

**2<sup>nd</sup> international Conference on Transport  
infrastructures**



**Rita Fortes  
Paulo Pereira**



# 2nd international Conference on Transport infrastructures - São Paulo, Brazil

Wednesday 4<sup>th</sup> AUGUST

8:00 - 9:00	Registration
9:00 - 10:00	OPENING CEREMONY - ROOM 1 - SALA ROUXINOL
9:00 - 9:10	iSMARTI Presentation
9:10 - 9:20	ANDIT Presentation
9:20 - 10:00	The Brazilian Transport Infrastructure Networks
10:00-10:30	Coffee-Break
10:30 - 11:30	FORUM: ROOM 1 - SALA ROUXINOL
10:30-11:10	The Sustainability of Transport Infrastructures - Dr. Waheed Uddin (The University of Mississippi, CAIT Director, USA) & Dr. Kamil Kaloush (Arizona State University, USA)
11:10-11:30	Debate
11:30-12:30	Keynote Lecture - ROOM 1 - SALA ROUXINOL
11:30-12:10	Road Network: a vision of the challenges for the future - Dr. Denis François (LCPC, France)
12:10-12:30	Debate
12:30-14:00	Lunch

## ROOM 1 - SALA ROUXINOL Theme 1

14:00	Session Theme 1	President: W. Steyn Moderator: J. Peralta
14:10	183	Iran Evaluation of Usage of Gilsonite as an Additive for Modification of Asphalt Cement, A. Mansourian, M. Ameri, S. Salehi
14:25	155	Italy Design and performance analysis of foamed asphalt treated mixtures, A. Marradi, G. Ridonelli, U. Pinori
14:40	170	Portugal Studies of Bituminous Mixtures with Acrylic Fibers, A. Teixeira, B. Pereira, J. Contreiras, M. Azevedo
14:55	142	USA Effects of the Rheological Properties of Mastics on Creep performance of Asphalt concretes, H. Zelelew, A.T. Papagiannakis
15:10	169	Portugal High Tenacity Acrylic Fibres in Bitumen mixtures , B. Pereira, J. M. Contreiras, A. Teixeira, M. Azevedo
15:25	180	USA Measuring the Asphalt-Aggregate Bond Strength Under Different Conditions, H. Bahia, R. Moraes, R. Velásquez
15:40	114	Portugal Durable Asphalt Surfaces with High Crack Resistance, F. Dourado, J. Scherer
15:55	Debate	
16:00-16:20	Coffee-Break	

## ROOM 2 - SALA MACUCO The DAWG

30 minutes per presentation - Dr. Robert Raab		
14:00		SOME PECULIARITIES OF DATA FROM APT STUDIES WITH LINEAR TRAFFIC SIMULATORS, W. Peres Núñez
14:30		THE VOLUMETRIC METHOD IN THE DESIGN AND PERFORMANCE OPTIMIZATION OF BITUMINOUS MIXTURES, D. Gardete, L. Picado Santos, S. Capitão
15:00		EXPERIMENTAL INVESTIGATIONS ON THE INFLUENCE OF SUBGRADE SOIL QUALITY ON THE PERFORMANCE OF FLEXIBLE ROAD PAVEMENT IN NIGERIA, R. Oduola
16:00-16:20	Lunch	

## ROOM 1 - SALA ROUXINOL Theme 4

16:20	Session Theme 4	President: Glicerio Triches Moderator: A. F. Nikolaides
16:30	112	Slovenia Results of Accelerated Load Tests in Slovenia, M. Tušar, M. Ravnikar Turk
16:45	181	USA Use of WIM Data to Evaluate Growth Including Economic Activities Attributed to Reconstruction of a Warranty Road, R. Tarefder, N. Sumeer
17:00	152	Ireland, Canada A Simple Tool for Applying Sustainability Principles to Road Rehabilitation Strategy, Michael L. J. Maher, Robert Noel-De-Tilley, Robert A. Douglas
17:15	101	Portugal Multi-Objective Decision-Aid Tool for Infrastructure Asset Management, A. Ferreira, S. Meneses, M. Trindade
17:45	105	South Africa Utilizing Traffic Moulding of Road Pavements Towards More Cost Efficient Pavement Design and Management, E. Kleyn, W. J.v.d.M. Steyn
18:00	Debate	
20:00-22:00	WELCOME RECEPTION	

## ROOM 2 - SALA MACUCO The DAWG

15:50		HALF-WARM ASPHALT MIXTURES MADE WITH BITUMEN AND INCORP. OF INDUST. BY-PRODUCTS: CHARACT. AND TECHNOLOGY VALIDATION, Fernando Martinho, Luis de Picado Santos, Silvino Capitão
16:20		VALIDATION OF RESULTS OBTAINED USING BEM (BOUNDARY ELEMENT METHOD) BY COMPARISON WITH EXPERIMENTAL AND REAL DATA OBTAINED FROM PHYSICAL MODELS AND OBSERVATION OF PAVEMENTS BEHAVIOUR, A. Almeida, L. Picado Santos
16:50		AIRPORT PAVEMENT RECONSTRUCTION AND ADAPTATION - A CASE STUDY, Silvio Rodrigues Filho, Regis Martins Rodrigues
17:20		3D LASER IMAGING FOR PAVEMENT DISTRESS SURVEY: POTENTIALS AND CHALLENGES, Kelvin CP Wang
20:00-22:00	WELCOME RECEPTION	

# 2nd international Conference on Transport infrastructures - São Paulo, Brazil



Thursday 5<sup>th</sup> AUGUST

8:00 - 9:00	Registration
9:00-10:00	Keynote Lecture: ROOM 1 - SALA ROUXINOL
9:00-9:40	Airport System: A Vision of the Challenges for the future - Environmentally Sustainable Pavement Materials for Roads and Airports - Dr. David Brill (FAA Airport Technology R&D Team, USA)
9:40-10:00	Debate
10:00-10:30	Coffee-Break

<b>ROOM 1 - SALA ROUXINOL</b>		<b>Theme 2</b>
10:30	Session Theme 2	President: Rita M. Fortes Moderator: WJvdM Steyn
10:45	202 USA	Remote sensing and geospatial technologies for inventory and condition monitoring of transport infrastructure assets, W. Uddin
11:00	Session Theme 1	Theme 1
11:15	154 USA	Comparative Study of a Mechanistic Resilient Modulus Predictive Equation for Unbound Materials, C. Cary, C. Zapata
11:30	219 Portugal	Identification of a Fuel Contamination Problem in the Production of Warm Mix Asphalts, H. Silva, J. Oliveira, J. Peralta, C. Ferreira
11:45	136 Turkey	The Use of Steel Fibers as a Reinforcement Material in Cement Concretes, C. A. Kiremitci, S. İyınam, A. F. İyınam, M. Ergün
12:00	156 Mexico, USA	Re-Capsulation of Styrene Butadiene Styrene (SBS), Styrene Butadiene (SB) with EX-Linking Agent for Asphalt Modification, G. Hernández, G.M. Memon
12:15	190 Brazil	Use of Tire Rubber to Improve Fatigue Performance of Asphalt Mixtures, L. Thives, P. Pereira, G. Trichês, J. Pais
12:30	Debate	
12:30-14:00	Lunch	

<b>ROOM 2 - SALA MACUCO</b>		<b>Theme 4</b>
10:30	Session - Theme 4	President: P. Pereira - Moderator: Liseane Thives
10:45	140 Portugal	Freight Traffic on High Speed Rail Line, D. Leal, L. Picado-Santos
11:00	123 Italy	HMA Composition vs. Surface Characteristics: Issues and Perspectives to Optimise Road Asset Management, F. Praticò, Vaiana R, A. Moro, T. luele
11:15	161 Poland	Construction of new road Infrastructure in Poland with emphasis on Bridge structures, J. Biliczczuk, J. Onysyk, M. Suchy
11:30	146 USA	New Methods of Traffic Growth Forecasting for MEPDG, K. Hall, X. Xiao, Y. Jiang, K. Wang
11:45	134 USA	Use of Trenchless Technologies in Roadway Drainage Infrastructure Management, O. Salem, B. Salman, M. Najafi, A. Moawad
12:00	103 Portugal	Additional Road User Costs due to Pavement State and Maintenance Actions: Initial Approach for Portuguese Conditions, B. Santos, L. Picado-Santos, V. Cavaleiro
12:15	Debate	
12:30-14:00	Lunch	

<b>ROOM 1 - SALA ROUXINOL</b>	
14h00-16h00	SHORT COURSE: Airport Pavement Thickness Design Procedures Dr. David Brill
<b>14:00-18:00</b>	<b>TECHNICAL VISIT</b>
16:00-16:20	Coffee-break

<b>ROOM 1 - SALA ROUXINOL</b>		<b>Theme 1</b>
16:20	Session Theme 1	President: Rui Alves Margarido Moderator: L. Picado Santos
16:35	120 Italy	Innovative Technologies for the Determination of the Density of Bituminous Mixtures, F. Praticò, A. Moro
16:50	130 Italy	A Theoretical Investigation on the Dependence of Gmb Measurements on Boundary Conditions, F. Praticò, A. Moro
17:05	217 Portugal	New Experimental Methods to Monitor and Characterize Asphalt Rubber Binders, J. Peralta, H. Silva, J. Pais
17:20	213 Portugal	Changes in the Rubber Morphology Caused by the Interaction with Bitumen, J. Peralta, H. Silva, J. Pais, A. Machado
17:35	218 Portugal	Monitoring Rubber Swelling and De- and Re-vulcanization through AR Elastic Recovery, J. Peralta, H. Silva, J. Pais, A. Machado
17:50	127 Nigeria	Experimental Investigation of a Cement-Stabilized Low-Strength Soil for Pavement Construction in Eastern Nigeria, R. Oduola
18:05	133 Portugal	Effect of the Adhesion between Layers of Airport Pavements in their Structural Behavior, L. Silva, P. Cachim, A. Benta
18:20	Debate	
20:00-22:00	Dinner	

<b>ROOM 2 - SALA MACUCO</b>		<b>Themes 5 and 6</b>
16:35	135 Turkey	New Bus Rapid Transit System: Significant Contribution to Public Transit Infrastructure of Istanbul, S. T. Kiremitci, S. İyınam, A. F. İyınam, M. Ergün
16:50	137 Turkey	Connecting two Continents: Marmaray Rail Transit Project of Istanbul, C. A. Kiremitci, P. Alpkokin, M. Ergün, S. Topuz Kiremitci
17:05	191 Turkey	Optimization of Bus Transport in Istanbul, A.S. Kesten, M. Ergün
17:20	Debate	
17:35	139 Portugal	Urban Road Safety – Evaluation of Road Safety Measures, C. Carvalho, L. Picado-Santos
17:50	119 Italy	Tribological and Environmental Effects in Dry and Wet Pavement-tyre Interaction: Modelling and Experiments, F. Praticò, R. Ammendola, A. Moro
18:05	Debate	
20:00-22:00	Dinner	



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Friday 6<sup>th</sup> AUGUST

9:00-10:00 Keynote Lecture: ROOM 1 - SALA ROUXINOL  
 9:00-9:40 Railways: European railway transportation: synergies and perspectives for a unique network system - Dr. Patrizia Cicini (Rete Ferroviaria Italiana - RFI, Italy)  
 9:40-10:00 Debate  
 16:00-16:20

## ROOM 1 - SALA ROUXINOL

10:30 Session Theme 1 President: W. Uddin Moderator: Denis François  
 10:35 113 Poland Asphalt Concrete with Low-Viscosity Modifier, M. Iwański, G. Mazurek  
 10:50 125 Malaysia Prospect of Using Waste Cooking Oil as Rejuvenating Agent for Aged Bituminous Binder, M. Karim, H. Asi  
 11:05 124 Malaysia Effect of Oil Palm Fiber on Properties of Asphalt Mixes, S. Vijaya, M. Karim, H. Mahmud  
 11:20 107 USA Rheology of Fractionated Cornstover Bio-oil as a Pavement Material, M. Raouf, R. Williams  
 11:35 165 Pakistan Use of Lime-Bagasse Ash for Subgrade Soil Stabilization, T. Akram, A. Khan  
 11:50 Debate  
 12:00-14:00 Lunch

## ROOM 3 - SALA COLIBRI

10:30 Session - Theme 4 President: Joao Virgilio Merighi - Moderator: F. Praticò  
 10:35 195 USA Analysis of Aircraft Inflatable Slide Evacuation Events, V. Motevalli  
 10:50 104 Singapore Evaluating of aircraft landing hydroplaning risk, H. Pasindu, T. F. Fwa, G.P.Ong  
 11:05 167 Canada Use of 3D laser profiling sensors for the automated measurement of road surface conditions (ruts, cracks, texture), D. Lefebvre, Y. Savard, J. Laurent, J.F. Hébert, R. Habel  
 11:20 145 USA Precision and Bias Measurements in Automated Cracking Survey and Future Technologies, K. Wang  
 11:35 102 Israel Combining FHWA and EVALIV Spreadsheets for Forwardcalculating Subgrade and Pavement-Layers Moduli, M. Livneh  
 11:50 Debate  
 12:00-14:00 Lunch

## ROOM 3 - SALA COLIBRI

10:30-11:50 SHORT COURSE: M-E Pavement Design Guide: Dr. Tom Papagiannakis  
 12:00-14:00 Lunch

## ROOM 1 - SALA ROUXINOL

14:00 Session Themes President: L. Picado-Santos Moderator: M. Livneh  
 1 and 7  
 14:05 182 USA Laboratory Investigation of Moisture Movement in Asphalt Concrete, D. Bateman, R. Tarefder  
 14:20 216 Brazil Performance Study of Different Addition of Stabilizers in 50% Dry Sludge from Water Treatment Plant (WTP) of Taiaçupeba to Use as Compacted Material in Earthwork Ditches, R. Fortes, J. Merighi, D. Pauli, M. Barros, M. de Carvalho, N. Menetti, A. Barbosa, B. Bento  
 14:35 214 Portugal A Laboratory Study on the Fatigue Performance of Warm Mix Asphalt Mixtures, J. Oliveira, H. Silva, P. Pereira, L. Moreno  
 14:50 149 IRAN Application of Polypropylene Fibers in Pervious Concrete Pavement, K. Behfarnia, S. Abtahi, A. R. Hejazi  
 15:05 Debate  
 15:20 210 Greece Thin Surfacing and Micro-Surfacing Alternative Cost Effective Wearing Course Materials, A. F. Nikolaidis  
 15:35 129 Italy Road Base Stabilization: Performance Improvement and Pavement Life Cycle Consequences, F. Praticò, M. Giunta, D'Agostino, P.  
 15:50 160 Portugal The Use of Boundary Element Method to Establish a Pavement Response, A. Almeida, Luis de Picado-Santos  
 16:05 Debate  
 16:05-16:20 Coffee-break

## ROOM 3 - SALA COLIBRI

14:00 Session - Theme 3 President: Frank Holt - Moderator: P. Pereira  
 14:05 209 Greece Wheel Tracking Performance of Asphalt Concrete Mixture with Conventional and Modified Bitumen, A. F. Nikolaidis, E. Manthos  
 14:20 189 Brazil Use of Construction and Demolition Waste as a pavement material in São Luís - Brazil, W. Sant'Ana, T. Ferreira, L. Bernucci, R. Motta  
 14:35 147 USA Analysis of Full Scale Test Data to Study the Load Transfer Efficiency of Rigid Airfield Pavement Joints, A. Wadkar, W. Kettleston, L. Musumeci, A. Zapata, Y. Mehta, D. Cleary  
 14:50 128 Turkey Evaluation of Asphalt Plants in Terms of Performance : A Case Study for Turkey, F. Yonar, S. İyınam, A. F. İyınam, M. Ergün  
 15:05 171 Portugal Assessment of Fatigue Resistance and Aging of Asphalt Mixtures in Portugal, J. Dias, F. Batista, M. Lopes  
 15:20 Debate  
 16:05-16:20 Coffee-break

## ROOM 3 - SALA COLIBRI

14:00 MULTIMODAL SESSION - Dr. Ghim Ping Ong  
 14:05 110 Multimodal Transport Infrastructure Policies to Support Safe, Efficient and Reliable Freight Operations: A Case Study of the United States, G. P. Ong  
 14:20 111 Role of Multimodal Urban Transportation Infrastructures in Sustainable Integrated Transportation and Urban Planning: Lessons Learnt from the United States and Asia, G. P. Ong  
 14:35 201 Sustainable personal rapid transit strategies for congested cities and urban communities, W. Uddin, U. Uddin  
 14:50 153 Effect of Transportation Infrastructure Investments on Urban Development; Case of Istanbul, Y. Eryilmaz, M. Ergun  
 16:05-16:20 Coffee-break

## 16:20 - 17:50 ROOM 1: SALA ROUXINOL - Closing Ceremony

16:20 - 16:40 CONINFRA Conference Report  
 16:40 - 17:00 ICTI Conference Report  
 17:00 - 17:10 Mairepav7 2012, Auckland, New Zealand - Presentation  
 17:10 - 17:20 ICTI2014, Pisa, Italy - Presentation  
 17:20 - 17:40 iSMARTI and ANDIT Paper Awards  
 17:40 - 17:50 Closure  
 20:00 - 23:00 Banquet