICROGRID FOR SEASONAL ENERGY STORAGE IN SUSTAINABLE RAILWAY INFRASTRUCTURE <b>C. Steindl, G. Fritscher &amp; J. Heger</b>
	1830	A LIFE-CYCLE APPROACH TO SAFETY IN MAGLEV DERIVED RAILWAY TECHNOLOGIES <b>A. Bardhi &amp; S. Ricci</b>
	1802	DROPPER-LENGTH-AWARE PREPROCESSING FOR ANOMALY DETECTION OF OVERHEAD CONTACT LINE FITTINGS <b>I. Matsumura &amp; G. Ohashi</b>
	2068	GEOMETRIC OPTIMIZATION OF MAGNETIC FIELD ENERGY HARVESTERS UNDER PRACTICAL WEIGHT CONSTRAINTS FOR RAILWAY CATENARY SYSTEMS <b>P. Jeong &amp; S. Ahn</b>
	2025	THE POTENTIAL FOR ECODRIVING SAVINGS IN REGIONAL AND SUBURBAN RAIL TRAFFIC BASED ON STUDIES CONDUCTED IN 2024–2025 USING JOURNEYS OPERATED IN CENTRAL POLAND <b>P. Stefańczyk &amp; A. Szelaż</b>
	2093	FATIGUE CRACK GROWTH IN RAILWAY AXLES: THE ROLE OF TESTING ENVIRONMENT AND VARIABLE LOADS <b>L. Nahlik, P. Pokorný, P. Dlhý &amp; P. Hutař</b>

12:30 – 13:00 Closing ceremony – Hall A

Saturday, May 30<sup>th</sup>  
11:00 – 12:30

**Session B8:  
Pavement Design and Analysis: From Materials to Performance**  
Moderators: Tatjana Rukavina & Sanja Dimter



Time	Sub. ID	Paper Title / Author(s)
11:00 – 12:30	1939	COMPARATIVE DESIGN AND PERFORMANCE EVALUATION OF PAVEMENT DESIGN METHODS FOR LOW VOLUME ROADS USING EMPIRICAL MECHANISTIC AND FEM APPROACHES <b>J. Adedeji &amp; M. Mostafa</b>
	1975	A UNIFIED FRAMEWORK FOR MECHANISTIC CORRELATION BETWEEN LABORATORY AND FIELD RUTTING RESPONSE IN ASPHALT PAVEMENT <b>S. Ramachandraiah, S. Marimuthu &amp; K. P. Biligiri</b>
	1998	MACHINE-LEARNING-BASED PREDICTION OF SKID RESISTANCE FROM 3D PAVEMENT SURFACE TEXTURE: IDENTIFYING AN EFFECTIVE TEXTURE DEPTH <b>M. Kováč, M. Brna &amp; P. Pisca</b>
	2016	UNDERSTANDING IN-SITU PAVEMENT RESPONSES: A COMPARATIVE STUDY OF STATIC AND DYNAMIC ANALYSIS FOR AN INSTRUMENTED PAVEMENT SECTION <b>M. Ceric, P. Tavassoti, H. Baaj &amp; O. Maadani</b>
	2020	PERFORMANCE-BASED LABORATORY STUDY ON ASPHALT MIXTURES UNDER TEMPERATURE AND TRAFFIC LOADING <b>R. D. Dermengiu, C. Răcănel &amp; M. Dicu</b>

12:30 – 13:00 Closing ceremony – Hall A



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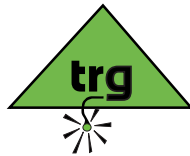
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