# RILEM International workshop on performance-based specification and control of concrete durability

Zagreb, 11 - 13 June 2014

DAY 1	- 11	JUNE	2014
		JOINE	2014

		DAY 1 - 11 JUNE 2	2014
08:00	08:30	Regis	tration
08:30	09:00	Opening	
		PLENARY SESSION AT FACULTY OF CIVIL ENGINEERI	NG, Fra Andrije Kačića-Miošića 26
09:00	09:30	Karen Scrivener Future Cements and performance testin	
09:30	09:50	Hans Beushausen Principles of the performance-based appr	
09:50	10:10	Lars Olof Nilsson Durability of reinforced concrete structure	
10:10	10:30	Dubravka Bjegović Test methods for concrete penetrability	· · · · · · · · · · · · · · · · · · ·
10:30	11:10		laboratory visit
10.30	11.10		<b>.</b>
11:10	11:30	PLENARY SESSION AT FACULTY OF CIVIL ENGINEERI	
		Doug Hooton Using performance-based specifications to im	
11:30	11:50	Luis Fernandez Luco Application Test of RILEM TC PSC in Ve	
11:50	12:10	Andre Valente Monteiro Compliance evaluation of concrete	cover depth
		TRANSPORT TO HOTEL PANORAMA, Tr	rg Krešimira Ćosića 9
12:30	13:30	Lunch break at	Hotel Panorama
Parallol	session	ROOM KAPTOL I	ROOM KAPTOL II
		Novel cements	Test methods
13:30	13:45	Chemical resistance of novel hybrid cement in various aggressive solutions Janotka, I. (Slovakia)	Carbonation resistance: Accelerated determination and limiting values based on Swiss standard method <i>Moro, F. (Switzerland)</i>
13:45	14:00	Novel hybrid cement based on different mechanisms of	Bridge damage identification from measured natural
		setting and hardening	frequencies
		Strigáč, J. (Slovakia)	Mekjavić, I. (Croatia)
14:00	14:15	The influence of partial cement replecement by fly ash and silica fume on the hydro-abrasive resistance of concrete	Use of combined durability parameters for different exposure conditions Santhanam, M. (India)
		Ristić, N. (Serbia)	
14:15	14:30	Durability of new environmental-friendly concrete without portland cement <i>Ogino, M. (Japan</i> )	Threshold pore radius of concrete obtained with two novel methods
14:45	15:00	Cementitious materials with low additions of waste GRP	Sakai, Y. (Japan) Importance of water behaviour on chloride ion ingress in
14:45	15:00	dust: Effect on fresh and hardened properties	cover concrete - A case study
		Moriconi, G. (Italy)	Islam, Md.S. (Bangladesh)
15:00	15:15	Performance-based vs. prescriptive concepts for the	Quality control of concrete structures using IR
10.00	10.10	Carbonation process in concretes made from cements	thermography
		with SCM	Milovanovic, B. (Croatia)
		Strauss, A. (Austria)	
15:15	15:30	Comparaison of reactivity of cementitious additions on	Non-destructive testing of accelerated corrosion of
		properties of micro concrete	reinforced mortar
45.00	45 50	Lanez, M. (Algeria)	Hamadache, M. (Algeria)
15:30	15:50		e break
Parallel	session	ROOM KAPTOL I	ROOM KAPTOL II
15.50	14.05	Chloride ingress and durability properties	Admixtures Effect of chemical admixtures on water penetration of
15:50	16:05	Chloride penetration after field exposure compared with estimates from service life prediciton models	concrete
		Aldred, J. (Australia)	Hassani, M. (Australia)
16:05	16:20	Electrical resistivity testing for as-built concrete	Surface impregnated concrete: A comparative study
10.00	10.20	performance assessment of chloride penetration	Ukrainczyk, N. (Croatia)
		resistance	
		Peelen, W. (The Netherlands)	
16:20	16:35	The influence of frost attack on chloride transport in	Improving durability of reinforced concrete structures
		concrete	using migrating corrosion inhibitors
		Ferreira, M. (Finland)	Bavarian (USA)
16:35	16:50	The Influence of increased levels of limestone mineral	Prediction method for degree of rebar corrosion in
		addition used in combination with cement kiln dust on	reinfroced concrete by thermography
		chloride ion penetration <i>Benn, T. (Australia)</i>	Imai, T. (Japan)
			Durability design of concrete structures with corrosion
16.50	17.05	Derformance evaluation of galvanic anodes through	T DOLADILLY DESIGN OF COUCLETE STRUCTURES WITH COUOSION
16:50	17:05	Performance evaluation of galvanic anodes through laboratory testing and on-site monitoring	
16:50	17:05	laboratory testing and on-site monitoring	resistant reinforcement
		laboratory testing and on-site monitoring Dodds, W. (UK)	resistant reinforcement Lollini, F. (Italy)
16:50 17:05	17:05 17:20	laboratory testing and on-site monitoring Dodds, W. (UK) Performance-based correlations between different	resistant reinforcement <i>Lollini, F. (Italy)</i> Effects of material characteristics on ready-mixed
		laboratory testing and on-site monitoring Dodds, W. (UK) Performance-based correlations between different concrete properties	resistant reinforcement Lollini, F. (Italy) Effects of material characteristics on ready-mixed concrete and implementation of quality control system
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17:05	17:20	laboratory testing and on-site monitoring Dodds, W. (UK) Performance-based correlations between different concrete properties Selander, A. (Sweden)	resistant reinforcement Lollini, F. (Italy) Effects of material characteristics on ready-mixed concrete and implementation of quality control system Shekarchizadeh, M. (Iran)
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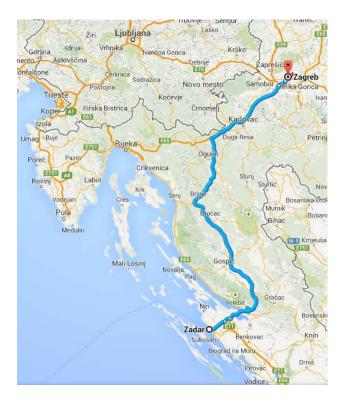
		DAY 2 - 12 JUNE 20	014
		HOTEL PANORAMA, Trg Krešin	nira Ćosića 9
		PLENARY SESSION - ROOM K	
08:30	09:00	Pierre-Claude Aïtchin The sky's the limit	
09:00	09:20	Mark Alexander Examples of performance-based approaches	for concrete durability in South Africa
09:20	09:40	Carmen Andrade Performance specifications and tests to ver	ify service life
09:40	10:00	Roberto Torrent The Swiss P2P Road: from Theorecrete to La	abcrete to Realcrete
10:00	10:20	Kei-ichi Imamoto Relationship between air permeability and	carbonation progress of concrete
10:20	10:45	Coffee	e break
Parallel	session	ROOM KAPTOL I Performance based design	ROOM KAPTOL II Durability enhancement
10:45	11:00	How can we move from prescription to performance? Mindess, S. (USA)	Performance versus prescriptive durability requirements - a case study
11.00	44.45		Gjørv, O.E. (Norway)
11:00	11:15	Field based performance indicators for concrete durability Santhanam, M. (India)	Evaluation of moisture and gas permeability of surface treated concrete under accelerated weathering conditions <i>Misono, M. (Japan)</i>
11:15	11:30	Probabilistic durability design and performance-based specification of concrete in the marine environment	Estimated performance of as-built internally cured concrete bridge deck
11.20	11.4F	Knights, J. (UK)	Villani, C. (USA)
11:30	11:45	Water permeability of reinforced concrete structures containing fiber reinforcement <i>Charron JP. (Canada)</i>	Influence of finishing materials on carbonation suppression of concrete in existing structures Nakai, A. (Japan)
11:45	12:00	Key performance indicators - A new approach for specifying concrete and assessing state of health of concrete structures Nanukuttan, S. (UK)	Extension of service life by electrochemical treatment of steel reinforcement <i>Sergi, G. (UK)</i>
12:00	12:15	Difficulties encountered in the derivation of performance criteria for reinforced concrete structures based on degradation models <i>Gulikers, J. (The Netherlands)</i>	Curing of concrete Jacobs, F. (Switzerland)
12:15	12:30	The Development of performance-based durability tables for reinforced concrete in the marine environment <i>Knights, J. (UK)</i>	Investigation on fired animal bones as aggregate replacement in concrete Makunza , J.K. (Tanzania)
12:30	13:30		ı break
Parallel	session	ROOM KAPTOL I	ROOM KAPTOL II
13:30	13:45	Durability modelling     Use of resistivity and chloride resistance model to assess concrete durability of New Panama Canal Andrade, C. (Spain)	Concrete mix parameters Porosity influence on life time of concrete structures analysed by chlorides migration testing <i>Ribeiro, D.V. (Brasil)</i>
13:45	14:00	Performance assessment of cracks in reinforced concrete: From crack width to crack volume Pacheco, J. (The Netherlands)	Durability of reinforced concrete member suffered hydrogen detonation Yoda, Y. (Japan)
14:00	14:15	Design of experiment and multi-criteria decision applied to concrete mixture with crushed brick and tile as an aggregate <i>Miličević, I. (Croatia)</i>	Coping with the effect of moisture on air-permeability measurements <i>Torrent, R. (Argentina)</i>
14:15	14:30	Predicting shrinkage deformation of high-strength concrete <i>Štirmer</i> , <i>N. (Croatia)</i>	Influence of blended cement type on concrete carbonation, capillary uptake and chloride penetration <i>Šajna, A. (Slovenia)</i>
14:45	15:00	Strategy for predicting transport-based durability properties of concrete based on DEM approach <i>Li, K. (The Netherlands)</i>	Autogenous deformations of dolomite based self- compacting concretes with different mineral aditives <i>Gabrijel</i> , I. (Croatia)
15:00	15:15	Assessment of routine cover measurements during the upgrading of fifteen bridge structures near Keimoes, South Africa Ronné, P. (South Africa)	Durability of lightweight concretes containing expanded polystyrene Bossio, A. (Italy)
15:15	15:30	Simulation of cyclic effects on coupled ionic and moisture transport in concrete <i>Yoon, S. (Scotland)</i>	Use of two-stage (pre-placed aggregate) concrete to produce durable structural concrete Abdelgader, H.S. (Libya)

## DAY 2 - 12 JUNE 2014

HOTEL PANORAMA, Tr	Krešimira	Ćosića '
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HOTEL PANORAMA, Trg Krešimira Čosića 9			
15:30	15:50	Coffee break	
Parallel	session	ROOM KAPTOL I ROOM KAPTOL II Maintenance and repair Special concretes	
15:50	16:05	Reinforced concrete corrosion performance in Florida bridges Sägues, A. (USA)	Influence of fine aggregate lithology on internal sulfate attack in high early strength concrete Amde, A. (USA)
16:05	16:20	Controlling past and future deterioration of reinforced concrete Christodoulou, C. (UK)	Characteristics of pervious concrete made with steel slag for road construction application Ćosić, K. (Croatia)
16:20	16:35	Aspects of conserving exposed concrete architecture with the Wotruba Church as an example <i>Ban, M. (Austria)</i>	Influence of steel fiber addition on the shrinkage of ordinary strength concrete and high strength concrete Šahinagić - Isović, M. (Bosnia and Hercegovina)
16:35	16:50	A monitoring system for preventive and programmed maintenance of concrete structures - case histories and studies Moriconi, G. (Italy)	Fibre reinforced SCC concrete with recycled fibres Baričević, A. (Croatia)
16:50	17:05	Life-cycle design after repair of chloride attacked concrete structures <i>Miyazato, S. (Japan</i> )	Impact strength evaluation of rubberized fiber reinforced SCC Jevtić, D. (Serbia)
17:05	17:20	Time to visual damage occurrence on building facades due to reinforcement corrosion Köliö, A. (Finland)	Development of high resistivity, high early strength concrete for direct current light rail <i>Tinnea, R. (USA)</i>
17:20	17:35	Study on structural performance of corroded RC member Oshita, H. (Japan)	
		SOCIAL PROGRAMME	
19:	:30	Organised transport	from Hotel Panorama
20:	:00	Conference dinner, Restaurant LIDO, Aleja Matije Ljubeka 25	

DAY 3 - 13 JUNE 2014			
TECHNICAL TOUR			
	VISITING PORT GAŽENICA IN ZADAR ON THE ADRIATIC COAST		
08:00	Expected departure from Zagreb		
20:00 - 22:00	Estimated arrival to Zagreb		







### **VENUES**

#### Lectures

OPENING SESSION Faculty of Civil Engineering Fra Andrije Kačića-Miošića 26, 10 000 Zagreb

#### LECTURES

Hotel Panorama Trg Krešimira Ćosića 9, 10000 Zagreb

#### Social programme

WELCOME RECEPTION ZAGREB EYE Trg Josipa Bana Jelačića, Ilica 1a, 10000 Zagreb

# CONFERENCE DINNER Restaurant Lido Aleja Matije Ljubeka 25, 10000 Zagreb

