



CRC

International RILEM conference on
early-age and long-term cracking
in RC structures



ENS Paris-Saclay, 9th April 2021

Programme



Friday, April 09, 2021 - CEST Time Zone	
08:00	Registration (for delegates participating at ENS Paris-Saclay)
08:45	Room A
	Opening Ceremony
09:00	Keynote Speaker 1: A. P. Caldentey Developments in crack width calculations: influence of type of force (bending or tension), casting position, curvature and shrinkage (Chair: M. Azenha)
09:30	Room A Room B
	S01 - Experimentation and on-site evaluation 1 (Chair: D. Schlicke) S02 - Modelling and simulation 1 (Chair: Laurie Lacarrière)
10:30	Coffee Break
10:45	Room A Room B
	S01 - Experimentation and on-site evaluation 2 (Chair: M. Azenha) S03 - Structural design and specification (Chair: C. Oliver-Leblond) S02 - Modelling and simulation 2 (Chair: M. Azenha)
12:25	Lunch
14:00	Room A
	Keynote Speaker 2: L. Boutillon Crack width vs Durability: Opportunities from a French national project (Chair: F. Benboudjema)
14:30	Room A Room B
	S04 - Binders, additions and admixtures (Chair: A. Bourdot) S02 - Modelling and simulation 3 (Chair: F. Kanavaris)
15:50	Coffee Break
16:05	Room A Room B
	S01 - Experimentation and on-site evaluation 3 (Chair: A. Jędrzejewska) S05 - Crack healing (Chair: A. Darquennes)
17:25	Conference closure (in Room A)
17:40	



CEST		CEST
08:00	Registration	08:00
	Room A	
08:45	Opening Ceremony - Miguel Azenha, Farid Benboudjema and Fragkoulis Kanavaris	08:45
09:00	Keynote Speaker 1: Alejandro Pérez Caldentey Developments in crack width calculations: influence of type of force (bending or tension), casting position, curvature and shrinkage Chair: Miguel Azenha	09:00
09:30	S01 - Experimentation and on-site evaluation 1 (Chair: D. Schlicke)	09:30
	S02 - Modelling and simulation 1 (Chair: L. Lacarrière)	
	ROOM A	ROOM B
	Crack initiation and propagation in fiber-glass reinforced mortars. <i>Pascale Saba, Tulio Honorio, Omar-Ateeq Mahmood and Farid Benboudjema</i>	Development of expansive agent model in a multi-scale thermodynamic framework based on hydration and microstructure formation. <i>Kolneath Pen, Tetsuya Ishida, Yuya Takahashi, Go Igarashi, Shinya Ito</i>
09:50	The effect of curing duration on restrained shrinkage cracking of concrete containing macro polymeric fibers. <i>Alireza Bagheri, Armin Jamali, Mina Pourmir, Hamed Zanganeh</i>	09:50
10:10	Distributed Optical Fibre Sensors for Strain and Temperature Monitoring of Early-Age Concrete: Laboratory and In-situ Examples. <i>Rafał Sienko, Łukasz Bednarski, Tomasz Howiacki</i>	10:10
10:30	Sustainability of Internally-Cured Concrete for Mitigating Shrinkage Cracking Using Service Life Prediction Models. <i>Sara Kalantari, Mohammad Ali Dastan Diznab, Fariborz Tehrani</i>	10:30
10:30	Numerical analysis of size effects on the stabilized cracking stage in RC members. <i>David Bouhji, Noam Demri, Miquel Aguilera Huguet, Silvano Erlicher, Julien Barot</i>	10:30
10:30	Coffee Break	10:30
10:45	S01 - Experimentation and on-site evaluation 2 (Chair: M. Azenha)	10:45
	S02 - Modelling and simulation 2 (Chair: M. Azenha)	
	S03 - Structural design and specification (Chair: C. Oliver-Leblond)	
	ROOM A	ROOM B
	Initiation period of corrosion by chloride ion in cracked concrete structures. <i>Julio Torres, Javier Sanchez</i>	Age-Adjusted Effective Elastic Modulus of High-Performance Concrete at Early Age. <i>Arosha Dabarera, Liang Li, Jiahang Li, Vishvendra Singh Jamwal, Qifan Yang, Vinh Dao</i>
11:05	Investigation on Crack Control and Crack Pattern Analysis of Self-Compacting Concrete Exposed to Standard Fire Exposure. <i>Mervin Ealiyas Mathews, Anand N, A Diana Andrushia, Tattukolla Kiran</i>	11:05
11:25	Imposed deformation reduction in semimassive walls of RC tanks by internal cooling. <i>Mariusz Zych, Trong Chuc Nguyen</i>	11:25
11:45	Crack width estimation in steel fibre reinforced concrete (SFRC): Design and limitations. <i>Ned Gould, Kanavaris Fragkoulis, Nuno Ferreira</i>	11:45
	In-situ X-CT test on mortar micro-specimen coupled with mesoscale numerical simulations of fracture. <i>Aliaksandra Tsitova, Fabien Bernachy-Barbe, Benoit Bary, François Hild</i>	
	Analysis of Plain Geopolymer Concrete Compression and Tension Strain Influence on Cross-Section Composition. <i>Rihards Gailitis, Andina Sprince, Leonids Pakrastins, Kinga Korniejenko, Tomass Kozlovskis</i>	
12:05	Cracking Analysis of Partially Prestressed Concrete Tie Under the Effect of Primary and Secondary Cracks. <i>Maurizio Taliano</i>	12:05
12:25	Design, Evaluation and Specification for Crack-Resistant Concrete Mixtures. <i>Jose Pacheco</i>	12:25
12:25	Lunch	12:25
14:00		14:00



CEST	Room A		CEST
14:00	<p align="center">Keynote Speaker 2: L. Boutillon Crack width vs Durability: Opportunities from a French national project (Chair: F. Benboudjema)</p>		14:00
14:30	<p align="center">S04 - Binders, additions and admixtures (Chair: A. Bourdot)</p>	<p align="center">S02 - Modelling and simulation 3 (Chair: F. Kanavaris)</p>	14:30
	ROOM A	ROOM B	
	<p>Effect of expansive additives on the early age elastic modulus development of cement paste by ambient response method (ARM). <i>Mayank Gupta, Go Igarashi, José Granja, Miguel Azenha, Tetsuya Ishida</i></p>	<p>Double wall containment building leak-tightness prediction. <i>Laurent Charpin, Charles Toulemonde, Adia Jean-Luc, Florian Escoffier, Sylvie Michel-Ponnelle, Guillaume Boulant, Benoit Masson, Julien Niepceron</i></p>	
14:50	<p>Effect of MgO-based expansive agent on the cement-based mortar behavior. <i>Lina Ammar, Kinda HANNAWI, Aveline Darquennes</i></p>	<p>Validation of thermo-hygro-mechanical FEM analysis of thick restrained RC members by comparison with experiments. <i>Cláudio Ferreira, Dirk Schlicke, Carlos Sousa, Rui Faria, Miguel Azenha</i></p>	14:50
15:10	<p>Bleeding of cement pastes modified with the addition of granite powder. <i>Adrian Chajec, Lukasz Sadowski</i></p>	<p>Numerical estimation of crack openings in concrete structures under multi-physic loadings. <i>Francois Soleilhet, Farid Benboudjema, Xavier Jourdain, Fabrice Gatuingt</i></p>	15:10
15:30	<p>Plasticizers as dispersants for carbon nanotubes in self-sensing cement composites. <i>Pedro de Almeida Carisio, Oscar Aurelio Mendoza Reales, Eduardo de Moraes Rego Fairbairn, Romildo Dias Toledo Filho</i></p>	<p>Crack control of upstream polder face using calibrated thermo-mechanical simulations. <i>Vit Šmilauer, Petr Havlásek, Pavel Reiterman, Petr Hunka</i></p>	15:30
15:50	Coffee Break		15:50
16:05	<p align="center">S01 - Experimentation and on-site evaluation 3 (Chair: A. Jędrzejewska)</p>	<p align="center">S05 - Crack healing (Chair: A. Darquennes)</p>	16:05
	ROOM A	ROOM B	
	<p>Experimental Investigations of Cracking in Reinforced Concrete Beams of Different Depth. <i>Aleksandr Sokolov, Deividas Rumsys, Karolis Sakalauskas, Darius Bacinskas, Gintaris Kaklauskas</i></p>	<p>Effects of Bacillus Subtilis on Crack Remediation in Thermally Degraded Limestone Calcined Clay Cement Mortars. <i>Joseph Mwitii Marangu, Mark Bediako</i></p>	
16:25	<p>Long-term experimental campaign on RC shrinkage cracking: conceptualization, planning and experimental procedures. <i>José Gomes, José Granja, Carlos Sousa, Cláudio Ferreira, Dirk Schlicke, Rui Faria, Miguel Azenha</i></p>	<p>Autogenous healing of high performance concrete using metakaolin. <i>Niviin Philip, Reeja P Soman</i></p>	16:25
16:45	<p>Strength behaviour of a high-performance concrete under drying. <i>Ismail Yurtdas, Nicolas Burlion, Jian-Fu Shao, Alex Li</i></p>	<p>Bacteria based self-healing of later-age cracks in concrete. <i>Lorena Skevi, Bianca Reeksting, Susanne Gebhard, Kevin Paine</i></p>	16:45
17:05	<p>The cracking sensitivity of a Na-geopolymer. <i>Sounean Heng, Kinda Hannawi and Aveline Darquennes</i></p>	<p>Effect of Binary-use Mineral Admixtures for the Advanced Autogenous Self-healing Behavior of Fiber-reinforced Cementitious Composites. <i>Oğuzhan Öztürk, Marta Roig-Flores</i></p>	17:05
17:25	<p align="center">Conference closure Miguel Azenha, Farid Benboudjema and Fragkoulis Kanavaris</p>		17:25
17:40			17:40