PROGRAM

DAY #1 | SEPTEMBER 12th (2022)

Starhotels Rosa Grand

time room plenary workshops
02:00 p.m. TURANDOT On-site registration ope

02:00 p.m. TURANDOT On-site registration opens
02:30 p.m. AIDA WORKSHOP 1

04:30 p.m. State of Art and advancements about surface characteristics

G. Flintsch | R. Wix

04:30 p.m. AIDA WORKSHOP 2

06:30 p.m. Concrete & Asphalt – State of Art and advancements about Surface

Treatments & Maintenance M. Crispino | E. Toraldo | L. Rens

06:30 p.m. **GRAND LOUNGE** Opening reception

07:30 p.m & BAR

DAY #2 | SEPTEMBER 13th (2022)

Starhotels Rosa Grand

time	room	plenary opening session
08:30 a.m.	TURANDOT	On-site registration opens
09:00 a.m. 10:00 a.m.	AIDA	INTRODUCTION AND WELCOME SPEECHES Maurizio Crispino - Professor, Symposium Chair, Moderator Alberto Guadagnini - Rector's delegate, Director of Department of Civil and Environmental Engineering, Politecnico di Milano Aldo Isi - Anas Ceo, Symposium Co-Chair Massimo Schintu - AISCAT General Director Claudio Eminente - Direttore Centrale Pianificazione Economica e Sviluppo Infrastrutture, ENAC Margo Briessinck - PIARC TC 4.1 "Pavements" Chair Nazir Alli - PIARC, President Armando Zambrano - Italian Engineers National Council, President Claudia Terzi - Regione Lombardia, Councilor for Infrastructures Enrico Giovannini - Italian Minister of Sustainable Infrastructures and Mobility (to be confirmed)
10:30 a.m. 11:00 a.m.	AIDA	KEYNOTE SPEECH Revolutionizing Pavements for the CAV era Imad Al-Qadi - Director, Illinois Center for Transportation, USA
11:00 a.m. 11:30 a.m.	EXHIBIT HALL	Coffee Break
time	room	concurrent technical session 1
11:30 a.m.	AIDA	Data Monitoring and Performance Assessment
01:30 p.m.	NORMA	Surface Materials Performance
	TOSCA	Urban Pavements: heat islands, pedestrian areas, and cycle paths
	MANON	Surface Layers and Bituminous Materials, Design and Characterization
01:30 p.m. 02:30 p.m.	EXHIBIT HALL	Light Lunch
time	room	concurrent technical session 2
02:30 p.m.	AIDA	Ride Safety and Pavement Surface Performance
04:30 p.m.	NORMA	Environmental Impacts and Issues
	TOSCA	Noise Effects and Roads Surface Characteristics
	MANON	Road Pavement Management
08:00 a.m.	ROSES RESTAURANT	Gala Dinner

DAY #3 | SEPTEMBER 14th (2022)

Starhotels Rosa Grand

time 09:00 a.m. 11:00 a.m. 11:00 a.m. 11:30 a.m.	POOM AIDA NORMA TOSCA MANON EXHIBIT HALL	concurrent technical session 3 Road Materials and Pavements Bearing Capacity Maintenance and Preservation Treatments Safety and Risk Issues Airport Pavements and Management Coffee Break
time	room	concurrent technical session 4
11:30 a.m. 01:30 p.m.	AIDA NORMA TOSCA MANON	Pavement Condition Measures and Models Pavement Surface Characteristics and Measures Road Materials and Construction Quality Assessment of Pavement Surface Layers
01:30 p.m. 02:30 p.m.	EXHIBIT HALL	Light Lunch
02:30 p.m. 03:30 p.m.	NORMA	POSTER session
time	room	plenary closing session
03:30 p.m. 04:00 p.m.	AIDA	KEYNOTE SPEECH Smart tyres: Key enablers of future mobility scenarios Corrado Rocca - R&D Head, Cyber Unit, Pirelli Tyre
04:00 p.m. 04:30 a.m.	AIDA	Cultural intermezzo
04:30 p.m. 05:00 p.m.	AIDA	CLOSING SESSION AND CONCLUSION OF THE SYMPOSIUM Maurizio Crispino - Professor, Symposium Chair Alberto Taliercio - Rector's delegate, Dean of School of Civil, Environmental and Land Management Engineering - Politecnico di Milano Edoardo Valente - ANAS President Domenico Crocco - PIARC Italy First Delegate Margo Briessinck - PIARC TC 4.1 "Pavements" Chair Surf 2022 - Student challenge awards Surf 2022 - Best paper awards
05:00 p.m. 05:30 p.m.	EXHIBIT HALL	Coffee Break

CONCURRENT TECHNICAL SESSION 1

Topic Data Monitoring and Performance Assessment

Day #2, September 13th

Time 11:30 a.m. – 01:30 p.m.

Room AIDA

Sessions Chairs Luc Rens | TBD

ID title

176 Analysis and Visualization for Pavement Condition Assessment

Using Network-Level Survey Data

Than Than Nyunt | Zhuoyuan Cheng | Puay Ping Koh

Anggraini Zulkati | Kian Keong Chin

210 Detection of Irregularities Within the Asphalt Surface Behind the

Paver Screed Using Image Analysis

Leandro Harries | Stefan Helfmann | Stefan Böhm

347 Road Condition Monitoring and Assessment in Germany

How to Use the Data for Pavement Analysis Ferdinand H. Farwick zum Hagen | Felix Lau

229 Real Time Road Condition Monitoring Data as a Tool for Situation

Awareness in the Maintenance Management of Paved and

Gravel Roads

Timo Saarenpää | Pekka Haatainen | Markus Simonen

Timo P Saarenketo

366 Analysis of Road Damage with Computer-Vision Based

Drive-By System Sergio Caccamo

231 Monitoring Rut Depth Development – What Does It Tell Us

Timo P Saarenketo | Tomi Herronen | Vesa Männistö

CONCURRENT TECHNICAL SESSION 1

Topic Surface Materials Performance

Day #2, September 13th
Time 11:30 a.m. – 01:30 p.m.

Room NORMA

Sessions Chairs Joralf Aurstad | TBD

ID title

163 Performance Review of Surfacing Materials Incorporating

Enhanced Levels of Reclaimed Asphalt on the UK Strategic

Road Network

Michael Wright | Matthew Wayman | Wenxin Zuo

326 The Use of Aggregates with Different Resistance to Polishing

in Wearing Courses

Pavla Nekulova | Jaroslava Daskova | Leos Nekula | Petr Bures

Jiri Kaspar

168 Challenges for the Development and Implementation of Asphalt

Mixtures containing Recycled Waste Plastic for Pavement

Surfacing

Greg White | Gordon Reid

311 Systemic Analysis of the Thermal Performance of Road Surfaces

Maxime Frere | Martin Hendel | Julien Van Rompu | Simon Pouget

Laurent Royon

298 Test Section with Next Generation Concrete Surface (NGCS)

in Belgium: Rolling Resistance and Noise Anneleen Bergiers | Barbara Vanhooreweder

296 ULTRAPAV - New Asphalt Mixtures with High Mechanical

Performance, Enhancing Their Sustainability and Their Safety

Victor Garcia Rabadan | Gloria Motos Cascales | Julio Lopez Ayerra

Jose Ramon Lopez Marco | Jesus Felipo Sanjuan

Rebeca Maria Sastre Rabal

CONCURRENT TECHNICAL SESSION 1

Topic Urban Pavements: heat islands, pedestrian areas and cycle paths

Day #2, September 13th

Time 11:30 a.m. – 01:30 p.m.

Room TOSCA

Sessions Chairs Stefan Holler | TBD

ID title

193 Simplified Road Pavement Surface Deterioration Model

in Urban Area

Monica Meocci | Valentina Branzi

197 Colorimetry of Pavements for Urban Planning

Laure Lebouc | Sébastien Liandrat | Romain Lafon | Aurélia Nicolaï

Fabrice Fournela | Florian Greffier

316 Building Information Modeling for Municipal Asset Management

Alexander Buttgereit | Maria Koordt | Markus Stöckner

Ute Stöckner

219 Mix Design of Recycled Asphalt Concretes for Sustainable Rural

Mobility: Bicycle and/or Pedestrian Routes

Donato Ciampa | Maurizio Diomedi | Francesco Paolo Rosario

Marino

Saverio Olita

239 Pavements, Energy Efficient Actors in Public Lighting

Sébastien Liandrat | Valérie Muzet | Vincent Bour | Jérôme Dehon

Jean-Pierre Christory | Brice Delaporte | Joseph Abdo

Florence Pero | Thibaut Le Doeuff

317 Applicability of WMA in Urban Road Construction in Accordance

with Occupational Health and Safety Requirements

Alexander Buttgereit | Knut Johannsen | Daniel Gogolin

CONCURRENT TECHNICAL SESSION 1

Topic Surface Layers and Bituminous Materials, Design and

Characterization

Day #2, September 13th

Time 11:30 a.m. – 01:30 p.m. Room MANON

Sessions Chairs Richard Wix | TBD

ID title

341 An Analytical Model for Forecasting Pavement Temperature

Usama B Ayasrah | Laith Tashman

359 Evaluation of Pavement Temperature Detected Through

Embedded Sensors – Comparison of Field Data with Different

Predictive Models

Cristina Tozzo | Davide Chiola | Nicoletta Gasbarro | Paolo Spinelli

340 Bituminous Sealant: New Formulation Approach Using Rheology

Ines Antunes | Gilberto Del Zoppo | Fabio Curto

221 Laboratory Investigation on the Role of Fibers into Porous

Bituminous Mixtures

Edoardo Mariani | Emanuele Toraldo

357 Recycled Porous Asphalt Concretes: Pros and Contras

Rosolino Vaiana | Filippo Giammaria Praticò | Teresa Iuele

Manuel De Rose | Giusi Perri | Rosario Fedele | Francesco De Masi

360 Grip Mastic Asphalt – High Friction Asphalt for Wearing Course

with the Addition of Steel Slag

Cristina Tozzo | Davide Chiola | Nicoletta Gasbarro | Paolo Spinelli

CONCURRENT TECHNICAL SESSION 2

Topic Ride Safety and Pavement Surface Performance

Day #2, September 13th

Time 02:30 p.m. – 04:30 p.m.

Room AIDA

Sessions Chairs Gina Ahlstrom | Davide Chiola

ID title

278 An Exploration of Friction Supply and Demand - The Management

of Road Surface Friction as a Factor in Vehicle Safety

Peter D. Sanders | Helen Viner

287 Characterization of Surface Roughness on the basis of Vibration

Response Corresponding to the Ride Quality of Micromobilities

Kazuya Tomiyama | Yuki Kotani

233 Improving the Understanding of User Experience of Ride Quality

Alex Wright | Craig Thomas | Kamal Nesnas | Nathan Dhillon

Neng Mbah | Stuart McRobbie

192 Determination of Riding Comfort of Cycleways

Leif Sjögren

288 Adjusting Skid Resistance Data for Seasonal Variation on the Irish

National Road Network Using Local Climatic Data Rory K. Donnellan | Kieran Feighan | Brian Mulry

306 Relationship Between Driving Conditions, Pavement

Characteristics and Rolling Resistance

Veronique Cerezo | Joao Santos | Mohamed Bouteldja

Xavier Potier

CONCURRENT TECHNICAL SESSION 2

Topic Environmental Impacts and Issues

Day #2, September 13th
Time 02:30 p.m. – 04:30 p.m.

Room NORMA

Sessions Chairs 7solt Boros | Edoardo Mariani

ID title

300 The Environmental Asphalt Rating (EAR) – A Case Study for

Open-Graded Asphalt Mixtures

Davide Chiola | Vincenzo Cirimele | Cristina Tozzo | Paolo Spinelli

323 Environmental Efficiency Assessment of RCA Inclusion as Partial

Replacement of Virgin Aggregates in HMA and WMA Rodrigo Ernesto Polo-Mendoza | Emilio Turbay

Gilberto Martinez-Arquelles | Rita Peñabaena-Niebles

345 Comparing Environmental Impacts of Alternative Roads:

Mechanical and Sustainable Considerations

Gaetano Bosurgi | Clara Celauro | Giuseppe Lo Brano

Orazio Pellegrino | Giuseppe Sollazzo

237 Innovative Cement-Based Material as Environmental and Efficient

Technical Alternative for Pavements

Arianna Stimilli | Tullio Caraffa | Alessandro Marradi

338 Evaluation of Porous Asphalt Hydrological Performances Through

Rainfall-Runoff Modelling by EPA SWMM
Diego Ciriminna | Giovanni Battista Ferreri
Leonardo Valerio Ferreri | Clara Celauro

290 Pavement Heating System Using Electroconductive Paint for

Preventing Ice Formation on The Surface Layer

Thomas Attia | Flavien Geisler | Simon Pouget | Camille Thomasse

Dominique Le Blanc

CONCURRENT TECHNICAL SESSION 2

Topic Noise Effects and Roads Surface Characteristics

Day #2, September 13th

Time 02:30 p.m. – 04:30 p.m.

Room TOSCA

Sessions Chairs Nazir Alli | Massimo Losa

ID title

222 Understanding User Experience of In-Vehicle Noise Based on

Road Surface Texture Data

Tadas Andriejauskas | Alex Wright | Rob Lee | Craig Thomas

Stuart McRobbie | Neng Mbah

232 Effect on Noise Reduction of Repaying Only the Top Layer in a

Double-Layer Porous Asphalt Pavement

Ulf Sandberg

199 Optimizing the Pattern of Grooves of the Next Generation Cement

Concrete Surface (NGCS) for Less Tyre/Road Noise and Less Fuel

Consumption Luc Goubert

356 Acoustic Characterisation of Motorway Pavements: New

Perspectives to Optimise Road Asset Management

Lara Ginevra Del Pizzo | Antonino Moro | Francesco Bianco Davide Chiola | Benedetto Carambia | Gaetano Licitra

238 Pavement Maintenance Influence on Road Traffic Noise Emission

Manfred Haider | Reinhard Wehr | Roland Spielhofer

250 Impacts of the Shift from Distressed Pavements to Low Noise

Pavements in Motorways – A Case Study in Portugal Maria João Rato | Maria Inês Ramos | Elisabete F. Freitas

Margarida Braga | Luís Fernandes | Ana Falcão | Isabel Gonzalez

Eduardo Fernandes

CONCURRENT TECHNICAL SESSION 2

Topic Road Pavement Management

Day #2, September 13th
Time 02:30 p.m. – 04:30 p.m.

Room MANON

Sessions Chairs Mariano Pernetti | TBD

ID title

205 Definition of a Low-Cost Pavement Management Method based on

a Dual Analytic Hierarchy Process

Nicholas Fiorentini | Giacomo Cuciniello | Pietro Leandri

Massimo Losa

271 Predicting the Coefficient of Friction as a Support Tool for

Decision Making in Pavement Management System

José Breno Ferreira Quariguasi | Francisco Heber

Lacerda De Oliveira | Minh-Tan Do | Manuela Gennesseaux

264 ANAS PMS (Pavement Management System) for Road

Pavement Management

Stefano Oddone | Massimo Simonini | Marcello De Marco

Stefano Drusin

A "Big Data" Approach Towards Analysis and Causation of

Pavement Surface Failure Mechanisms

Gary A. Cook | Helen K Bailey

257 Innovation Pathways within Road Performance Management to

Upgrade Investment Analysis: A Walkthrough of New Zealand and

Philippine Resilience Landscapes

Jessica Vien S Mandi | Annisa Hasanah | Theunis Henning

283 Innovative Pavement Contracts to Reduce CO2-Emissions

in Norway

Even K. Sund | Thor Asbjørn Lunaas

CONCURREN	T TECUNICAL	CECCION 2
CUNCURREN	I IECHNICAL	. JEJJIUN J

Topic Road Materials and Pavements Bearing Capacity

Day #3, September 14th
Time 09:00 a.m. – 11:00 a.m.

Room AIDA

Sessions Chairs Gianluca Cossale | TBD

ID title

330 The Choice of Appropriate Bituminous Seals and Substrates

Combinations for Improved Performance of Road Pavements

in Tropical Climates

Andrew Otto | Jasper Cook

216 Comparison of Bearing Capacity Measurements with the Traffic

Speed Deflectometer (TSD) and Surface Characteristics on

Intra-Urban Roads in Germany

Barbara K. Esser | Pahirangan Slvapatham | Stefan Koppers

167 Improved Approach to Accelerated Ageing of Asphalt Samples in

the Laboratory

Greg White | Ahmed Abouelsaad

364 Inductive Systems for Electric Vehicles: Optimization of the

Charging Units Embedded into Road Pavement

Claudia Nodari | Misagh Ketabdari | Maurizio Crispino

Emanuele Toraldo

318 Evaluation of the Application of Tailing from Magnesite Extraction

in Pavement by Adhesion Properties

Mateus S. Brito | Lilian Gondim | Suelly Barroso

346 Experimental Analysis of Asphalt Concrete Modified with

Polymeric Compounds Including Steel Slags as an Alternative

to Basaltic Aggregates

Gaetano Bosurgi | Giovanni Bertino | Augusto Ciarlitti Clara Celauro | Matteo Fumagalli | Orazio Pellegrino

Alessia Ruggeri | Giuseppe Sollazzo

174 Probe Vehicle Data as Input Source for Road Maintenance

Björn Zachrisson | Johan Hägg; Håkan Frank | Johan Petersson

Olle Noren

CONCURRENT TECHNICAL SESSION 3

Topic Maintenance and Preservation Treatments

Day #3, September 14th

Time 09:00 a.m. – 11:00 a.m.

Room NORMA

Sessions Chairs Margo Briessinck | Maurizio Diomedi

ID title

337 Software Application for Long-Term Monitoring and Assessment

of Pavement Serviceability and Performance in Slovakia Zsolt Boros | Norbert Dancs | Filip Buček | Zsolt Benkó

190 Pavement Maintenance Backlog - How to Calculate and Use in

Decision-Making? Vesa Männistö

194 Review and Analysis of Prediction Models for As-built Roughness

in Asphalt Overlay Rehabilitations

Rodrigo Díaz | José Ramón Marcobal | Juan Gallego

292 Use of Traffic-Speed Ravelling Data for Resurfacing Intervention

on Open Graded Asphalt

Richard Wix | Chloe Ip | Lalinda Karunaratne

265 Design and On-Site Non-Destructive Testing Method for

Evaluating Lifespan Asphalt Concrete Pavement with Traditional,

Recycled and Material with Additives

Stefano Oddone | Stefano Drusin | Luca Frezza Gianluca Salvatore Spinazzola | Cristina Tozzo

269 Advanced Asphalt Pavements to Achieve Environmental Goals in

Asset Management

Alexander Buttgereit | Daniel Gogolin | Stefan Gomolluch

Maria Koordt

CONCURRENT TECHNICAL SESSION 3

Topic Safety and Risk Issues

Day #3, September 14th

Time 09:00 a.m. – 11:00 a.m.

Room TOSCA

Sessions Chairs Vittorio Nicolosi | TBD

ID title

351 Evaluation of Road Safety Indicators Using Artificial Intelligence

Case Study Brazilian Federal Highway BR-116

Rodovia Santos Dumont Fernanda O de Sousa

304 Improving the Criteria for Plans for Bridge Inspection

Larysa Bodnar

267 Freeway Interchanges Maintenance Operations. Preliminary

Safety Analysis of Connected Automated Vehicles Impact on Road

Traffic Circulation

Tullio Giuffrè | Salvatore Curto | Andrea Petralia

207 Skid Resistance and Braking Distance Revisited – The Case

of Grinding

Roland Spielhofer | Matthias Hahn

352 Safety Aspects of E-Scooters in Urban Areas: Preliminary Results

on Citizens' Perception, Users' Behavior and Role of Pavement

Arianna Antoniazzi | Elena Davoli | Claudia Nodari

Maurizio Crispino

181 A Risk Analysis in The Event of a Fire in a Twin-Tube Road Tunnel

with Considerations for Resilience

Ciro Caliendo | Isidoro Russo | Gianluca Genovese

CONCURRENT TECHNICAL SESSION 3

Topic Airport Pavements and Management

Day #3, September 14th
Time 09:00 a.m. – 11:00 a.m.

Room MANON

Sessions Chairs Monica Meocci | TBD

ID title

223 Aviation Risk Assessment: Analyzing the Critical Boundary

Conditions that Can Affect the Risk of Runway-Related Accidents

Misagh Ketabdari | Claudia Nodari | Maurizio Crispino

Emanuele Toraldo

195 Assessment of Maintenance and Rehabilitation Strategies in

Airport Pavement and Life Cycle Cost

Rayssa de Sousa Carneiro | Francisco Heber | Lacerda de Oliveira

305 The Setting Up of Milan Airports' Pavement Management System

Giacomo Ridondelli | Riccardo Lamperti | Maurizio Crispino

Alessandro Marradi | Jacopo Leonardi | Marco Sclip

Paolo Pasinetti

363 The Determination of the Status Indices of Airport Pavements by

Using High-Performance Machines as a Tool for the Programming

of Maintenance and Requalification Activities of the Italian

Military Airfields

Stefano Cimichella | Aniello Corcione | Claudio De Marchis

Antonello Germinario

201 Towards Efficient Airfield Pavement Surface Condition Monitoring

Using Deep Learning Models

Ronald A. Roberts | Fabien Menant | Michael Broutin

252 Assessment of Roughness Limit Based in Vertical Acceleration of

Aircraft on Runways

Elisa Da Silva Sousa | Lucas Moreira Magalhães | Francisco Heber

Lacerda De Oliveira

CONCURRENT TECHNICAL SESSION 4

Topic Pavement Condition Measures and Models

Day #3, September 14th

Time 11:30 a.m. – 01:30 p.m.

Room AIDA

Sessions Chairs Misagh Ketabdari | TBD

ID title

308 A Critical Review on Effect of Pavement Condition on Traffic

Flow Characteristics

Ashalakshmi V. M. | Sivakumar M. | Anjaneyulu Mvlr

321 A Deep Learning Approach to Detect and Characterize Potholes

by Stereo Imaging

Saif Eddine Amdouni | Yossra Garbouj | Amel Benazza

Kaouther Machta

353 Indirect IRI Estimation Through Smart Tyre Technology

Gabriele Montorio | Massimiliano Sallusti | Stefano Melzi Davide Chiola | Federico Cheli | Benedetto Carambia

358 E-PMS – Evolutive Pavement Management System. Overview on

the Methodology Developed by Autostrade Per l'Italia (ASPI)

Davide Chiola | Benedetto Carambia | Cristina Tozzo

Nicoletta Gasbarro | Paolo Spinelli

350 Human-centered Evaluation with Biosignals for Localized Surface

Roughness on Expressway Pavements

Kazuya Tomiyama | Marei Inagi

175 Automation of PASER Condition Rating Through 3D Laser

Scanning and Image Processing

Richard G. Fox-Ivey | John Laurent | Nhat-Tan Nguyen

SP1 Wirtgen Group, latest developments of sustainable Cold Recycling

Technology, experiences and job reports

Mike Marshall | Davide D'Onza

CONCURRENT TECHNICAL SESSION 4

Topic Pavement Surface Characteristics and Measures

Day #3, September 14th

Time 11:30 a.m. – 01:30 p.m.

Room NORMA

Sessions Chairs Claudia Nodari | TBD

ID title

206 A Correlation between Laser-based Device and Close-Range

Photogrammetry Technique for Road Pavement Macrotexture

Estimation

Mauro D'Apuzzo | Azzurra Evangelisti | Giuseppe Cappelli

Vittorio Nicolosi

217 Reference Calculations and Implementation of Mean Profile Depth

Thomas Lundberg | Ulf Sandberg | Luc Goubert | Wout Schwanen

Robert Rasmussen

314 Evaluating the Feasibility of Convolutional Neural Networks in

Detecting Cracks on Flexible Road Pavements

Hermann U. Tapamo | Anna S. Bosman | James Maina

Emile Horak

225 Two Methods for Sustainable and Safe Surface Textures for

Pavements: Surface Treatment with Reactive Resins and

Grinding)

Tim Alte-Teigeler | Martin Oeser

226 The Fundamental Characteristics of Sideway-Force Skid

Resistance Measurement Devices

Peter D. Sanders | Cormac Browne | Martin Greene

Andrew Mumford

228 Reliability of Laser Measurements of Surface Macrotexture on

Untrafficked Pavements

Helen Viner | Nathan Dhillon | Alex Wright | Nassera Thompson

CONCURRENT TECHNICAL SESSION 4

Topic Road Materials and Construction

Day #3, September 14th

Time 11:30 a.m. – 01:30 p.m.

Room TOSCA

Sessions Chairs Patrick Mallejacq | Emanuele Toraldo

ID title

203 Medium to Long Term Stockpiling Performance of Bitumen

Stabilised Materials (BSMs)
Niel N. Claassens | Kim Jenkins

204 Optimization of Reinstating Drill Core Holes - Laboratory

Investigation and Accelerated Pavement Testing

Tim Schroedter | Pahirangan Slvapatham | Stefan Koppers

Hartmut Beckedahl

309 Field Evaluation of Different Rollers Effect on the Compaction of

Hot Mix Asphalt Overlays Using an Electromagnetic Densitometer

Rasool Fazeli | Hamidreza Sahebzamani | Omid Ferdosian

242 Winter Damage to Road Wearing Course

Heidi Kauffmann | Pascal Rossigny

255 The Use of Rejuvenating Bio Emulsion From Soybean Oil in

Recycled Aggregates for Chip Seals

Ataslina de Paula Silva | Mateus S Brito | Suelly Barroso Caio Falcão | Ronald William | Antônia Uchôa | Sandra Soares

258 Laboratory and Field Evaluation of Modified Microsurfacing to

Improve Durability and Lowering Destructive Environmental

Impacts

Rasool Fazeli | Nader Mahmoodinia | Hamidreza Sahebzamani

Masoud Mahmoodinia

CONCURRENT TECHNICAL SESSION 4

Topic Quality Assessment of Pavement Surface Layers

Day #3, September 14th

Time 11:30 a.m. – 01:30 p.m.

Room MANON

Sessions Chairs Ciro Caliendo | TBD

ID title

240 Characterising Texture in Hot Rolled Asphalt Pavement Surfaces

Using 3D Modelling Techniques

Raymond McGowan | Brian Mulry | Kieran Feighan

Rory K. Donnellan

355 Experiences in the Use of Automatic 3-D Distress Evaluation

System for Pavement Monitoring in Argentina

Gustavo D. Mezzelani | Franco Piazza

251 Are There New Ways to Improve the Surface Characteristics of

Asphalt Mixtures? For Sure! By Functionalization Process Iran Rocha Segundo | Cátia Afonso | Orlando Lima Jr.

Salmon Landi Jr. | Elisabete F. Freitas | Joaquim O. Carneiro

259 Alternative Methods of Road Condition Monitoring

Berthold Best | Helena Angerer

213 A Methodology to Assist in the Management of Friction Supply on

the Irish National Road Network

Emmanouil Kakouris | Enda Burton | Mark Tucker

Ilaria Bernardini | Tom Casey

297 Large Scale Noise Survey of the Walloon Road Network Using CPX

Method: Second Measurement Campaign Anneleen Bergiers | Sébastien Marcocci

POSTER SESSION

Day #3, September 14th
Time 02:30 p.m. – 03:30 p.m.

Room NORMA

ID title

191 Shrinkage Crack Induction for The Study of Repair Agents in Rigid

Pavements

Sebastian Lopez | Gloria Beltran | Henry Meneses

Pedro F. B. Brandão

235 A Tree-based Machine Learning Approach to Predicting IRI and

RSL on Thailand's Highways Network

Theerada Rungruangjaroensuk | Ponlathep Lertworawanich

Rajwanlop Kumpoopong | Wuttichai Amornprasitpol

198 Road Asset Management with a Mobile Game and Artificial

Intelligence

Markku M Knuuti | Konsta Dr. Sirvio | Vesa Männistö

Susanna Suomela

202 Comprehensive Road Infrastructure Measurements –

The Solution Towards Next Generation Sustainable Road

Infrastructure

Bjarne Schmidt | Simon Tetley | Verushka Balaram

Jerome Daleiden

200 Sub-mm 3D Laser Imaging for Bridge Deck Safety Evaluation and

Al Potentials with 3D Pavement Data

Kelvin Wang | Guangwei Yang | Guolong Wang

209 Implementation of a Laboratory Design Method for Anti-slip

Asphalt Pavements - FAPLAB

Victor Garcia Rabadan | Gloria Motos Cascales

Jose Manuel Berenguer Prieto

ID	title
212	Development of New Method for Detecting Partial Deformation and Subsidence of Porous Asphalt Surface Layer and Examination of New Management Criteria Kiyohito Yamaguchi Ryo Kato
215	The Development and Validation of the World First SWF/LCMS Combination Iacopo Malquori Eelke Vromans
218	Pavement Friction Characterization with the Wehner & Schulze (W&S) Machine Donatien de Lesquen du Plessis Casso Julien Waligora Simon Pouget
220	Rutting Effects on Electrified Asphalt Roads Embedding Electric Vehicles Charging Units Claudia Nodari Maurizio Crispino Emanuele Toraldo
224	Airport Noise Emission: Models Comparison and Application on a Real Case Study Misagh Ketabdari Fazel Nasserzadeh Maurizio Crispino Emanuele Toraldo
236	Waste Plastic as Potential High Value Solution for Asphalt Road Applications Edoardo Bocci Tullio Caraffa Arianna Stimilli Maurizio Bocci
241	Road Pavement Surface Friction Index Contactless Stefano Oddone Stefano Drusin Gianluca Salvatore Spinazzola Cristina Tozzo
249	Transparent Communication and Improvement of Cycle Path Maintenance for an Increase in Bicycle Use Rainer Hess Carsten C. Mahnel Liliane Stein

ID	title
254	The Use of Bio-Emulsion from Soybean Oil in Maintenance of Flexible Pavements Ataslina de Paula Silva Caio Falcã Mateus S. Brito Ellen Serra Suelly Barroso Ronald Williams Antônia Uchôa
	Suetty Barroso Rollatu Wittiams Antonia Octioa
266	Quality Evaluation Management System for Road Infrastructures Stefano Oddone Gianluca Cossale Luca Frezza Salvatore Gianluca La Placa Andrea Meo Bruno Scrudato Gianluca Salvatore Spinazzola Cristina Tozzo
275	The Relationship between Surface Defects and Structural Distress on A 50-year-old Japanese Toll Road Keizo Kamiya
279	Management of Pavement Surface at Curve Section Using by Real Time Traction Tool Kanako Uchino Nobuya Okamoto Takahisa Fukushima Rei Fujita
282	Can the Increase in Roughness and Rutting be Attributed to Surface Cracking? Doug Brown
285	Comparison of Pavement Condition Mapping Systems Sara Anastasio Doreen Siebert Dagfin Gryteselv Trond Østen
289	Development and Implementation of a New Policy on the Management of Skid Resistance in Ireland Brian Mulry Rory K. Donnellan Raymond McGowan Stephen Smyth
293	Exhaustive Assessment of Asphalt Mixture Reinforcement with Waste Fibres Helena Miera-Dominguez Carlos Real-Gutierrez Teresa Pomposo-Perez Irune Indacoechea-Vega Pedro Lastra-González Daniel Castro-Fresno

טו	title
302	Rejuvenating Agents vs Fluxing Agents: Their Respective Mechanisms of Action on a Binder Subjected to Multiple Aging Cycles
	Shahin Eskandarsefat Paolino Caputo Cesare Oliviero Rossi Michele Porto Valeria Loise Eugenia Giorno Shahin Eskandarsefat Loretta Venturini
310	How Modern Petrographic Analysis of Roadstone Aggregate Can Provide a Better Understanding of Their Frictional Properties Richard P. Unitt Patrick Meere Tom Casey Brian Mulry
312	New Procedure for Quality Assurance of Municipal Road Survey and Assessment Campaigns Christiane Krause Ulrich Pfeifer Markus Stöckner Ute Stöckner
322	A Prediction Model of the Coefficient of Friction for Runway Using Artificial Neural Networks Mariana Myszak Danilo Rinaldi Bisconsini Jorge Durán Jose L Fernandes Jr Lucas Moreira Magalhães José Breno Ferreira Quariguasi Francisco Heber Lacerda De Oliveira
327	Principles for Using Wearing Courses in Terms of Skid Resistance Pavla Nekulova Leos Nekula Josef Stryk
329	Estimation of Pavement Layer Moduli of Thin-Sealed Roads for use in Pavement Management Systems Christopher Ngwira Andrew Otto Presley Chilonda Chilukwa Nathan Andrew Mwale
276	A Study on the Association Between RLCBR and DCP Subgrade Moduli for Low Volume Road Evaluation Supratim Kaushik Anjan Kumar S. Teiborlang Lyngdoh Ryntathiang

ID	title
335	The Multi-Speed Deflectometer: New Technology Developed for Traffic Speed Non-Destructive Structural Pavement Testing Alessandro Marradi Lily B. Grimshaw Graham Salt
339	Surface Heat Budget of Sixteen Pavement Samples on an Experimental Test Site in the Parisian Region Sophie Parison Maïlys Chanial Frédéric Filaine Laurent Royon Martin Hendel
342	Raveling Algorithm for PA and SMA Based on 3D Data Willem van Aalst Pieter Piscaer Bram Vreugdenhil Frank Bouman Marten van Antwerpen Gert van Antwerpen Jan Baan
349	Correlation Analysis of Pavement Damage on Orthotropic Steel Slabs of Road Viaducts Focusing on Road Structure and Traffic Environment Kose Eri Yasumoto Aoki Ryuzo Kamishita
361	Thermal Behaviour of Innovative Pavements for the Life Cool & Low Noise Asphalt Project Maïlys Chanial Sophie Parison Martin Hendel Laurent Royon
10	Long-Term Performance-Based Maintenance Contracts to Secure the Maintenance of Existing Roads. Christophe Nicodème Jean-Claude Roffé
169	Achieving Performance in Large Public Infrastructure Projects: The Case of Road Works in Senegal Mohamed Laye

SURF2022

ID	title
184	Road Maintenance Massimiliano Rizzi Roberto Galizia
313	Cellulose Fibres for Better Performing Road Pavements Patrizia Bellucci Filippo Praticò Giuseppe Chidichimo
165	A New Challenge for Pavement Performance Assessment in Thailand Auckpath Sawangsuriya Harutus Phoban Theerada Rungruangjaroensuk
348	Evaluating Aggregate-Emulsion Compatibility Test Using Color- Measuring Devices Shivpal Yadav Cassie Castorena