



Note: On Tuesday, June 27th, for your convenience the conference secretariat will be available from 19:00-20:00 to distribute the proceedings, etc. to those individuals whom have already registered for the conference.

08:00	REGISTRATION			
	ROOM: MACEDONIA			
08:45	OPENING <i>Chairs: Andreas Loizos, Imad L. Al-Qadi & Tom Scarpas</i>			
09:30	Theme lecture: “Toll Road PPP’s. A tool for innovation promoting cost efficiency through high quality pavements” <i>Bill M. Halkias, P.E., F.ASCE, F.ITE, President, Hellenic Association of Toll Road Network (HELLASTRON)</i>			
09:45	Keynote lecture: “Imposed vs. chosen change: A vision for the future of the pavement enterprise” <i>Prof. John Harvey, University of California, Davis, USA</i>			
10:45	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.1: Unbound granular materials <i>Chair: Sigurdur Erlingsson</i>	Session B.1: Structural evaluation <i>Chair: Lev Khazanovich</i>	Session C.1: Airfield pavements structures (Part I) <i>Chair: Greg White</i>	Session D.1: Railway track structures (Part I) <i>Chair: Pauli Kolisoja</i>
11:15	Laboratory investigations of thermal properties of crushed rock materials <i>K. Rieksts, I. Hoff, E. Kuznetsova & J. Côté</i>	Evaluation of cement-bitumen treated material bearing capacity by in-situ tests <i>M. Meocci & F. La Torre</i>	Development of new FAA design procedures for extended airport pavement life <i>D.R. Brill & T.A. Parsons</i>	Influence of water content and triaxial size effects on determination of bearing capacity of fouled ballast <i>A.K. Rohrman, Z. Yang, H.F. Kashani & C.L. Ho</i>
11:35	Experimental characterization of unbound granular materials subjected to high harmonic loads <i>G. Canon Falla, S. Leischner, F. Wellner & T. Spanier</i>	Bearing capacity assessment of a flexible pavement subjected to seasonal effects <i>G. Bazi, S. Saboundjian, R. Briggs & P. Ullidtz</i>	Development of rational ACN/PCN system <i>C. Fabre & G. Vaurs</i>	Laboratory evaluation of under-ballast mat effectiveness to mitigate differential movement problem in railway transition zones <i>A. de O. Lima, M.S. Dersch, Y. Qian, E. Tutumluer & J.R. Edwards</i>
11:55	Unsaturated resilient strain behaviours of a granular material <i>P. Jing, C. Chazallon & H. Nowamooz</i>	Variability of Light Weight Deflectometer during laboratory and field applications for subgrade soils under variable moisture conditions <i>M. Mazari, G. Garcia, I. Abdallah, J. Garibay & S. Nazarian</i>	Harmonizing PCN reporting on extended airport maneuver areas <i>C. Busch & A. Rolim</i>	Ballast degradation analysis by Los Angeles Abrasion test and image analysis method <i>Y.L. Guo & G.Q. Jing</i>
12:15	Numerical simulation and laboratory testing of unbound base course materials considering the effect of temperature <i>J. Patzak & F. Wellner</i>	Using QC LWD data for improving pavement design and management in Chile and Peru <i>J.R. Marcobal, F. Cerrolaza, J. Arias & M.A. Moreno</i>	Towards airfield pavement design using cold recycled bound materials <i>H.I. Lacalle Jimenez, N. Thom & B. Hakim</i>	Effect of temperature and traffic on mix-design of bituminous asphalt for railway sub-ballast layer <i>F. Martinez Soto, G. Di Mino & F. Acuto</i>



	Session A.1: Unbound granular materials <i>Chair: Sigurdur Erlingsson</i>	Session B.1: Structural evaluation <i>Chair: Lev Khazanovich</i>	Session C.1: Airfield pavements structures (Part I) <i>Chair: Greg White</i>	Session D.1: Railway track structures (Part I) <i>Chair: Pauli Kolisoja</i>
12:35	Some recent research on the hydraulic conductivity of road materials <i>P.J. Vardanega, S. Feng & C.J. Shephard</i>	Contribution to lateritic soils calibration using the dynamic penetrometer PANDA <i>Y. Gansonré, C. Bacconnet, P. Breul, M. Benz, P. Moustan, R. Gourvès & S. De-Maistre</i>	Asphalt Pavement Analyzer—laboratory tool for characterization of rutting performance of airport pavement Hot Mix Asphalt (HMA) <i>N. Garg, Q. Li & J. Stein</i>	Some results on the properties and behavior of railway ballast <i>E. Fortunato, A. Paixão, S. Fontul & J. Pires</i>
12:55	Structural characteristics of unbound aggregate materials in conventional flexible pavements <i>L. Wang & X.G. Xie</i>	Predicting roller-compacted concrete properties from mixture proportions <i>J. LaHucic & J. Roesler</i>	Implementing the traffic speed deflectometer for airfield runway assessment <i>D.D. Rodriguez & L. Edwards</i>	Roadbed improvement of an existing railway line located in cold region by reusing crushed deteriorated ballast <i>L.L. Fu, J.H. Xiao, S.H. Zhou, D. Zhang, Y.H. Wang, W.J. Liu & L.H. Jiang</i>
13:15	LUNCH			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.2: Subgrade soils <i>Chair: Sabine Leischner</i>	Session B.2: Structural design methods <i>Chair: Michael Wistuba</i>	Session C.2: Stabilization and reinforcement (Part I) <i>Chair: Soheil Nazarian</i>	Session D.2: In-situ measurements techniques and monitoring (Part I) <i>Chair: Elie Y. Hajj</i>
14:15	Evaluation of a resilient modulus model for unsaturated soil conditions <i>P. Thirthar Palanivelu & C.E. Zapata</i>	A comparison of mechanistic-empirical pavement design methods for Norwegian conditions <i>I.E. Trangen & H. Mork</i>	Bearing capacity of a stabilised granular layer on clay subgrade <i>A.S. Lees</i>	Continuous health monitoring of asphalt concrete pavements using surface-mounted battery-free wireless sensors <i>H. Hasni, A.H. Alavi, K. Chatti & N. Lajnef</i>
14:35	Investigating correlations between stiffness indexes for Brazilian soils <i>M. dos Reis & R. Moura Fortes</i>	Tool for enhancing the 1993 AASHTO pavement design method to incorporate the dynamic modulus of asphalt mixture <i>Y.S. Hamdar & G.R. Chehab</i>	US highway 65 emergency pavement subgrade improvement <i>R.L. Boudreau, J.P. Donahue & R.W. Brown</i>	Instrumentation to evaluate the field performance of composite overlays using accelerated pavement testing <i>H. Rizvi, A. Ali, Y. Mehta, A. Francoise, C. Purdy & A. Nolan</i>
14:55	Bearing capacity on stockpiled fly ash <i>C.A. Lenngren</i>	Determination of AASHTO 1993 layer coefficients considering time- and temperature-dependency of the asphalt mixture <i>M. Lanotte & M.E. Kutay</i>	Pavement subgrade soil bearing capacity as influenced by stabilization process <i>A. Athanasopoulou & G. Kollaros</i>	Inferring pavement layer properties from a moving measurement platform <i>S. Andersen, E. Levenberg & M.B. Andersen</i>
15:15	Analysis of compaction and California Bearing Ratio (CBR) test results of a mixture of iron ore tailings with Brazilian tropical soil in different proportions for road construction purposes <i>A.A.N. Dantas, T.A. Mendes, A.J.A. Posse, L.F.M. Ribeiro & C.M.C. Gurjão</i>	Comparison of practice for aggregate use in road construction—results from an international survey <i>M. Fladvad, J. Aurstad & B.J. Wigum</i>	Pavement design considerations for subgrades stabilized with recycled materials <i>N. Bandara, E. Jensen & T. Binoy</i>	Quality control tool for asphalt emulsion-based chip seal curing times <i>M.A. Montoya, J.E. Haddock & W.J. Weiss</i>



	Session A.2: Subgrade soils <i>Chair: Sabine Leischner</i>	Session B.2: Structural design methods <i>Chair: Michael Wistuba</i>	Session C.2: Stabilization and reinforcement (Part I) <i>Chair: Soheil Nazarian</i>	Session D.2: In-situ measurements techniques and monitoring (Part I) <i>Chair: Elie Y. Hajj</i>
15:35	Tunnels interaction with surrounding alluvial soils <i>O. Naeemifar & R. Rahbari</i>	A mechanistic empirical design concept for low volume flexible pavement using unbound granular materials with application of concentration factor in a layered system <i>P.P. Biswas, M.K. Sahis, G.C. Mandal & D. Majumder</i>	Swelling pressure and consolidation of soft clay stabilized with bagasse ash and lime <i>H. Hasan, L. Dang, H. Khabbaz & B. Fatahi</i>	Investigation of sampling strategy on estimating strains in flexible pavements through Response Surface Method (RSM) <i>R. Aswathy & A.K. Swamy</i>
15:55	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.3: Asphalt mixes (Part I) <i>Chair: Sandra Erkens</i>	Session B.3: Geophysical assessment <i>Chairs: Andrei Petriaev & Christina Plati</i>	Session C.3: Airfield pavements structures (Part II) <i>Chair: Erol Tutumluer</i>	Session D.3: Railway track structures (Part II) <i>Chairs: Tatsuya Ishikawa & Rita Moura Fortes</i>
16:10	Laboratory evaluation of stiffness and fatigue susceptibility of asphalt paving materials incorporating environmental factors <i>A. Aljuboryl, G.D. Airey & J.R.A. Grenfell</i>	Pavement thickness evaluation with air-coupled GPR systems <i>V. Marecos, M. Solla, S. Fontul & M.L. Antunes</i>	Comparing near surface aircraft pavement responses calculated by finite element and layered elastic methods <i>G. White & W. Smith</i>	Modeling the viscoplastic creep behavior of asphalt concrete for use in ballastless railway tracks in tunnels <i>O. Lopez Polanco, N. Calon, T. Gabet & P. Hornych</i>
16:30	Laboratory test and numerical simulation of microwave heating properties of asphalt mixture <i>H. Wang, P. Apostolidis, X. Liu, T. Scarpas, J. Yang & L. Xu</i>	Second-generation analysis approach for condition assessment of transportation infrastructure using Step-Frequency (SF) Ground-Penetrating-Radar (GPR) array system <i>N. Gagarin, J.R. Mekemson & D. Goulias</i>	Assessment of critical loading conditions on rigid airfield pavements by means of numerical simulation <i>D. Mounier, J.-M. Piau & O. Chupin</i>	Effect of creep and destructuration under Sebou high speed railway line embankment <i>A.H. Mridakh, F. Lahlou, A. Mridekh, H. Ejjaouani & H. Labied</i>
16:50	An implementation of the Illinois flexibility index testing protocol for balanced asphalt mix designs <i>M.K. Barry, I.L. Al-Qadi, H. Ozer & F. Safi</i>	A comparative investigation of the pavement layer dielectrics by FDTD modelling and reflection amplitude GPR data <i>F. Tosti, A.M. Alani, A. Benedetto, L. Bianchini Ciampoli, M.G. Brancadoro & L. Pajewski</i>	Neural networks prediction of critical responses related to top-down and bottom-up cracking in airfield concrete pavement <i>A. Rezaei-Tarahomi, O. Kaya, H. Ceylan, K. Gopalakrishnan, S. Kim & D.R. Brill</i>	Effects of model scale on lateral resistance characteristic of sleepers in railway ballasted tracks <i>H. Tomita, K. Hayano & P.T. Anh</i>



	Session A.3: Asphalt mixes (Part I) <i>Chair: Sandra Erkens</i>	Session B.3: Geophysical assessment <i>Chairs: Andrei Petriaev & Christina Plati</i>	Session C.3: Airfield pavements structures (Part II) <i>Chair: Erol Tutumluer</i>	Session D.3: Railway track structures (Part II) <i>Chairs: Tatsuya Ishikawa & Rita Moura Fortes</i>
17:10	Effect of compaction temperatures on the warm mix asphalt volumetrics and stability <i>H.I. Ozturk & O.C. Pamuk</i>	Study on the use of low field nuclear magnetic resonance for detecting asphalt aging <i>I. Menapace, E. Masad, M. Nogueira d'Eurydice, P. Galvosas, M.W. Hunter & O. Sirin</i>	Perpetual pavement responses under single and dual wheel aircraft gear loading <i>H. Wang, M. Li & N. Garg</i>	Track defects and the dynamic loads due to suspended (sprung) masses of railway vehicles <i>K. Giannakos</i>
17:30	Apps for modal analysis to characterize the complex modulus of asphalt concrete <i>A. Gudmarsson & N. Ryden</i>	Soft soils boundaries detection by GPR (the Case of Port Antioquia Survey, Colombia) <i>Y.A. Sukhobok, V.V. Pupatenko, G.M. Stoyanovich & E.V. Fedorenko</i>	Effect of subbase quality on performance of rapid-setting replacement slabs for airfield pavements <i>J.S. Tingle, H.P. Bell, L.P. Priddy & L. Edwards</i>	Performance of track transition remedies implemented in high tonnage heavy axle load environment <i>D. Li, J. Baillargeon & L. Maal</i>
17:50	Computational study of the influence of form and angularity of coarse aggregates in the linear viscoelastic properties of asphalt mixtures <i>D. Castillo & S. Caro</i>	Assessment of pavement structures using non-invasive imaging and geotechnical testing <i>N. Khoury, C. Saad, Y. Maalouf & M. Nasr</i>	Preliminary analysis of pavement life indicators of large- and medium-hub airport runways <i>T.A. Parsons & D.R. Brill</i>	Finite element model on stress distribution of ballasted railway subgrade and its validation <i>Y. Feng, C. Zhao & X. Zhang</i>
18:10	Degradation of asphalt mixtures due to impact method of compaction <i>P. Singh & A.K. Swamy</i>	How to create a full-wave GPR model of a 3D domain of railway track bed? <i>M.G. Brancadoro, F. Tosti, L. Bianchini Ciampoli, L. Pajewski, D. Pirrone, A. Benedetto, A.M. Alani</i>	Domain analysis for airfield pavement: Moving forward from point responses <i>J.A. Hernandez, A. Gamez & I.L. Al-Qadi</i>	Theoretical assessment of railway ballast degradation under cyclic loading <i>P.K. Bajpai & A. Das</i>
END OF SESSIONS: 18:30				



08:00	REGISTRATION			
	ROOM: MACEDONIA			
08:30	Keynote lecture: “Recent Innovations in Airfield Pavement Design and Materials” <i>Prof. Jeffery Roesler, University of Illinois, Urbana-Champaign, USA</i> <i>Chair: Tom Scarpas</i>			
09:30	ROOMS: NAOUSSA & EDESSA Poster Session I (see below) <i>Chairs: Christiane Raab & Serdal Terzi</i>			
	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.4: Asphalt mixes (Part II) <i>Chair: Eyad Masad</i>	Session B.4: Performance modeling (Part I) <i>Chair: Emin Kutay</i>	Session C.4: Backcalculation analyses of deflection measurements <i>Chair: Karim Chatti</i>	Session D.4.1: Pavement serviceability condition (Part I) <i>Chair: Filippo G. Praticò</i>
10:20	Evaluation of mixing temperature impact on warm mix asphalt performance <i>A. Abed, N. Thom & J.R.A. Grenfell</i>	3D-FE Modeling and dynamic response analysis of asphalt pavements subjected to FWD impact loads <i>W. Uddin, Y. Nanagiri & S. Garza</i>	Determination of an optimum backcalculation cross-section for flexible pavements <i>K.A. Tutu & D.H. Timm</i>	Non-destructive crack identification for concrete pavements: A case study <i>L.S. Salles, L. Khazanovich, J.T. Balbo & A. Cargnin</i>
10:40	Linear viscoelastic behaviour of bituminous mixtures with multi-Recycled Asphalt Pavement <i>A. Pedraza, H. Di Benedetto, C. Sauzéat & S. Pouget</i>	3D modeling and measuring of tire-pavement contact pressure <i>E.Y. Manyo, I. Leandry, B. Picoux, P. Reynaud, F. Allou & C. Petit</i>	Evolution of asphalt modulus from falling weight deflectometer tests and challenges associated with its interpretation and applications: A case study using LTPP data <i>M. Oshone, M. Elshaer, E. Dave & J.S. Daniel</i>	Advanced analysis of pavement longitudinal profiles for rehabilitation diagnostic <i>J.-P. Bilodeau, G. Doré & L.-A. Grégoire</i>
11:00	Comparison of DSR and BBR tests for determining the Performance Grade (PG) of asphalt binder at low temperature <i>C. Riccardi, A. Cannone Falchetto, M.P. Wistuba & M. Losa</i>	Influence of layer thickness on the flow of asphalt under simulated compaction <i>E. Ghafoori Roozbahany, M.N. Partl & A. Guarin</i>	A model to adjust the falling weight deflections due to temperature variations <i>J.C. Pais & P. Pereira</i>	Pavement performance and durability through rational design <i>A. Mouratidis & G.P. Papageorgiou</i>
11:20	Aging of bituminous binders in asphalt pavements and laboratory tests <i>X. Lu, H. Soenen & O.-V. Laukkanen</i>	Performance evaluation of perpetual pavement after ten years <i>S. Islam, A. Sufian, M. Hossain & D. Gedafa</i>	A layered pavement structural and remaining capacity model by analysis of FWD and TSD data <i>J.D. Roberts</i>	Comparative laboratory evaluation of macro texture depth of chip seal samples using sand patch and outflow meter test methods <i>I. Gökalp, V.E. Uz & M. Saltan</i>



	Session A.4: Asphalt mixes (Part II) <i>Chair: Eyad Masad</i>	Session B.4: Performance modeling (Part I) <i>Chair: Emin Kutay</i>	Session C.4: Backcalculation analyses of deflection measurements <i>Chair: Karim Chatti</i>	Session D.4.2: Full-scale testing <i>Chair: Andrea Benedetto</i>
11:40	Effects of mineral fillers and bitumen on ageing of asphalt mastics properties <i>R. Alfaqawi, G.D. Airey & J.R.A. Grenfell</i>	Determination of asphalt layer thickness above which axle load-induced strains initiate op-down cracking <i>A. Nikolaidis & E. Manthos</i>	Application of falling weight deflectometer for the estimation of in-situ shear strength parameters of subgrade layer <i>H. Nabizadeh, E.Y. Hajj, R.V. Siddharthan, S. Elfass & M. Nimeri</i>	Pavement strengthening with respect to frost penetration: A laboratory study using a full-scale heavy vehicle simulator <i>J.-P. Bilodeau, J.-P. Cloutier, G. Doré & P.M. Thiam</i>
12:00	An alternative method for determining thermal stress in asphalt binder based on Laplace transform <i>A. Cannone Falchetto, C. Riccardi, D. Wang, M.P. Wistuba & K.H. Moon</i>	Prediction of heavy vehicle impact on rut development using PEDRO model <i>S.F. Said & A.W. Ahmed</i>	Backcalculation of asphalt concrete moduli using field-measured strain <i>M.M. Robbins, D.H. Timm & K.A. Tutu</i>	Full-scale accelerated pavement testing of geogrid stabilized roads <i>J.S. Tingle, G.J. Norwood, W.J. Robinson, M.H. Wayne & J. Kwon</i>
12:20	Development of empirical models for the estimation of the rheological properties of asphalt binders <i>F. Martinez, M. Cauhape Casaux & S. Angelone</i>	Evaluation of rutting potential in cold bituminous emulsion mixture using finite element analysis <i>H.K. Shanbara, F. Ruddock, W. Atherton & G. Rothwell</i>	Development of a frequency temperature correction model for FWD back-calculated moduli based on frequency-temperature superposition principle / <i>J.M. Flores, P. Le Van, C.K. Park, W. Kim & H.J. Lee</i>	Use of accelerated pavement testing for degree of risk due to road cavity <i>H.M. Park, Y.T. Kim, J.Y. Choi & B. Kim</i>
12:40	LUNCH			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.5: Rehabilitation and maintenance issues <i>Chair: Dimitris Goulias</i>	Session B.5: Recycled materials and techniques (Part I) <i>Chair: Massimo Losa</i>	Session C.5: Stabilization and reinforcement (Part II) <i>Chair: Chassan Chehab</i>	Session D.5: Mechanics of layers interfaces <i>Chair: Herve Di Benedetto</i>
13:30	Assessment of the efficiency of pavement surface rehabilitation techniques <i>J. Neves & H. Simas</i>	Performance evaluation of a 100% recycled asphalt pavement mixture using a polymer binder: A pilot study <i>E.Y. Hajj, M. Piratheepan & P.E. Sebaaly</i>	Sustainable field applications of quarry byproducts mixed with large size unconventional aggregates <i>I. Qamhia, E. Tutumluer, H. Ozer & H. Kazmee</i>	Analysis of the behavior of pavement layers interfaces from in situ measurements <i>N.S. Duong, J. Blanc & P. Hornych</i>
13:50	Precast concrete pavements for rapid rehabilitation of high traffic volume highways—US state of practice <i>S. Tayabji & S. Tyson</i>	Maximising asphalt recycling in road surface courses: The importance of a preliminary binder design <i>G.M. Pires, A. Jiménez del Barco Carrión, G.D. Airey & D. Lo Presti</i>	Analytical and numerical design approaches for stabilized road pavement base layers <i>P. Skels, A. Zarins, K. Bondars & V. Haritonovs</i>	Interface shear fatigue performance of asphalt pavement structures in function of normal stress and temperature <i>I. Isailović, M.P. Wistuba, S. Büchler & A. Cannone Falchetto</i>



	Session A.5: Rehabilitation and maintenance issues <i>Chair: Dimitris Goulias</i>	Session B.5: Recycled materials and techniques (Part I) <i>Chair: Massimo Losa</i>	Session C.5: Stabilization and reinforcement (Part II) <i>Chair: Chassan Chehab</i>	Session D.5: Mechanics of layers interfaces <i>Chair: Herve Di Benedetto</i>
14:10	Road asset valuation system using long term pavement data analysis <i>A. Heitor, J. Davis, P. Tobin & K. Bogie</i>	Assessment of the bearing capacity of pavements using fiber optic sensors <i>V. Papavasiliou & A. Loizos</i>	The stabilization of a soft soil subgrade layer using a new sustainable binder produced from free-cement blending of waste materials fly ashes <i>H.M. Jafer, W. Atherton, F. Ruddock & E. Loffill</i>	Effect of glass fibre grids on the bonding strength between two asphalt layers <i>L. Sagnol, C. Chazallon & M. Stöckner</i>
14:30	An efficiency based approach to multi-year network-level maintenance programming <i>T. Lorino & P. Hankach</i>	Performance of warm recycled mixtures in field trial sections <i>A. Stimilli, F. Frigio, F. Cardone & F. Canestrari</i>	Mechanical characteristics and insolubilization effect of incineration bottom ash from MSW using aging method <i>K. Sato & T. Fujikawa</i>	Static and cyclic evaluation of interlayer bonding <i>C. Raab, M.N. Partl, E. Fourquet & A.O. Abd El Halim</i>
14:50	Macroeconomic and external costs caused by inefficient pavement management: Empirical evidence from the A9 motorway in Germany <i>W.H. Schulz, L. Heinrich & S. Scheler</i>	Evaluation of bituminous binders miscibility for warm-mix recycling techniques <i>S. Vassaux, V. Gaudefroy, L. Jean Soro, A. Pévère, V. Mouillet, L. Boulangé & V. Barragan-Montero</i>	Influences of curing conditions on strength and microstructure of lime-amended fly ash <i>A. Pani & S.P. Singh</i>	Characterization of the bond between asphalt layers and glass grid layer with help of a wedge splitting test <i>M. Gharbi, M.L. Nguyen, S. Trichet & A. Chabot</i>
15:10	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.6.1: Pavement serviceability condition (Part II) <i>Chair: Markus Oeser</i>	Session B.6: Permanent deformability characteristics of geomaterials and unbound materials <i>Chair: Tom Papagiannakis</i>	Session C.6: Performance of asphalt mixes with additives (Part I) <i>Chair: Gordon D. Airey</i>	Session D.6: Railway track structures (Part III) <i>Chair: Simona Fontul</i>
15:25	Special theme lecture: A deep-learning based fully automated cracking detection with pixel-accuracy <i>K.C.P. Wang</i>	Stiffness and permanent deformation characteristics of open-graded unbound granular materials <i>M.S. Rahman, S. Erlingsson & F. Hellman</i>	Feasibility study on a thermoset polymer-coated emulsified warm-mix asphalt mixture <i>P.J. Yoo, B.S. Ohm, K.S. Park & I.L. Al-Qadi</i>	Influence of parallel grading on hydro-mechanical characteristics of unsaturated fouled ballast <i>T. Ishikawa, S. Matsutani, T. Tokoro, T. Nakamura & Y. Momoya</i>
15:45	Structural Health Monitoring of pavement assets through acoustic signature <i>R. Fedele, F.G. Praticò, R. Carotenuto & F.G. Della Corte</i>	Estimation of shakedown loads of flexible pavements <i>A.G. Stathas & K.V. Spiliopoulos</i>	Performance properties of asphalt mixture containing Linz-Donawitz (LD) steel slag <i>J. Groenniger & M.P. Wistuba</i>	Introduction of new systems for evaluation of ballast bearing capacity <i>S. Cafiso, B. Capace, C. D'Agostino, E. Delfino & A. Di Graziano</i>
16:05	Challenges when modelling ravelling in porous friction courses <i>L. Manrique-Sanchez, S. Caro & S. Torres</i>	Permanent deformation measurements under flexible pavements using image correlation <i>A. Bowman & S. Haigh</i>	Comparative investigation on the reinforcing effects of polymer-based fiber into bituminous mixtures <i>E. Toraldo, E. Mariani & M. Crispino</i>	Prediction of railway ballast service life <i>R. Nålsund</i>



	Session A.6.1: Pavement serviceability condition (Part II) <i>Chair: Markus Oeser</i>	Session B.6: Permanent deformability characteristics of geomaterials and unbound materials <i>Chair: Tom Papagiannakis</i>	Session C.6: Performance of asphalt mixes with additives (Part I) <i>Chair: Gordon D. Airey</i>	Session D.6: Railway track structures (Part III) <i>Chair: Simona Fontul</i>
16:25	Overview of California studies on noise reduction for asphalt and concrete surfaces <i>J. Harvey, R. Wu, I. Guada, Q. Lu, A. Ongel, A. Rezaei, E. Kohler & C. Reyes</i>	Implementation of shakedown and packing theories for unbound granular materials <i>T.F. Yideti, A. Dawson & B. Birgisson</i>	An experimental study on waxy bitumens <i>J. Oner, B. Sengoz & G. Malkoç</i>	The impact of heavy freight train on the roadbed <i>A.V. Petriaev</i>
16:45	Assessment of tire-pavement noise by using On-Board Sound Intensity (OBSI) method in the State of Qatar <i>M. Ohiduzzaman, O. Sirin & E. Kassem</i>	Cumulative deformation characteristic and shakedown limit of railway ballast under cyclic loading <i>J.H. Xiao, D. Zhang, Y.H. Wang & Z. Luo</i>	Effect of new types of synthetic waxes designed for low-temperature asphalt mixtures <i>L. Benešová, J. Mastný & J. Valentin</i>	Study on the mechanism and inspection method of railway pumping <i>C.P. Kuo, C.H. Hsu, C.W. Wu, P.L. Liu & D.W. Chen</i>
17:05	Session A.6.2: Case histories <i>Chair: Pierre Hornych</i>	Experimental study on cyclic deformation and particle breakage of railway ballast <i>X. Bian, D. Sun & W. Li</i>	Chemical and physical properties of an asphalt binder modified by the sap of <i>Euphorbia Tirucalli</i> plant: Application in bituminous prime coat <i>L.M. Gondim, S.A. Soares, S.H.A. Barroso & C.M.C. Alecrin</i>	Engineering performance of steel slag as railway ballast <i>C.-M. Kuo & C.-C. Lin</i>
	Resurfacing of the Queen Elizabeth II bridge: Binder selection and evaluation <i>I. Artamendi, B. Allen, C. Allpress, P. Phillips & C. Wingrove</i>			
17:25	Design of Ultra-Thin Continuously Reinforced Concrete (UTCRC) and Enrobé à Module Élevé (EME) implemented as alternative remedial actions <i>S.J. Bredenhann, J.L. van Heerden, P.J. Strauss & P.J. Joubert</i>		High temperatures performance investigation of geopolymer modified bitumen binders <i>S.I.A. Ali, H.A.M. Yahia, A.N.H. Ibrahim & R.A. Al Mansob</i>	Effect of uneven subgrade settlement in high-speed railway on double-block ballastless track regularity <i>Y. Guo & W.M. Zhai</i>
17:45	Geotechnical assessment strategy for bridge maintenance—case study <i>O. Hamza</i>			
END OF SESSIONS: 18:05 / 17:25 / 17:45 / 17:45				
18:45	Transportation to Vorres Museum (Gala Dinner)			



09:30-10:20 / POSTER SESSION I (ROOMS: NAOUSSA & EDESSA)

Chairs: Christiane Raab & Serdal Terzi

Subgrade soils	P15 An investigation of the mechanical properties of rubber modified asphalt mixtures using a modified dry process <i>A. Subhy, G.D. Airey & D. Lo Presti</i>
P01 Application of pattern classification techniques for anisotropic characterization of pavement foundations <i>R.S. Ashtiani & M. Asadi</i>	Structural design methods
P02 Experimental and statistical investigation of the mechanical properties of limestone rocks in Lebanon <i>M. Mrad, G. Saad, G.R. Chehab & R. Mrad</i>	P16 Reliability demystified, at last <i>A.M. Ioannides & D.D. Rodriguez</i>
P03 Suitability assessment of soils for pavement subgrade using gyratory compaction and bearing capacity testing <i>A. Athanasopoulou & G. Kollaros</i>	P17 Mechanistic-empirical pavement design for unpaved roads: Development of a damage function for structural rutting <i>J.-P. Bilodeau, G. Doré, M. Le Vern & P.M. Thiam</i>
Unbound granular materials	P18 Effect of treated subgrade layer on mechanistic-empirical pavement design <i>S. Islam, A. Sufian & M. Hossain</i>
P04 Investigation of resilient modulus values for base aggregates <i>B. Cliatt & A. Loizos</i>	P19 Perpetual flexible pavement design life <i>G. Kollaros, A. Athanasopoulou & A. Kokkalis</i>
P05 Laboratory investigation on unbound materials used in a highway with premature damage <i>D.M. Barbieri, I. Hoff & H. Mork</i>	In-situ measurements techniques and monitoring
P06 An investigation into relevance between fractal dimension and dynamic behavior of pure granular materials <i>S. Altun, A. Sezer, A.B. Göktepe, T. Günay & P. Ahmedzade</i>	P21 Effectiveness of Spectral Analysis of Surface Waves (SASW) method for pavement evaluation <i>A. Loizos, C. Plati, B. Cliatt & K. Gkyrtis</i>
Asphalt mixes	Backcalculation analyses of deflection measurements
P07 Experimental study on the effects of angular rate on the torsional shear property of asphalt mixture <i>Y. Li, Y. Li, G. Wang, S. Zhang, Y. Liu & J. Chen</i>	P22 Optimization of deflection bowl measurements <i>V. Le Boursicaud, J.-M. Simonin & P. Hornych</i>
P08 Study of asphalt binder diffusion using atomic force microscopy <i>A. Savarnya, A. Kuity, S. Gupta, A. Chandra & A. Das</i>	P23 Analysing FWD data—from the deflection bowl to material parameters <i>M. Čičković</i>
P09 Comparison of flexural strength and crack propagation test characteristics of SMA mixtures including the ageing impact <i>P. Vacková, J. Valentin & P. Mondschein</i>	Structural evaluation
P10 Influence of lateral confining pressure on flow number tests <i>E. Santagata, O. Baglieri, P.P. Riviera, M. Lanotte & M. Alam</i>	P24 Comparing CBR values obtained from field with laboratory test results <i>S. Karahancer, E. Eriskin, O. Sarioglu, M. Saltan & S. Terzi</i>
P11 Laboratory investigation of physical performance and FT-IR analysis of warm mix asphalt binders <i>J. Chen, W. Wang & B. Xu</i>	P25 Evaluation of soil bearing capacity by plate load test <i>Q. Al-Obaidi, A. Al-Shamoosi & A. Ahmed</i>
Performance of asphalt mixes with additives	P26 A practical non-destructive testing based approach to improve the quality of the asphalt compaction process <i>P. Georgiou & A. Loizos</i>
P12 Improving the raveling resistance of porous asphalt with kraft lignin modified bitumen <i>N.R.Z. Poeran, B.W. Sluer, M.F.C. van de Ven & W.F. Gard</i>	P27 E* prediction algorithm for pavement quality control assessment <i>K. Georgouli & A. Loizos</i>
P13 Fibre behaviour and influence on the properties of asphalt mortar <i>M. Mohammed, T. Parry & J. Grenfell</i>	P28 Evaluation of pavement load bearing capacity comprised of insulation layers during thaw season <i>L. Hashemian, N. Tavafzadeh & A. Bayat</i>
P14 Rutting performance of bituminous mixtures composed with red mud <i>M.S.S. Lima, L.P. Thives & V. Haritonovs</i>	P29 Implementation of modulus-based quality control testing for pavement construction in Thailand <i>A. Sawangsuriya, P. Jitarekul, Y. Taesiri, S. Sirisak & W. Lawanwisut</i>



Recycled materials and techniques	Environmental challenges
P30 Effects of vibratory and static compaction in laboratory to strength properties of cold recycled materials <i>K. Mollenhauer</i>	P39 Applications of an innovative load bearing permeable concrete pavement <i>Y.H. Lee, H.W. Ker, N.S. Chou & J.W. Chen</i>
P31 Structural evaluation of cold recycling mixture with foamed asphalt <i>F.V. Guatimosim, K.L. Vasconcelos & L.L.B. Bernucci</i>	P40 Water-heat response of embankments on permafrost to increasing precipitation <i>Z. Wen, Z.H. Bao, P.G. Liao, M.L. Zhang, Z.Z. Sun & S.J. Zhang</i>
Stabilization and reinforcement	P41 The importance of maintaining pavement roughness to reduce carbon footprint <i>A. Drainakis, M. Pomoni & C. Plati</i>
P32 Design of mortars for controlled modulus columns: From laboratory to field experiments <i>G. Blanc, G. Escadeillas, A. Turatsinze, A.-C. Ariane & B. Quandalle</i>	P42 Bearing capacity analysis of pavement structures for short term flooding events <i>M. Elshaer, M. Ghayoomi & J.S. Daniel</i>
P33 Geosynthetic impact on subgrade bearing capacity and their possible improvement <i>K. Pospisil & P. Zednik</i>	P43 A water preservation base for pervious pavement of traffic road <i>S.-Y. Wu, H.-J. Liao & Y.-T. Huang</i>
P34 Implication of the mechanically stabilised granular layer for access road over saline soils at uranium in situ leaching mine in South Kazakhstan <i>A. Kuznetsova, C. Doulala-Rigby, G. Solovyev & E. Orlov</i>	P44 Accumulation managing pavement—design, construction and performance for confined areas <i>A. Dodhiya, M. Dave, P. Modi & J. Shah</i>
P35 Geosynthetic sub-base stabilization of roads and artificial turf installations <i>C. van Gurp, T. Messinella, M. Hazenkamp & F. Harmeling</i>	P45 Detoxication of the heavy metal ions in water resources by means of mineral geoantidotes <i>A.S. Sakharova, L.B. Svatovskaya, M.M. Baidarashvili & A.V. Petriaev</i>
P36 Lifetime prediction of asphalt interlayer systems, and the correlation between a simplified design method and real cases <i>P. Pezzano, A. Simone, F. Mazzotta, C. Sangiorgi, V. Vignali & G. Dondi</i>	
P37 High-performance synthetic microfibers for the structural reinforcement of hot mix asphalts <i>M. Pasetto, E. Pasquini, G. Giacomello, A. Baliello & N. Baldo</i>	
P38 Geogrid in paved and unpaved road systems: A review of mechanisms and design methods <i>M. Sharbaf, N. Ghafouri & N. Dumitru</i>	



08:00	REGISTRATION			
	ROOM: MACEDONIA			
08:45	Theme lecture: “Developing Airport Business: The key role of pavements in airfield investments” <i>Dimitrios J. Dimitriou, Chairman of Athens Airport, Assistant Professor at DUTH</i> <i>Chair: Antonio G. Correia</i>			
09:00	Keynote lecture: “Novel monitoring techniques for preventive maintenance of railway tracks” <i>Prof. Rolf Dollevoet, Delft University of Technology, Netherlands</i> <i>Chair: Imad L.Al-Qadi</i>			
10:00	ROOMS: NAOUSSA & EDESSA Poster Session II (see below) <i>Chairs: Fabio Tosti & Christina Plati</i>			
	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.7: Effect of traffic loading <i>Chair: Athanasios Nikolaidis</i>	Session B.7: Performance modeling (Part II) <i>Chair: Francesco Canestrari</i>	Session C.7: Airfield pavements structures (Part III) <i>Chair: David R. Brill</i>	Session D.7.1: In-situ measurements techniques and monitoring (Part II) <i>Chair: Jorge Carvalho Pais</i>
11:00	Impact of longer and heavier vehicles on the performance of asphalt pavements: A laboratory study <i>A.W. Ahmed, M.S. Rahman & S. Erlingsson</i>	Prediction of HMA fatigue performances using different Visco-Elastic Continuum Damage (VECD) models <i>M. Lanotte & M.E. Kutay</i>	Design of rigid and flexible airfield pavements on cement-treated base <i>C. Rabaiotti, D. Tsirantonaki & M. Schnyder</i>	Effect of embedment scheme on damage detection performance of self-powered pavement monitoring sensor <i>A.H. Alavi, H. Hasni, K. Chatti & N. Lajnef</i>
11:20	Effects of super heavy trucks on the condition of road infrastructure <i>P. Kolisoja, T. Saarenketo & P. Varin</i>	Thin overlay analysis using finite element method <i>H. Dhasmana, H. Ozer & I.L. Al-Qadi</i>	Nondestructive detection of voids under airfield pavement <i>M. Abbasghorbani, A. Bamdad & N. Tabatabaee</i>	Methods for calculating deflections from traffic speed deflectometer data and impacts on pavement design <i>P. Schmalzer & N. Weitzel</i>
11:40	Dynamic pavement response coefficient to estimate the impact of variation in dynamic vehicle load <i>S.-F. Kazemi, P.E. Sebaaly, R.V. Siddharthan, E.Y. Hajj, A.J.T. Hand & Md. Ahsanuzzaman</i>	Modelling of reflective cracking in composite pavements <i>E. Manola, A.C. Collop & N. Thom</i>	Innovative construction techniques and functional verification on airfield pavements—a Dutch case study <i>F.R. Bijleveld, A.H. de Bondt, R. Khedoe & M. Stet</i>	A comparison of TSD and FWD deflections at Norwegian roads with an interpretation of bearing capacity from TSD measurements <i>V. Antonsen & H. Mork</i>
12:00	Investigation of influence of heavy traffic loads on asphalt pavement response by SAFEM <i>P. Liu, D. Wang & M. Oeser</i>	Estimation of optimal pavement performance models for highways <i>M. Khadka & A. Paz</i>	Expedient runway upgrade technologies <i>G. White</i>	Subgrade cracking monitoring using distributed optical fiber sensing technique <i>W. Liu, B. Wang, X. Chen & L. Li</i>



	Session A.7: Effect of traffic loading <i>Chair: Athanasios Nikolaidis</i>	Session B.7: Performance modeling (Part II) <i>Chair: Francesco Canestrari</i>	Session C.7: Airfield pavements structures (Part III) <i>Chair: David R. Brill</i>	Session D.7.2: Special technical sessions (2017 DaRTS meeting / 8th EuroFWD UGM) (Part I) <i>Chair: Carl Van Geem</i>
12:20	Dynamic behavior of flexible inelastic pavements under moving loads <i>N.D. Beskou, A.P. Chassiakos & D.D. Theodorakopoulos</i>	A three-dimensional finite element analysis of temperature distribution in hot mix asphalt pothole repair <i>J. Byzyka, M. Rahman & D.A. Chamberlain</i>	Impact of joint filling materials on cracking in concrete gutters at large airfields <i>R. Breitenbuecher</i>	Integration of traffic speed deflectometer and ground penetrating radar for network-level roadway structure evaluation <i>K.R. Maser, A. Carmichael, P. Schmalzer & B. Shaw</i>
12:40	Implications of changing the maximum legal truck load for the pavement service life <i>C.A. Lenngren & R. Salini</i>	Structural pavement responses using nonlinear finite element analysis of unbound materials <i>A. Loizos, K.V. Spiliopoulos, B. Cliatt & K. Gkyrtis</i>	Life cycle cost analysis of runway reconstruction alternatives for commercial service airports <i>M.T. McNerney & G.P. Vittas</i>	Fast Falling Weight Deflectometer (FastFWD) for Accelerated Pavement Testing (APT) <i>M. Manosalvas-Paredes, A. Navarro Comes, M. Francesconi, S. Khosravifar & P. Ullidtz</i>
13:00	Impact of overloaded vehicles on load equivalency factors and service period of flexible pavements <i>D. Rys, J. Judycki & J. Jaskula</i>	Assessment of moisture sensitivity of warm mix asphalt using advanced 3-D imaging technique <i>M.O. Hamzah, S.Y. Teh, B. Golchin & J. Voskuilen</i>	Airfield pavement management program of Hellenic air force <i>E. Adamidou & P. Gomatou</i>	Assessment of pavement structures at traffic speed <i>A. Zofka, J. Sudyka & D. Sybilski</i>
13:20	LUNCH			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.8: Environmental challenges (Part I) <i>Chair: Guy Doré</i>	Session B.8: Recycled materials and techniques (Part II) <i>Chair: Dariusz Sybilski</i>	Session C.8: Stabilization and reinforcement (Part III) <i>Chair: Halil Ceylan</i>	Session D.8: Special technical sessions (2017 DaRTS meeting / 8th EuroFWD UGM) (Part II) <i>Chair: Adam Zofka</i>
14:20	Predicting subgrade soil strength using FWD and meteorological time series data <i>L. Gáspár, M. Karoliny & C. Tóth</i>	Influence of bio-based additives on RAP clustering and asphalt binder rheology <i>M. Orešković, S. Bressi, G. Di Mino & D. Lo Presti</i>	Laboratory evaluation of triangular aperture geogrid reinforced flexible pavements <i>M. Sharbaf & N. Ghafouri</i>	Assessing the potential of in-motion deflection measurements to determine the bearing capacity of the Dutch highway network <i>C. Giezen, Z. Reimertand, S. Mookhoek, A. van Dommelen, P. Paffen, F. Bouman, S. Erkens, M. Villani, T. Bennis, R. Hofman, J. Jørgensen, J. Krarup & L. Grønsvov</i>
14:40	Seasonal temperature distribution in rigid pavements <i>K. Bayraktarova, L. Eberhardsteiner & R. Blab</i>	Mechanical performance of recycled aggregates in cyclic triaxial testing <i>C. Grégoire, A. Van der Wielen & B. Janssens</i>	In situ damage evaluation of geogrid used in asphalt concrete pavement <i>C. Chazallon, T.C. Nguyen, M.L. Nguyen, P. Hornych, D. Doligez, L. Brissaud & E. Godard</i>	Quality assurance of traffic-speed structural condition surveys / <i>A. Wright, S. Brittain, D. Gershkoff, P. Werro & R. Fairclough</i>



	Session A.8: Environmental challenges (Part I) <i>Chair: Guy Doré</i>	Session B.8: Recycled materials and techniques (Part II) <i>Chair: Dariusz Sybilski</i>	Session C.8: Stabilization and reinforcement (Part III) <i>Chair: Halil Ceylan</i>	Session D.8: Special technical sessions (2017 DaRTS meeting / 8th EuroFWD UGM) (Part II) <i>Chair: Adam Zofka</i>
15:00	Longitude profiling as a tool for evaluation of frost actions active pavement section <i>T. Edeskär, V. Perez, J. Ullberg & P. Ekdal</i>	Sustainability evaluation of pavements using recycled materials <i>Y. Zhang, D. Goulias & A. Aydilek</i>	Bituminous pavements reinforcement with interlayer systems: Proposing a routine laboratory cyclic flexural testing procedure <i>P. Pezzano, C. Sangiorgi, P. Tataranni, N. Bonucchi & C. Lantieri</i>	Mechanistic analysis of traffic-speed surface deflections for pavement structure condition assessment <i>H. Wang</i>
15:20	A method to assess climate change induced damage on flexible pavements with machine learning <i>Y. Qiao, Y. Zhang, M. Elshaer & J.S. Daniel</i>	Moisture effects on the properties of RAP-foamed bitumen mixtures <i>D.B. Sánchez, G.D. Airey, J.R.A. Grenfell & S. Caro</i>	Assessment of fiber reinforced HMA and WMA mixes using viscoelastic continuum damage model <i>H.A. Kassem, G.R. Chehab, N.F. Saleh & A. Zalghout</i>	Influences of measurement conditions on structural indicators obtained from FWD data / <i>C. Van Geem</i>
15:40	Evaluation of Norwegian gradation based regulation for frost susceptibility of crushed rock aggregates in roads and railways <i>B. Loranger, E. Kuznetsova, I. Hoff, J. Aksnes & K.A. Skoglund</i>	Instrumented test section for analyzing the curing process of cold-recycled mixtures <i>C. Godenzoni, A. Graziani, M. Bocci, A. Grilli & E. Bocci</i>	Compressive and tensile behaviour of polymer-treated pavement foundation materials <i>R.N. Georgees, R.A. Hassan, R.P. Evans & P. Jegatheesan</i>	F/HWD international round robin tests on the STAC's test facility / <i>M. Broutin & S. Belon</i>
16:00	COFFEE BREAK			
	ROOM: MACEDONIA A	ROOM: MACEDONIA B	ROOM: MYCENAE	ROOM: PELLA
	Session A.9: Environmental challenges (Part II) <i>Chair: Andrew Dawson</i>	Session B.9: Life cycle assessment and sustainability <i>Chair: Athanasios Chassiakos</i>	Session C.9: Performance of asphalt mixes with additives (Part II) <i>Chair: Silvia Caro</i>	Session D.9: Special technical sessions (2017 DaRTS meeting / 8th EuroFWD UGM) (Part III) <i>Chair: Gülay Malkoç</i>
16:15	Thermal energy harvesting from asphalt pavement roadways <i>U. Datta, S. Dessouky & A.T. Papagiannakis</i>	Sustainable pavement rehabilitation strategy using consequential life cycle assessment: An example of interstate 95 <i>C. DeCarlo, W. Mo, E. Dave & J. Locore</i>	Effect of waste metallic particles on asphalt induction heating <i>B. Gómez-Meijide, H. Ajam, A. García & H.S. Al Mahely</i>	Ensuring reliable robust FWD measurements on the English road network <i>S. Brittain, A. Wright, D. Gershkoff & R. Fairclough</i>
16:35	The effect of highway geometry on fuel consumption of heavy-duty vehicles operating in eco-driving mode <i>G.K. Booto, R.A. Bohne, H. Vignisdottir, K. Pitera, G. Marinelli, H. Brattebø, H. Wallbaum & B. Ebrahimi</i>	Sustainable implementation of future smart road solutions: A case study on the electrified road <i>F. Chen, R. Balieu & N. Kringos</i>	Physical properties of sepiolite clay nanofibers modified bitumen <i>T. Günay, P. Ahmedzade & S. Altun</i>	Study on the evaluation of track support stiffness of the ballasted track using the FWD <i>H. Tanigawa, T. Nakamura & Y. Momoya</i>



	Session A.9: Environmental challenges (Part II) <i>Chair: Andrew Dawson</i>	Session B.9: Life cycle assessment and sustainability <i>Chair: Athanasios Chassiakos</i>	Session C.9: Performance of asphalt mixes with additives (Part II) <i>Chair: Silvia Caro</i>	Session D.9: Special technical sessions (2017 DaRTS meeting / 8th EuroFWD UGM) (Part III) <i>Chair: Gülay Malkoç</i>
16:55	Testing and modeling the behavior of water saturated asphalt concrete under freezing conditions in relation to pavement damaging <i>V.-T. Vu, O. Chupin, J.-M. Piau, F. Hammoum & P. Lecontee</i>	Life cycle assessment of an optimized network arch highway bridge utilizing timber <i>R. O'Born, K. Vertes, G. Pytten, L.O. Hortemo & A. Brændhagen</i>	Usage of ion-irradiated recycled polypropylene as modifier in bituminous binder <i>P. Ahmedzade, T. Günay, S. Altun, B. Kultayev, A. Fainleib, O. Grigoryeva & O. Starostenko</i>	Reproducibility of decisions for rehabilitation of existing roads based on deflection measurements with curviameter or FWD <i>C. Van Geem</i>
17:15	CLOSING <i>Chairs: Andreas Loizos, Imad L. Al-Qadi, Tom Scarpas & Leif Baklökk</i>			



10:00-11:00 / POSTER SESSION II (ROOMS: NAOUSSA & EDESSA)

Chairs: Fabio Tosti & Christina Plati

Pavement serviceability condition	Effect of traffic loading
P46 Automated patch detection and quantification for pavement evaluation <i>G.M. Hadjidemetriou & S.E. Christodoulou</i>	P60 Responses and performance of flexible pavements in cold climate due to heavy vehicle loading <i>S. Erlingsson & J. Ullberg</i>
P47 Data driven frameworks for classifying pavement surface anomalies based on pattern recognition techniques and smartphone technology <i>C. Kyriakou, S.E. Christodoulou & L. Dimitriou</i>	P61 Modeling of dynamic loads in pavement structural response models <i>J.A. Ramos-García, F. Sánchez-Domínguez & J.M. Sanz-García</i>
P48 Review of pavement cracking data collection practices <i>B. Yang, H. Ceylan, O. Smadi, K. Gopalakrishnan, S. Kim, Y. Turkan, A.A. Alhasan & O. Adarkwa</i>	P62 The increase of pavement cost due to the traffic overloads <i>J.C. Pais & P. Pereira</i>
P49 Evaluation of highway pavement skid resistance performance made of Engineered Cementitious Composite (ECC) <i>A.A. Bawono, N. Nguyen Dinh, E.H. Yang & B. Lechner</i>	Performance modeling
P50 In-lab versus on-site measurement of surface performance of flexible pavements <i>F.G. Praticò, S. Noto & A. Astolfi</i>	P63 Fatigue performance evaluation of high modulus asphalt binder using the LAS test and S-VECD model <i>J. Zhang, H. Zhang & C. Wang</i>
P51 Sampling functional condition indices at traffic-speed <i>K.P. Drenth, F.H. Ju & J.Y. Tan</i>	P64 Research on cracking of asphalt pavement based on cohesive zone model and extended finite element method <i>Y. Sun, K. Li, X. Yuan, Z. Ma & J. Wang</i>
P52 Estimating new road rolling resistance using neural networks <i>C.A. Lenngren & R. Salini</i>	P65 Cold and hot asphalt pavements modeling <i>H.K. Shanbara, A. Dulaimi, F. Ruddock, W. Atherton & G. Rothwell</i>
P53 A laboratory evaluation on skid resistance performance of surface coatings manufactured by both natural aggregates and by-products <i>I. Gökalp, V.E. Uz & M. Saltan</i>	P66 Road pavement responses estimated through finite element modeling analysis <i>B. Cliatt, A. Loizos & K. Gkyrtis</i>
P54 Investigation of tire-pavement noise level using On-Board Sound Intensity (OBSI) system <i>A. Zofka, E. Zofka, T. Mechowski & A. Urbanik</i>	P67 Pavement rutting prediction models for the coastal roads of southern Norway <i>E. Taddesse</i>
Rehabilitation and maintenance issues	P69 Analysis of expansive reactions in cement concrete pavement structures by microscopical methods <i>J. Stryk, A. Frybort, J. Stulirova, K. Pospisil & M. Gregerova</i>
P55 Assessment of shotblasting moving speed for pavement preservation—a pilot-case study <i>C. Plati, A. Loizos, T. Stergiou, M. Pomoni, F. Papadimitriou & K. Drimeris</i>	P70 Infinite element technology of adaptive FEMOL applied in mechanical analysis of layered elastic systems for asphalt pavement <i>Y. Dong, Q. Xing, S. Yuan & N. Fang</i>
P56 Effect of neglected maintenance for the Austrian State road network <i>J. Litzka & A. Weninger-Vycudil</i>	P71 Analytical modeling of rutting for asphalt concrete pavement <i>B.A. Feyissa</i>
P57 A low cost method of real time pavement condition data sharing to expedite maintenance intervention <i>W. Uddin, O.W. Uddin & J.V. Merighi</i>	Mechanics of layers interfaces
P58 Why PWL is a better quality measure for developing PRS <i>S.W. Haider, G. Musunuru & K. Chatti</i>	P72 Research on the crack resistance of HVASSAL based on the nonlinear contact between layers <i>Y. Sun, Z. Gu, J. Pan & K. Li</i>
P59 Road bridge decks sealing, joints and pavement practice, the Greek motorway experience <i>A. Kokkalis, A. Athanasopoulou, G. Kollaros & P. Panetsos</i>	



Geophysical assessment	Railway track structures
<p>P73 Signal processing for optimisation of low-powered GPR data with application in transportation engineering (roads and railways) <i>L. Bianchini Ciampoli, F. D'Amico, A. Calvi, F. Benedetto & F. Tosti</i></p>	<p>P83 Evaluation of the ballast aggregates shape properties using digital image processing techniques <i>D.F. Diógenes, R.S. Maia & V.T.F. Castelo Branco</i></p>
<p>P74 Imaging boulders using the Ground Penetrating Radar (GPR) method <i>A. Vafidis, N. Economou, G. Kritikakis, M. Galetakis, A. Vasilio, G. Apostolopoulos & T. Michalakopoulos</i></p>	<p>P84 Bearing capacity evaluation of a subgrade in a heavy haul railway in Brazil <i>R. Costa, R. Motta, L.L.B. Bernucci, E. Moura, J. Pires & L. Oliveira</i></p>
Airfield pavements structures	<p>P85 Design optimization of the modern tram track infrastructure in soft soil area <i>Y. Shan, J. Zhang, S. Zhou, Q. Gong & B. Wang</i></p>
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