

Programme of 78th RILEM Week - Toulouse 2024

Venue: [INSA Toulouse](#)

Wednesday 21 August (INSA Toulouse)			
9:00-17:00	Pre-congress Courses		
Thursday 22 August (INSA Toulouse)			
9:00-17:00	Pre-congress Courses		
Friday 23 August (INSA Toulouse)			
9:00-17:00	Pre-congress Courses		
Saturday 24 August (INSA Toulouse)			
9:00-17:00	RILEM Imagine Workshop		
Sunday 25 August (INSA Toulouse)			
9:00 – 10:30	TAC	DAC	TC meetings
10:30-11:00	Coffee break		
11:00-12:30	TAC	DAC	TC meetings
12:30 – 13:30	Lunch Break		
13:30 – 15:30	TAC	DAC	TC meetings
15:30 – 16:00	Coffee break		
16:00-17:30	TAC	DAC	TC meetings
Monday 26 August (INSA Toulouse)			
9:00 – 10:30	EAC		TC meetings
10:30-11:00	Coffee break		
11:00-12:30	BoE M&S		TC meetings
12:30 – 13:30	Lunch Break		
13:30 – 15:30	BoE RTL		TC meetings
15:30 – 16:00	Conference registration - Pierre Baudis Conference Centre, Welcome desk	Coffee break	
16:00-17:30		DEV	TC meetings

RILEM Conference on Sustainable Materials & Structures: Meeting the major challenges of the 21st century - SMS 2024

Venue: Pierre Baudis Conference Centre

Monday 26 August (Pierre Baudis Conference Centre)

15:00–18:00	Conference registration - Pierre Baudis Conference Centre, Welcome desk						
18:30–22:00	SMS Conference Welcome Reception - Toulouse Place du Capitole, Café Le Florida						

Tuesday 27 August (Pierre Baudis Conference Centre)

7:00–7:45	Conference registration - Pierre Baudis Conference Centre, Welcome desk						
7:45–8:15	SMS Conference & 78th RILEM Weel official opening - Amphitheatre Saint-Exupery Bertrand Raquet (Director of INSA Toulouse), Nicolas Roussel (RILEM President), Alexandra Bertron (Conference Chair, 2024 RILEM Honorary president)						
8:15–10:15	Opening Conference - Major research avenues to address challenges of the 21st century - Karen Scrivener, Nicolas Roussel, Susan Bernal, Jason Weiss - Chairman: Ravindra Gettu						
10:15–11:00	Robert L'Hermitte Medal - Jose Norambuena-Contreras - Chairman: Enrico Sassoni						
11:00–11:30	Coffee / Poster Session						
	Amphitheatre Saint-Exupery	Guillaumet 1 (100)	Guillaumet 2 (100)	Spot (90)	Argos (60)	Diamant (50)	Latécoère
11:30–13:00	Cementitious materials: development and characterisation of binders	Cementitious materials: Early age, rheology and processing	Cementitious materials and structures: durability and long-term performances	Bituminous materials: Properties, sustainability and resilience	Bio-based materials	Data-driven concrete science	RILEM Bureau
13:00–14:00	Lunch / Poster Session						
14:00–16:00	Cementitious materials: development and characterisation of binders	Cementitious materials: Early age, rheology and processing	Cementitious materials and structures: durability and long-term performances	Bituminous materials: Properties, sustainability and resilience	Bio-based materials	Data-driven concrete science	RILEM Bureau
16:00–16:30	Coffee / Poster Session						
16:30–18:00	Cementitious materials: development and characterisation of binders	Cementitious materials: Early age, rheology and processing	Cementitious materials and structures: durability and long-term performances	Bituminous materials: Properties, sustainability and resilience	Bio-based materials	Wood in structures	RILEM Bureau
							Plaza Hotel (Capitole)
19:30–23:00							RILEM Banquet/dinner (RILEM Officers)

Wednesday 28 August (Pierre Baudis Conference Centre)

8:00–10:00	Plenary Session 2: TC presentations, 281-CCC Nele De Belie, 283-CAM Shishir Mundra, 289-DCM Kefei Li, 293-CCH Javier Sanchez & Alvaro Ridruejo						
10:00–10:30	Presentation of JCSS Joint Committee of Structural Safety - Jochen Köhler						
10:30–11:00	Coffee / Poster Session						
11:00–13:00	Cementitious materials: development and characterisation of binders	Low-CO2, low-energy, low-resources processes, recycling	Cementitious materials and structures: durability and long-term performances	Historic materials and buildings and cultural heritage	Corrosion, Maintenance and Repair of Concrete Materials and Structures	Characterisation and modelling on small scales	Materials for energy storage (Sensible-Heat, Latent-Heat, and Thermochemical)
13:00–14:00	Lunch / Poster Session						
14:00–16:00	Cementitious materials: development and characterisation of binders	Low-CO2, low-energy, low-resources processes, recycling	Cementitious materials and structures: durability and long-term performances	Historic materials and buildings and cultural heritage	Corrosion, Maintenance and Repair of Reinforced Concrete Structures	Characterisation and modelling on small scales	Materials for energy storage Energy-efficient buildings, comfort, IAQ
16:00–16:30	Coffee / Poster Session						
16:30–17:30	RILEM General Council	Low-CO2, low-energy, low-resources processes, recycling	Cementitious materials and structures: durability and long-term performances	Historic materials and buildings and cultural heritage	Corrosion, Maintenance and Repair of Reinforced Concrete Structures		
17:30–18:30	RILEM General Council		Cementitious materials and structures: durability and long-term performances	Historic materials and buildings and cultural heritage	Corrosion, Maintenance and Repair of Reinforced Concrete Structures		
19:00–23:30	Conference Dinner (Espaces Vanel, Médiathèque Marengo)						

Thursday 29 August (Pierre Baudis Conference Centre)

8:30–10:00	Plenary Session 3: TC presentations, 282-CCL Fernando Martirena, 291-AMC Wolfram Schmidt, 277-LHS Noni-Pagona Maravelaki						
10:00–10:30	Coffee / Poster Session						
10:30–13:00	Monitoring and NDT	Circular economy, Life Cycle Analysis, Regional Practices	Cementitious materials and structures: durability and long-term performances	Innovation Day	Earth materials	Corrosion of engineering materials – Session for young scientists	
13:00–14:00	Lunch / Poster Session						
14:00–16:00	Monitoring and NDT	Low-CO2, low-energy, low-resources processes, recycling	Cementitious materials and structures: durability and long-term performances	Innovation Day	Earth materials	Corrosion of engineering materials – Session for young scientists	
16:00–16:30	Coffee / Poster Session						
16:30–17:30	Monitoring and NDT	Low-CO2, low-energy, low-resources processes, recycling	Cementitious materials and structures: durability and long-term performances				
17:30–18:30	Young Research Meeting and Award Ceremony						

Cementitious materials: development and characterisation of cementitious binders

Session chairs: Prof. Gabriel Samson, Prof. Daman Panesar

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 13:00	11:30	11:55	'COLD-FUSION' – A NEW APPROACH TO STUDY C-S-H	Guoqing Geng, Guoqing Geng, Zhe Zhang, Lianyao Xiong
	11:55	12:10	ANALYSIS OF MICROSTRUCTURE AND PROPERTIES OF CARBON BLACK BASED COMPOSITE CEMENT AND CONCRETE	Kazi Islam, Wei Sha, Meng Gao
	12:10	12:25	CHARACTERIZATION OF CALCIUM CARBONATE CRYSTAL FORMATION IN CALCIUM CARBONATE CONCRETE	Ngoc Kien Bui, Takafumi Noguchi, Ippie Maruyama
	12:25	12:40	EFFECT OF CA(OH) ₂ AND KOH ON THE HYDRATION KINETICS OF ORDINARY PORTLAND AND SLAG-BASED CEMENTS	Jitendra Patel, Mirco Perinelli, Giulia Masi, Maria Elia Natali, Maria Chiara Bignozzi
	12:40	12:55	EFFECTS OF CHEMICAL ACTIVATION ON PROPERTIES AND HYDRATION MECHANISM OF HIGH VOLUME FLY ASH BINDERS	Effects of chemical activation on properties and hydration mechanism of high volume fly ash binders
13:00–14:00	Lunch break / poster session			
14:00–16:00	14:00	14:15	HYDRATION PROCESS OF ALKALI-ACTIVATED SLAG AND WIND TURBINE BLADE WASTE COMPOSITES	Tao Liu, Ana T. Lima
	14:15	14:30	ENHANCED HYDRATION OF STEEL SLAG WITH ADDITION OF SODIUM SULFATE AND THERMAL TREATMENT	Jiseul Park, Seohyun Kim, Ahyeon Lim, Juhyuk Moon
	14:30	14:45	MICROSTRUCTURAL AND CHEMICAL CHARACTERIZATION DURING THE RECYCLING PROGRESS OF SULFUR CONCRETE	Qinjian Wang, Didier Snoeck
	14:45	15:00	ON THE STABILITY OF HYDRATED MAGNESIUM CARBONATES	Nirrupama Kamala Ilango, Hoang Nguyen, Mohammad Alzeer, Frank Winnefeld, Paivo Kinnunen
	15:00	15:15	ENHANCING MORTAR COMPRESSIVE STRENGTH THROUGH THE COMBINED USE OF RAW BAUXITE REFINERY RESIDUE AND SUPPLEMENTARY CEMENTITIOUS MATERIALS	Pukar Siwakoti, Jaya Nepal, Salim Barbhuiya, Bamdad Ayati
	15:15	15:30	FIRED CLAY BRICK WASTE POWDER AS SILICOALUMINATE PRECURSOR FOR THE SUPERSULFATED CEMENT MANUFACTURING	Miguel Angel Martin Antunes, Andres Seco, Céline Perlot-Bascoulès, Jesus Maria Del Castillo, Sandra Espuelas,
	15:30	15:45	PERFORMANCE OF LIMESTONE CALCINED CLAY CEMENT (LC3) WITH ACTIVATED MARINE SEDIMENT	Zhijian Chen, Hailong Ye
15:45	16:00	CORRELATION OF HYDRATION AND STRENGTH TO MICROSTRUCTURE OF BINDERS BLENDED WITH VOLCANIC MATERIALS	Amrita Hazarika, Liming Huang, Ingemar Löfgren, Luping Tang, Arezou Baba Ahmadi	
16:00-16:30	Coffee break / Poster session			
16:30-18:00	16:30	16:45	OPTIMISATION OF LC3 BINDER PROPERTIES THROUGH VARIED CARBONATES	Xiangming Zhou, Shuang Liang, Mingqing Liu, Zhonghao Niu, Pengkun Hou
	16:45	17:00	PARTICLE SIZE EFFECTS ON EVOLUTIONS OF THE RHEOLOGY, HYDRATION, AND HARDENING PROPERTIES OF LIMESTONE CALCINED CLAY CEMENT	Pengkun Hou, Xiangming Zhou, Johann Plank
	17:00	17:15	PERFORMANCE OF MASONRY MORTARS WITH LADLE FURNACE SLAG AS SUPPLEMENTARY CEMENTITIOUS MATERIAL	Everton Souza, Tayná Silva, Eduardo Mariano, Gisleiva Ferreira, Carlos Gomes
	17:15	17:30	QUATERNARY BLENDS CONTAINING LOW-GRADE CALCINED CLAYS	Juan Manuel Etcheverry, Laurent Detemmerman, Vadim Grigorjev, Laurena De Brabandere, Degezelle Krist, Nele De
	17:30	17:45	ENVIRONMENTAL IMPACTS OF ONE-PART ALKALI ACTIVATED SLAG-BASED CONCRETE	Jayashree Sengupta, Nirjhar Dhang, Arghya Deb
	17:45	18:00	THE IMPACT OF NANO-SIO ₂ ON THE MECHANICAL PROPERTIES OF CEMENTLESS ULTRA-HIGH-PERFORMANCE CONCRETE BASED ON ALKALI-ACTIVATED MATERIALS	Piao Rongzhen Piao, Taekgeun Oh, booki Chun, Soonho Kim, Zhengri Cui, Doo-Yeol Yoo

Wednesday 28 August

Time slot	start	end	Title	Authors
11:00 – 13:00	11:00	11:25	ALKALI-ACTIVATED MATERIALS – SOME PERSISTENT OBSTACLES FOR PRACTICAL BREAKTHROUGH	Geert De Schutter
	11:25	11:40	A MULTI-STAGE EVALUATION PROCESS OF AUSTRIAN MINERAL WASTE STREAMS AS RAW MATERIALS IN ALKALI-ACTIVATED MATERIAL DEVELOPMENT	Stefanie Radinger, Amr Hassan, Ognjen Rudić, Bettina Ratz, Iris Zögl, Sara Raič, Steindl Florian, Florian Mittermayr,
	11:40	11:55	ALKALI-ACTIVATED MATERIALS BASED ON BLAST FURNACE SLAG AS A CONFINEMENT BARRIER FOR SOLID AND LIQUID RADIOACTIVE WASTE: FRESH STATE PROPERTIES	M. Jimena De Hita, María Criado
	11:55	12:10	CEMENTLESS BINDER BASED ON LIME-ACTIVATED WASTE CONCRETE POWDER	Aidarus Yonis, Yanchen Oinam, Prabhat Vashistha, Sukhoon Pyo
	12:10	12:25	DEVELOPMENT AND INVESTIGATION OF MECHANICAL PROPERTIES OF GEOPOLYMER MORTAR	Ioanna Skyrianou, Lampros N. Koutas, Christos G. Papakonstantinou
	12:25	12:40	DIELECTRIC PROPERTIES OF FLY ASH GEOPOLYMERS	Claudiane Ouellet-Plamondon, Eric David, Patrick Brisebois
	12:40	12:55	EFFECT OF GAMMA RADIATION ON THE STRENGTH DEVELOPMENT OF METAKAOLIN-BASED GEOPOLYMER	Emile Mukiza, Quoc Tri Phung, Suresh Seetharam, Lander Frederickx, Eef Weetjens, Geert De Schutter
13:00 – 14:00	Lunch break / poster session			
	14:00	14:15	EFFECTS OF LAGOON FLY ASH AND ACTIVATORS ON THE PROPERTIES OF GEOPOLYMER COMPOSITES BASED ON GROUND GRANULATED BLAST FURNACE SLAG	Yi Chen, Meng Gao, Wei Sha
	14:15	14:30	THERMODYNAMIC MODELING OF METAKAOLIN-BASED GEOPOLYMERS UNDER ACID ATTACK	Neven Ukrainczyk, Eddie Koenders
	14:30	14:45	EXPERIMENTAL STUDY AND MODELING OF N-A-S-H GEOPOLYMER PRODUCTS	Eashow Shamo, Angélique Rousselet, Alain Chartier, Thibault Charpentiers
	14:45	15:00	IMPACT OF GLASS POWDER TYPE ON THE PERFORMANCE OF ALKALI-ACTIVATED SLAG	Yujin Lee, Ilhwan You, Doo-Yeol Yoo, Seung-Jung Lee, Goangseup Zi
	15:00	15:15	INFLUENCE OF THE FORMING METHODS ON THE POROSITY AND MICROSTRUCTURE OF METAKAOLIN-BASED GEOPOLYMERS	Giulia Masi, Lucia Ferrari, Villiam Bortolotti, Elisa Franzoni, Maria Chiara Bignozzi
	15:15	15:30	PREDICTION OF COMPRESSIVE STRENGTH OF GEOPOLYMERS	Henning Kruppa, Anya Vollpracht
	15:30	15:45	STABILISATION OF EXPANSIVE SOIL USING ALKALI-ACTIVATED BINDER PRODUCED WITH UN-CALCINATED PRECURSOR	Mengyuan Zhu, Chin Leo, Qinghua Zeng, Jeff Hsi, Reza Karimi, Antonin Fabbri, Samantha Liyanapathirana, Pan Hu

14:00–16:00	15:45	15:47	INVESTIGATION OF THE EFFECT OF MESOPOROUS SILICA NANOPARTICLES ON EARLY-AGE CEMENT HYDRATION	Davoud Tavakoli, Özlem Cizer
	15:47	15:49	REACTIVITY OF SEWAGE SLUDGE ASH AFTER REMOVAL OF PHOSPHOROUS FOR USE IN CEMENT BASED MATERIALS	Gunvor Kirkelund, Lisbeth M. Ottosen, Wolfgang Kunther
	15:49	15:51	ENHANCING HYDRATION OF BOF SLAG PASTES THROUGH MONOPOTASSIUM PHOSPHATE ADDITION	Yanjie Tang, Katrin Schollbach, Sieger Van Der Laan, Jos Brouwers
	15:51	15:53	THE INFLUENCE OF DIFFERENT SULFATE SOURCES ON BELITE HYDRATION	Antonina Goncharov, Semion Zhutovsky
	15:53	15:55	COMPARING REACTIVITY OF SUPPLEMENTARY CEMENTITIOUS MATERIALS: FROM NATURAL POZZOLANS TO CONSTRUCTION AND DEMOLITION WASTE FINES	Andrea Bisciotti, Silvia Castellini, Alessandro Neri, Giuseppe Cruciani
	15:55	15:57	THE IMPACT OF RED MUD-DERIVED LAYERED DOUBLE HYDROXIDE (RM-LDH) ON HYDRATION, MICROSTRUCTURE, AND PROPERTIES OF CEMENT PASTE	Molan Li, Hailong Ye
	15:57	15:59	VALORIZATION OF PHOSPHATE INDUSTRY WASTE THROUGH GEOPOLYMER TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT	Hicham Majdoubi, Haddaji Younnes, Mouad Nadi, Bouchaib Manoun, Hassan Hannache, Youssef Tamraoui
	15:59	16:01	SYNTHESIS AND CHARACTERIZATION OF ECO-FRIENDLY GEOPOLYMER FOR SUSTAINABLE BUILDING APPLICATIONS	Zineb Moujoud, Abdeslem Elbouari, Omar Tanane
	16:01	16:03	ALKALI-ACTIVATION OF COPPER SLAG: EFFECT OF VARYING ACTIVATOR CONTENT AND SILICATE MODULUS ON PASTES AND MORTARS	Dhiraj Mahajan, Salman Muhammad
	16:03	16:05	ALKALINE ACTIVATION OF PARTIALLY AMORPHOUS BLACK STEEL SLAGS FOR THE PRODUCTION OF BINDERS WITH HIGH-TEMPERATURE RESISTANCE	Lorena Freire, Miguel Otero, Lucía Unamunzaga, Carolina Ramos
16:05	16:07	METAKAOLIN-BASED GEOPOLYMERS WITH DIFFERENT RAW MATERIALS CHARACTERISTICS	Sara Koubeissy, Franck Agostini, Nicolas Gay, Matthieu Briffaut	
16:00-16:30	Coffee break / Poster session			

Cementitious materials: Early age, rheology and processing

Session Chair: Prof. Arnaud Perrot

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 13:00	11:30	11:55	IMPACT OF CALCIUM CARBONATE POLYMORPHS DERIVED FROM CO ₂ MINERALIZATION SCHEMES ON CEMENT-BASED MATERIALS	Shiho Kawashima, Diandian Zhao, Jonah Williams, Ah-Hyung (Alissa) Park
	11:55	12:10	EFFECT OF GRAPHENE MATERIALS DISPERSION ON EARLY HYDRATION OF TERNARY BINDER	Suriyaprakash Saravanan, Liming Huang, Arezou Baba Ahmadi
	12:10	12:25	EFFECT OF NANO-SILICA ON THE RHEOLOGICAL PROPERTIES AND ORGANIC ADDITIVE DOSAGE OF CEMENTITIOUS MATERIAL	Kaci Chalah, Abdebaki Benmounah
	12:25	12:40	THE EFFECT OF THE FUNCTIONAL GROUP'S POSITION ON THE PERFORMANCE, AND MECHANISM OF POLYCARBOXYLATE SUPERPLASTICIZER	Bin Li, Ling Wang, Zhendi Wang
	12:40	12:55	VARIABILITY OF SUPERPLASTICISER-CEMENT INTERACTIONS	Wolfram Schmidt, Angela Tetteh Tawiah, Alice Titus Bakera, Kolawole Adisa Olonade
13:00 – 14:00	Lunch break / Poster session			
14:00–16:00	14:00	14:15	EXPLORATION OF SLAG-BASED CONCRETES CONTAINING AN ETTRINGITIC ACCELERATOR	Corentin Foulon, Cedric Roosz, Hervé Fryda, Barbara Benevenuti, Sarra El Housseini, Martin Cyr
	14:15	14:30	RHEOLOGICAL EVALUATION OF ALKALI-ACTIVATED BINDERS BASED ON FLY ASH AND STEEL SLAG WITH VARIATION OF SILICA MODULUS	Madson Souza, Abcael Melo, Mauro Silva Filho, Vinicius Veras, Jonathan Muñoz, Lucas Araújo, Lucas Babadopulos
	14:30	14:45	NEW INSIGHTS FOR DETERMINATION OF LINEAR VISCOELASTIC REGION OF MAGNETO-RESPONSIVE CEMENT PASTES BASED ON STRAIN-SWEEP TEST	Yiyuan Zhang, Yaxin Tao, Xiaodi Dai, Karel Lesage, Geert De Schutter
	14:45	15:00	SYNERGISTIC EFFECTS OF SUPERABSORBENT POLYMERS AND METAKAOLIN	Luiza Souza, Livia Agostinho
	15:00	15:15	MODELING SQUEEZE FLOW TEST OF 3D PRINTING MORTAR WITH FINITE ELEMENTS BASED ON EXPERIMENTAL RHEOLOGICAL DATA	Abcael Melo, Madson Souza, Lucas Babadopulos, Evandro Junior
	15:15	15:30	IMPROVEMENT OF COMPRESSIVE STRENGTH OF CONCRETE USING FLY ASH AT EARLY-AGE	Tien Dung Nguyen, Cong Thang Nguyen, Van Tuan Nguyen, V.N Luu
	15:30	15:45	NEW INSIGHTS FOR DETERMINATION OF LINEAR VISCOELASTIC REGION OF MAGNETO-RESPONSIVE CEMENT PASTES BASED ON STRAIN-SWEEP TEST	Yiyuan Zhang, Yaxin Tao, Xiaodi Dai, Karel Lesage, Geert De Schutter
15:45	16:00			
16:00-16:30	Coffee break / Poster session			
16:30-18:00	16:30	16:55	TOUGH AND DUCTILE NACRE-LIKE CEMENTITIOUS COMPOSITE ARCHITECTED MATERIALS	Shashank Gupta, Shagerdi Hadi, Reza Moini
	16:55	17:10	NATURAL FIBERS TO CONTROL EARLY AGE CRACKING: EFFECT ON FREE PLASTIC SHRINKAGE, EVAPORATION RATE AND SETTING TIME	Vincent Sabathier, Mohamed Kabore
	17:10	17:25	STUDY OF WORKABILITY, STRENGTH AND MICROSTRUCTURE ISSUES OF RECYCLED CONCRETE	Viacheslav Troian, Volodymyr Gots, Asel Maria Aguilar Sanchez, Ueli Angst, Robert J. Flatt
	17:25	17:40	3D CONCRETE PRINTING PARAMETERS FOR ENHANCED SUSTAINABILITY: A COMPREHENSIVE ANALYSIS	Khristel Rodriguez, Maria De Los Angeles Ortega Del Rosario, Rafael Duque, Luis Castellero, Melany Medina
	17:40	17:55	FLEXURAL STRENGTH OF 3D PRINTED CONCRETE LONGITUDINALLY REINFORCED BY HOLLOW NUT STUD BOLT REBAR	Xinze Li, Zhendi Wang
	17:55	17:57	EFFECT OF PUMPING DISTANCE AND WATER-BINDER RATIO ON THE PUMPABILITY OF 3D PRINTING CONCRETE	Hojae Lee, Eun-A Seo
	17:57	17:59	EFFECTS OF TIME-DEPENDENT RHEOLOGICAL PROPERTIES OF CEMENTITIOUS MATERIALS ON THE PRINT QUALITY OF EXTRUSION-BASED 3D PRINTING	Yu Jiang, Abir Al-Tabbaa, Ronan Daly

Cementitious materials and structures: durability and long-term performances

Session Chairs: Prof. Multon Stéphane, Prof. Marie Giroudon

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 13:00	11:30	11:55	STRESS EFFECT ON DEGRADATION DUE TO EXPANSION IN CONCRETE	Stéphane Multon
	11:55	12:10	DELAYED THERMAL TREATMENT ON HYDRATED CEMENTITIOUS MATERIALS WITH SCM : EVALUATION OF DEF RISK	Saillio Mickael, Oumayma Ahmadah, Arthur Resnier, Loic Divet, Jean-Michel Torrenti
	12:10	12:25	THERMODYNAMIC MODELING OF ASR PRODUCTS AND ESTIMATES OF CRYSTALLIZATION PRESSURE	Syrine Razki, Tulio Honorio, Alexandra Bourdot, Farid Benboudjema
	12:25	12:40	MACROSCOPIC MODEL FOR CONCRETE AFFECTED BY INTERNAL SWELLING REACTIONS CONSIDERING STRESS INFLUENCE AND DAMAGE	Ha-Thanh Phan, Boumediene Nedjar, Jean-François Seignol
	12:40	12:55	EVOLUTION OF THE RADIAL GAS PERMEABILITY OF CONCRETE UNDER COMPRESSIVE CREEP LOADING	Robin Cartier, Hugo Cagnon, Jérôme Verdier, Thierry Vidal
13:00–14:00	Lunch break / Poster session			
14:00–16:00	14:00	14:15	DAMAGE EVOLUTION IN CONCRETE UNDER FREEZE-THAW CYCLES COUPLED WITH FATIGUE LOADING	Xu Yanqun, Qiang Yuan, Geert De Schutter
	14:15	14:30	COMPARISON OF PROTECTED PASTE VOLUMES ESTIMATED BY THE DIRICHLET TESSELLATION TILE DIAGRAM AND CONVENTIONAL STEREOLOGY MODELS	Shin-Ichi Igarashi, Hayao Tanabe, Kazuya Ohyama
	14:30	14:45	CORRELATION BETWEEN POROSITY AND RESISTANCE TO FREEZE-THAW CYCLES OF NATURAL HYDRAULIC LIME PLASTERS	Maria Cecilia Carangi, Cristina Tedeschi
	14:45	15:00	VALIDATION OF A NON-DESTRUCTIVE INSTANTANEOUS METHOD FOR ASSESSING CARBONATION OF COATED CONCRETE	Oujidane Qacami, Bruno Huet, Philippe Turcry, Abdelkarim Ait-Mokhtar, Ravi Ajitbhai Patel, Frank Dehn
	15:00	15:15	CAPILLARY IMBIBITION OF NATURALLY CARBONATED SAMPLES EVALUATED VIA NEUTRON RADIOGRAPHY	Natalia Alderete, Juan Manuel Etcheverry, Vanessa Cappellesso, Yasmina Shields, Claire Riordan, Nele De Belie
	15:15	15:30	CHANGES IN MICROSTRUCTURE AND MECHANICAL PROPERTIES OF CEM I AND CEM III CEMENTITIOUS MATERIALS INDUCED BY ACCELERATED CARBONATION	Quoc Tri Phung, Thi Nhan Nguyen, Lander Frederickx
	15:30	15:45	RESEARCH ON CARBONATION RESISTANCE OF LOW CARBON CEMENT CONCRETE	Hao Xue, Zhendi Wang
15:45	16:00	MODELLING THE CARBONATION OF A HIGH-PERFORMANCE CONCRETE UNDER SPECIFIC ENVIRONMENTAL CONDITIONS	Maxime Ressler, Francois Soleilhet, Nicolas Seigneur, Philippe Turcry, Abdelkarim Ait-Mokhtar	
16:00-16:30	Coffee break / Poster session			
16:30-18:00	16:30	16:45	CARBONATION IN CEMENTITIOUS MATERIALS: CRACKS IN MESOPORES	Sahar Iftikhar, Arezou Babaahmadi, Jelke Dijkstra, Tang Luping, Ingemar Löfgren
	16:45	17:00	EFFECT OF BLAST FURNACE SLAG FINE AGGREGATE UNDER DIFFERENT STORAGE ENVIRONMENTAL CONDITIONS ON CONCRETE	Yusuke Koshiishi, Akio Tanaka, Chizuru Kiyohara
	17:00	17:15	SHRINKAGE CRACK RESISTANCE MECHANISM OF CONCRETE WITH HIGH BLAST-FURNACE SLAG CONTENT	Mayuko Hirata, Haruki Momose, Tetsushi Kanda, Daijiro Tsuji, Masaro Kojima, Kei-Ichi Imamoto, Chizuru Kiyohara
	17:15	17:30	STRENGTH OPTIMIZATION AND DURABILITY OF LIGHTWEIGHT HYBRID BINDER MORTARS BASED ON VOLCANIC PUMICE.	Jesús López Salas, José Iván Escalante-García
	17:30	17:45	MULTINUCLEAR MAS-NMR INVESTIGATION OF MAGNESIUM POTASSIUM PHOSPHATE CEMENTS FOR TRITIUM SEQUESTRATION	Arthur Listwan, Thibault Charpentier, Céline Cau Dit Coumes, Mickaël Payet, Elodie Bernard
	17:45	17:47	FREEZE-THAW, CARBONATION AND SULFATE ATTACK RESISTANCE OF HIGH VOLUME FLY ASH BINDERS	Zvezdana Bascarevic, Jelena Rakic
	17:47	17:49	CARBONATION DURING CYCLIC WET-DRY CONDITIONS IN THE PRESENCE OF CHLORIDES	Stefanie V. Greve-Dierfeld, Daniel Grolimund
	17:49	17:51	CARBONATION BEHAVIOUR OF CONCRETE CONSIDERING THE CONSTITUENTS OF COARSE AGGREGATE	Tien-Dung Nguyen, Emilio Bastidas-Arteaga, Rachid Cherif, Pierre-Yves Mahieux
	17:51	17:53	CARBONATION RESISTANCE OF GGFBS/CALCINED CALY-BASED ALKALI-ACTIVATED CONCRETES	Luis Tambara, Frank Dehn, Gregor Gluth

Wednesday 28t August

Time slot	start	end	Title	Authors
11:00 – 13:00	11:00	11:15	PERFORMANCE APPROACH APPLIED TO CONCRETES FOR CONTROLLED MODULUS COLUMNS	Gilles Escadeillas, Nathalie Kouta, Vanessa Mazars, Jean Ostrovsky
	11:15	11:30	ANALYZING THE IMPACT OF CALCIUM CARBONATE PRECIPITATED BY BACTERIA ON CEMENT MORTAR	Seoeun Oh, Sang-Yeop Chung
	11:30	11:45	ANTIBACTERIAL PROPERTIES OF SORBATE-MODIFIED ALKALI-ACTIVATED SLAG	Xiaojuan Kang, Hailong Ye
	11:45	12:00	THE INFLUENCE OF TREATED WOOD FIBERS IN THE BEHAVIOR OF BIO-REINFORCED CEMENT MORTARS	Petrini Kampragkou, Vasiliki Kamperidou, Maria Stefanidou
	12:00	12:15	INVESTIGATION ON CHLORIDE CONTAMINATION THROUGH MICROBIAL INDUCED CALCIUM CARBONATE PRECIPITATION TREATMENT OF RECYCLED MIXED	Brigitte Nagy, Kai Tandon, Andrea Kustermann
	12:15	12:30	SUPER-SULPHATED CEMENT – DURABILITY OF ULTRA-LOW CARBON EMISSION CONCRETES	Fabrizio Moro, Sylvia Keßler, Kruspan Peter
12:30	12:45	COMPARISON OF THE MECHANICAL AND DURABLE BEHAVIOUR OF SUSTAINABLE MORTARS WITH REDUCED CEMENT CONTAIN WITH LIMESTONE, METAKAOLIN	Miguel Angel De La Rubia, Alvaro Picazo, Cristina Argiz , Encarnacion Reyes , Jaime Galvez , Amparo Moragues , Elvis	
13:00–14:00	Lunch break / Poster session			
14:00 – 16:00	14:00	14:15	EFFECT OF CALCINED MARINE CLAY ON THE STRENGTH, WATER AND CHLORIDE IONS TRANSPORT PROPERTIES OF CONCRETE	Baixing Song , Hongjian Du , Sze Dai Pang
	14:15	14:30	EFFECT OF CARBONATION ON THE MECHANICAL PROPERTIES OF CONCRETE	Qier Wu, Thomas Rougelot, Hailing Shi, Jian-Fu Shao, Olivier Helson
	14:30	14:45	NON-DESTRUCTIVE METHOD FOR MONITORING THE EFFECT OF CARBONATION IN CEMENTITIOUS MATRIX THROUGH CONDUCTIVITY MEASUREMENT WITH MINI-RESILIENCE ASSESSMENT: MORTAR INCORPORATING CARBONATED FINE RECYCLED CONCRETE AGGREGATES	Arezou Baba Ahmadi, Tang Luping, Liming Huang, Ingemar Löfgren
	14:45	15:00		Chao Qun Lye, Sze Dai Pang

15:00 - 16:00	15:00	15:15	EFFECT OF MIXED RECYCLED AGGREGATES ON QUATERNARY BLENDED HIGH STRENGTH SELF-COMPACTING CONCRETE	Merin Mathew, Dr. Girija K
	15:15	15:30	EFFECTS OF BIOCHAR AND ACCELERATED CARBONATION ON THE MICROSTRUCTURE, MECHANICAL PROPERTIES, CARBON CAPTURE OF LIMESTONE CALCINED CLAY	Harn Wei Kua, Abhimanyu Goel, Jun Hao, Jeremy Teo
	15:30	15:45	EFFECT OF METAKAOLIN CONTENT ON MICROSTRUCTURE EVOLUTION OF CEMENT PASTE INDUCED BY CARBONATION USING PROTON NMR RELAXOMETRY	Rui Zhang, Shiju Joseph, Özlem Cizer
	15:45	16:00	CLAY POZZOLANA CONCRETE FOR SUSTAINABLE CONSTRUCTION- FROM LABORATORY TO FIELD PRACTICE	Mark Bediako, N Asante, Timothy Ametefe, Solomon Adumatta
16:00-16:30	Coffee break / Poster session			
16:30-18:00	16:30	16:45	COMPRESSIVE PERFORMANCE OF CEMENTITIOUS MATERIAL-FILLED AUXETIC PANEL COMPOSITE STRUCTURES	Mohammad Hajsadeghi, Emmanuel Owoichoechi Momoh, Amila Jayasinghe, Raffaele Vinai, Prakash Kripakaran, Ken E
	16:45	17:00	PRINCIPLE AND MECHANICAL PROPERTIES OF PRESTRESSED CONCRETE WITHOUT REINFORCEMENT	Aofei Liang, Zhendi Wang
	17:00	17:15	ASSESSMENT OF FRESH, STRENGTH AND SHRINKAGE PROPERTIES OF CONCRETE USING VARIOUS SHRINKAGE REDUCING AGENT SOURCES	Saeid Ghorbani, Jeroen Smet, Ives Swennen
	17:15	17:30	STUDY OF PROPERTIES IN THE FRESH AND HARDENED STATE OF CONCRETE MIXED WITH RECYCLED AGGREGATES	Marcos David Dos Santos, Filipe Brito Marinho De Barros, Arnaldo Manoel Pereira Carneiro
	17:30	17:45	SCALING LAWS IN PROGRESSIVE COLLAPSE STUDIES	Nada Elkady, Levingshan Augusthus-Nelson, Laurence Weekes
	17:45	17:47	ASSESSMENT OF THE IMPACT OF PRE-HYDRATED CEMENT ON THE LONG-TERM PERFORMANCE OF CONCRETE	Traad Alzhrani, Colin Davie, Magdalini Theodoridou
	17:47	17:49	ENHANCING THE DURABILITY OF NATURAL FIBER-REINFORCED CEMENTITIOUS COMPOSITES BY CHEMICAL TREATMENT	Gulsen Nazerian, Guillermo Meza Hernandez, Jun Gu, Hubert Rahier
	17:49	17:51	REDUCTION OF POLLUTING GASES THROUGH THE USE OF ECO-SUSTAINABLE CEMENTS. A DURABILITY STUDY	Miguel Angel De La Rubia, Alvaro Picazo, Cristina Argiz, Encarnacion Reyes, Jaime Galvez, Amparo Moragues, Elvis
	17:51	17:53	ENHANCING CONCRETE SUSTAINABILITY: UTILIZING BIOCHAR AND CALCIUM CARBONATE FOR REDUCED CARBON FOOTPRINT	Sharareh Shirzad
	17:53	17:55	STRUCTURAL PERFORMANCE OF ELEMENTS REALISED WITH SUSTAINABLE BINDERS	Gianni Blasi, Marianovella Leone, Maria Antonietta Aiello

Thursday 29th of August, room

Time slot	start	end	Title	Authors
10:30 - 13:00	10:30	10:45	CHEMO-MECHANICAL MODELING OF AN OPC CEMENT PASTE EXPOSED TO EXTERNAL SULFATE ATTACK: AN APPROACH BASED ON SULFATES ADSORBED IN C-S-H AND	Anthony Soive, Syed Yasir Alam, Safae Berrabeh, Ahmed Loukili
	10:45	11:00	CALCIUM SILICATE HYDRATES STABILITY UNDER CHEMICALLY AGGRESSIVE CONDITIONS	Cédric Roos, Marie Giroudon, Mehdi Bista, Arij Fawaz, Fructueux Jéugnon Sohounme, Laurie Lacarrière, Alexandra
	11:00	11:15	LEACHING AND CARBONATION MODELLING OF CONCRETE UNDER VARIABLE HYDROTHERMAL CONDITIONS	Layla Ibrahim, Laurie Lacarrière, Thierry Vidal, Alain Sellier
	11:15	11:30	MIX DESIGN GUIDANCE FOR CARBONATION-RESISTANT ALKALI-ACTIVATED PASTES INCORPORATING MSWI BOTTOM ASH: INSIGHTS FROM THERMODYNAMICS	Farnaz Aghabeyk, Boyu Chen, Mayank Gupta, Luiz Miranda De Lima, Yun Chen, Ye Guang
	11:30	11:45	DURABILITY OF INNOVATIVE CEMENTITIOUS COATINGS FOR CONCRETE WASTEWATER TREATMENT PLANTS: IMPACT OF CRACKS ON BIODETERIORATION	Reem Hoballah, Matthieu Peyre Lavigne, Ahmed Toumi, Laurie Lacarrière, Cédric Patapy, Carole Soula, Amr
	11:45	12:00	LIVING CONCRETE WALLS: ENGINEERING BIORECEPTIVITY AND BIOFILMS	Julia Von Werder, Leonie Stohl, Jake Cook, Chiara Tonon
	12:00	12:15	EFFECT OF AGGREGATE SIZE ON LOAD INDUCED THERMAL STRAIN OF CONCRETE AT HIGH TEMPERATURE	Kajanan Selvaranjan, John Provis, Maurizio Guadagnini, Giacomo Torelli
	12:15	12:30	CHEMICAL ACIDIFICATION OF PORTLAND-CEMENT BASED PASTES	Feyza Nur Sahan, O. Burkan Isgor, William Jason Weiss
	12:30	12:45	CORROSION OF SALT CONCRETES IN MAGNESIUM-RICH SALINE SOLUTION SIMULATING EVAPORITE ROCK IN THE MORSLEBEN REPOSITORY	Ricky Henning, Patrick Sturm, Sylvia Keßler, Gregor Gluth
13:00-14:00	Lunch break / Poster session			
14:00-16:00	14:00	14:02	RILEM TC GDP. RECENT PROGRESS IN MEASURING GAS DIFFUSION IN CEMENT BASED MATERIALS.	Bruno Huet, Philippe Turcry, Carmen Andrade, David Benavente, Wisssem Dridi, Fabien Georget, Andreas Leeman,
	14:02	14:04	RESISTANCE AGAINST SULPHATE OF BINARY AND TERNARY WITH GGBS OR/AND HIGH LIMESTONE CONTENT	Matthieu Bertin, Yoann Jainin, Roberta Alfani, Martin Cyr
	14:02	14:04	SUSTAINABLE TERNARY BLENDED MIXTURE SCC: STRENGTH AND TRANSPORT PROPERTIES	Timothy Kofi Ametefe, Mark Bediako, Jones Owusu Twumasi
	14:04	14:06	SCM REACTIVITY IN MULTICOMPONENT CEMENTS: DIFFERENTIAL EFFECTS OF MIX DESIGN PARAMETERS ON SCM INTERACTIONS	Hasmik Bou Farhat, Guillaume Lepêcheur, Ruben Snellings
	14:06	14:08	INVESTIGATION OF STRUCTURAL AND OPTICAL PROPERTIES OF COAL FLY ASH THIN FILM DOPED WITH T	Rawan Aljabbari, Thamer Alomayri, Faisal G. Al-Maqate, Abeer Alsuwat
	14:08	14:10	PROTON NUCLEAR MAGNETIC RESONANCE (1H NMR) SPECTROSCOPY STUDY ON THE MICROSTRUCTURE OF CEMENT PASTE CONTAINING ELECTRIC ARC FURNACE SLAG	Namkon Lee, Muhammad Haseeb Zaheer
	14:10	14:12	MICROSTRUCTURE CHARACTERISTICS OF INTERFACIAL TRANSITION ZONE IN CONCRETE BASED ON FLUORESCENT EPOXY IMPREGNATION METHOD	Jiarong Shen
	14:12	14:14	BIODETERIORATION MAPPING OF LOW CARBON SEWAGE CEMENTITIOUS MATERIALS FROM RAMAN INSIGHT TO CHEMOMETRICS INPUTS	Janette Ayoub, Mario Marchetti, Tony Pons, Marcos Oliveira, Marielle Gueguen Minerbe
	14:14	14:16	SHORT-TERM INVESTIGATION OF INTERACTIONS OF PLAIN CONCRETE, MARINE MICROORGANISMS, AND SEA WATER FOR THE APPLICATION OF FOWTS	Deeksha Arya Margapuram, Marie Salgues, Fabrice Deby, Raphael Lami, Benjamin Erable, Michel Groc, Renaud
	14:16	14:18	KINETIC MODELLING OF THE EFFECT OF SCM FINENESS, CURING TEMPERATURE AND CONSTITUENT INTERACTIONS ON REACTIVITY	Guillaume Lepêcheur, Hasmik Bou Farhat, Shiju Joseph, Özlem Cizer, Ruben Snellings
	14:18	14:20	SIMULATING NEUTRON RADIOGRAPHY FOR DESIGN AND INTERPRETATION	Tanner Heatherly, Todd Palmer, Burkan Isgor, Jason Weiss
14:20	14:22	BEHAVIOR OF CONCRETE EXPOSED TO SODIUM CHLORIDE	Fadi Althoey Althoey	

Bituminous materials: properties, sustainability and resilience

Session Chairs: Prof. Eshan Dave, Prof. Gabriele Tebaldi

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 13:00	11:30	11:55	RESILIENCE OF ASPHALT PAVEMENTS	Eshan Dave
	11:55	12:10	EXPERIMENTAL EVALUATION OF SELF-HEALING PROPERTIES OF BITUMINOUS BINDERS: OUTCOMES AND CHALLENGES FROM RILEM TC 278-CHA	Fabrizio Miglietta, Roberto M. Aurilio, Lucia Tsantilis, Orazio Baglieri, Hassan Baaj
	12:10	12:25	UNRAVELLING G*/SINδ AND G*.SINδ CRITERIA THROUGH PHASE ANGLE ANALYSIS	Sham Ravindranth, Akanksha Pandey
	12:25	12:40	TOWARDS A CONCEPT REPLACING BITUMEN WITH RENEWABLE BIO-BINDER	Michael P. Wistuba, Trifunović Stefan
	12:40	12:55	ASSESSING THE IMPACT OF VOLUMETRIC PROPERTIES ON WMA PERFORMANCE USING HAMBURG WHEEL TRACKING TEST	Jorge Del Valle Corte, Pablo Orosa Iglesias, Ana María Rodríguez Pasandín, Ignacio Pérez Pérez, Santiago Ferro Lojo
13:00 – 14:00	Lunch break - poster session			
14:00 – 16:00	14:00	14:15	ANALYZING THE EFFECT OF ADDITIVES ON THE RHEOLOGICAL PROPERTIES OF SBS MODIFIED BINDERS	Sham Ravindranth, Akanksha Pandey
	14:15	14:30	OPTIMIZING ASPHALT MIX PERFORMANCE FOR HEAVY DUTY PAVEMENTS	Maissa Gharbi, Aybike Öngel, Nicolas Bueche, Mehdi Ould-Henia, Tobias Balmer, Samuel Probst
	14:30	14:45	CODA WAVE INTERFEROMETRY FOR FATIGUE MONITORING AND HEALING CHARACTERIZATION OF ASPHALT MIXTURES	Hassan Baaj, Roberto M. Aurilio
	14:45	15:00	ENCAPSULATED PYROLYTIC REJUVENATOR BASED ON WASTE MINING TYRES TO PROMOTE SELF-HEALING OF MICROCRACKS IN AGED BITUMEN	Jose Concha, Manuel Chávez-Delgado, Erik Alpizar-Reyes, Jose Norambuena-Contreras
	15:00	15:15	SENSITIVITY OF THE SPECIFIC HEAT CAPACITY OF ASPHALT CONCRETE TO MIXTURE CONSTITUENTS AND CONDITIONING TEMPERATURES	Duygu Demirtürk, Hande Isik Ozturk, Murat Guler
	15:15	15:30	THE EFFECT OF USING PRIME COAT ON THE SURFACE TEMPERATURE OF ASPHALT PAVEMENT	Mohsen Shamsaei, Alan Carter, Michel Vaillancourt
	15:30	15:45	MANDATORY USE OF HIGH VINYL CONTENT SBS POLYMERS FOR BITUMEN MODIFICATION AND PAVEMENT CONSTRUCTION	Sham Ravindranth, Soheli Islam, Sumit Singh, Gd Ransinchung R. N
15:45	16:00	PROPERTY EROSION IN REACTIVE ELASTOMERIC TERPOLYMER MODIFIED BINDERS: ROLE OF STORAGE TEMPERATURE AND TIME	Sham Ravindranth, Alok Sharma, Gd Ransinchung R. N	
16:00-16:30	Coffee break - poster session			
16:30-18:30	16:30	16:55	EVALUATION OF THE MECHANICAL PERFORMANCE OF BSM AS A FUNCTION OF ACTIVE FILLERS AND BITUMINOUS STABILISING AGENTS	Fausto Bisanti, Gabriele Tebaldi, Eshan V. Dave
	16:55	17:10	INFLUENCE OF A SUSTAINABLE MATERIAL PROCESSING OF RECLAIMED ASPHALT ON PERFORMANCE TESTS AND FORECASTS OF ASPHALT PAVEMENTS	Panujan Naguleswaran, Pahirangan Sivapatham, Ines Dragon
	17:10	17:25	INVESTIGATION OF THE PERFORMANCE OF COLD MIX ASPHALT INCLUDING, 50% RAP AND CEMENT	Maissa Gharbi, Nicolas Bueche, Christian Angst
	17:25	17:40	PRESENTATION OF THE ALTERNATIVE PAVING MATERIALS – SUSTAINABILITY TECHNICAL COMMITTEE PROPOSAL	Davide Lo Presti, Emmanuel Chailleux, Ana Jimenez del Barco Carrion, Kamilla Vasconcelos, Filippo Giustozzi
	17:40	17:55	SUSTAINABLE PAVEMENT STRUCTURE BY USING COLD RECYCLING TECHNOLOGY (BSM METHODOLOGY) IN COMPARISON TO TRADITIONAL PAVEMENTS DESIGN	Jibrin Mohammed Kaura, Abdulfatai Adinoyi Murana Murana, Shuaibu Abdulmumin Ahmed, Bilkisu Hassan Sada
	17:55	17:57	EFFECTS OF LABORATORY COMPACTION METHODS ON PROPERTIES OF COLD RECYCLED ASPHALT MIXTURES	Nicola Carbutti, Eshan Dave, Gabriele Tebaldi, Jo Sias
	17:57	17:59	EVALUATION OF STONE MATRIX ASPHALT DESIGNED WITH UNTREATED RECYCLED CONCRETE AND ASPHALT PAVEMENT AGGREGATES	Lee Leon
	17:59	18:01	IMPACT OF AGING ON CHEMICAL AND RHEOLOGICAL CHARACTERISTICS OF SELF-HEALING ASPHALT BINDER	Nacer Akkouri
	18:01	18:03	LABORATORY INVESTIGATION OF MECHANICAL PROPERTIES AND DURABILITY PERFORMANCE OF CEMENT-TREATED RECLAIMED ASPHALT PAVEMENT BASE WITH	Rishi Singh Chhabra, Gd Ransinchung R. N
	18:03	18:05	RESTORATION OF PHYSICAL PROPERTIES ON LONG-TERM AGED BITUMEN BY EFFECT OF A PYROLYTIC REJUVENATOR BASED ON WASTE TYRES	Manuel Chávez-Delgado, Jose L. Concha, Luis E. Arteaga-Pérez, Jose Norambuena-Contreras
	18:05	18:07	COMPARISON OF COSTS AND BENEFITS OF USING NATURAL AND RECYCLED CONCRETE AGGREGATES IN ASPHALT CONCRETE: A CASE STUDY IN TURKEY	Duygu Demirtürk, İffet Gamze Mütevelli Özkan

Biobased materials

Session-Chair: Prof. Camille Magniont

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 13:00	11:30	11:55	ABOUT THE COMPLEXITY OF A COMPREHENSIVE APPROACH TO MITIGATING AND ADAPTING TO CLIMATE CHANGE WHEN DESIGNING BUILDINGS	Thibaut Lecompte
	11:55	12:10	BIO-BASED BUILDING MATERIALS: IMPACT OF THE THERMAL CONDUCTIVITY VARIABILITY ON THERMO-HYDRIC BEHAVIOR	Séverine Rosa Latapie, Ariane Abou Chakra, Vincent Sabathier
	12:10	12:25	INFLUENCE OF BIORESOURCE ON MINERAL BINDERS HYDRATION AND VEGETAL CONCRETES COMPRESSIVE STRENGTH	Ana Laura Berger Cokely, Rafik Bardouh, Sofiane Amziane, Evelyne Toussaint, Grégory Mouille, Agathe
	12:25	12:40	CHARACTERIZATION OF THE PHYSICAL AND THERMAL PROPERTIES OF MISCANTHUS FOR BUILDING MATERIAL	Mohammed Yacine Benariba, Anh Dung Tran Le, Dang Mao Nguyen, Geoffrey Promis
	12:40	12:55	INFLUENCE OF SUNFLOWER STALKS PROCESSING PARAMETERS ON THE PROPERTIES OF PITH INSULATING MATERIALS	Myriam Goutière, Aurélie Laborel-Préneron, Camille Magniont
13:00 – 14:00	lunch break - poster session			
14:00 – 16:00	14:00	14:15	STUDY OF THE MECHANICAL BEHAVIOR OF HEMP CONCRETE WITH TWO DIFFERENT MINERAL BINDERS THROUGH DIGITAL IMAGE CORRELATION IN VARIED AGGREGATE	Rafik Bardouh, Evelyne Toussaint, Sofiane Amziane, Sandrine Marceau, Ana Laura Berger Cokely
	14:15	14:30	THE UTILIZATION OF RECYCLED CELLULOSE IN CEMENTITIOUS MATERIALS	David Law, Chamini Liyanage, Chamila Gunasekara
	14:30	14:45	BIO-BASED CORE-SHELL CAPSULES FOR SELF-HEALING CONCRETE WITH CORROSION INHIBITION	Erik Alpizar-Reyes, Mercedes Sánchez-Moreno, M. Ángeles Oliva-Lamarca, Jose Norambuena-Contreras
	14:45	15:00	EXPLORING THE BEHAVIOUR OF HUMIDITY RESPONSIVE MATERIALS	Natalia Pynirtzi, Kumar, Biswajit Debnath, Mahab Aljanaat, Jane Scott, Colin Davie, Ben Bridgens
	15:00	15:15	OPTIMIZED VEGETAL WOOLS FOR INDOOR COMFORT: COUPLING FIRE TREATMENT WITH ACOUSTIC AND HYGROTHERMAL PERFORMANCES	Thomas Schatzmayr Welp Sá, Sandrine Marceau, Clément Piégay, Philippe Glé, Fouad Laoutid, Cesar
	15:15	15:30	QUANTIFYING CELLULOSE NANOCRYSTALS ADSORPTION ON CEMENTITIOUS CONSTITUENTS	Sivakumar Ramanathan, Krishna Siva Teja Chopperla, O. Burkan Isgor, W. Jason Weiss
	15:30	15:45	INTEGRATING MOISTURE DYNAMICS INTO GRASSHOPPER ARCHITECTURAL DESIGN WORKFLOW: A PLUGIN TO GRASP THE BENEFITS OF MOISTURE BUFFERING	Magda Posani, Yasmine Priore, Pierre Estève, Emma Livio, Dominique Daudon, Guillaume Habert
	15:45	16:00	POTENTIAL OF LOCAL AGRICULTURAL BY-PRODUCTS FOR VEGETAL CONCRETE DESIGN	Haga Ratsimbazafy, Aurélie Laborel-Préneron, Camille Magniont, Philippe Evon, Pascale Sénéchal
16:00-16:30	coffee break - poster session			
16:30-18:00	16:30	16:55		Monika Woloszyn
	16:55	17:10	CHARACTERIZATION OF MICROSTRUCTURE EVOLUTION OF HEMP CONCRETE IN THE EARLY STAGE BY 3D X-RAY MICROTOMOGRAPHY	Haichuan Liu, Dmytro Kosiachevskyi, Benjamin Smaniotta, Kamilia Abahri
	17:10	17:25	AN ANALYTICAL REVIEW OF THE INFLUENCE OF MICROSTRUCTURE ON THE CHEMICAL, PHYSICAL, AND HYGROTHERMAL PROPERTIES OF PLANT AGGREGATES	Mohammed Yacine Benariba, Anh Dung Tran Le, Dang Mao Nguyen, Geoffrey Promis
	17:25	17:27	ECO-FRIENDLY BUILDING SOLUTIONS: UNVEILING THE POTENTIAL OF WOOD WASTE PANELS FOR SUSTAINABLE CONSTRUCTION INNOVATION	Maya Hajj Obeid, Mickael Pailha, Monika Woloszyn
	17:25	17:27	100% BIO-BASED MATERIALS FOR COMFORTABLE AND DEMOUNTABLE CONSTRUCTIONS	A. Copin, S. Marceau And M. Guéguen Minerbe
	17:27	17:29	CHARACTERIZATION OF ONE ENDEMIC BAMBOO SPECIE OF AFRICA FOR INDUSTRIAL AND CONSTRUCTION APPLICATIONS	Japhet Noubiap Ngouobe, Thibaut Lecompte, Paul Salomon Ngohe-Ekam, Penlap Landry Hervé, Micheal
	17:29	17:31	INTRODUCING A NOVEL VEGETAL FUNGICIDE FOR PROTECTION OF BIO-BASED INSULATION MATERIALS AGAINST MOULDS	Canelle Vibert Clement, Daouia Messaoudi, César Cegovia
	17:31	17:33	OPTIMIZATION OF THE VINE SHOOTS PRE-TREATMENT APPLIED TO BIO-BASED CONCRETES	Lucas Araujo, Lally Garrigue, Rime Chehade, Stéphane Hans, Myriam Bahrar, Fabbri Antonin, Nassim Sebaibi
	17:33	17:35	TEXTILE HEMP SHIV POTENTIAL AS ALTERNATIVE BIOAGGREGATE FOR HEMP CONCRETE	Paul Soulié, Djillali Mezhoud, Aurélie Laborel-Préneron, Camille Magniont

Data-driven concrete science (AI for concrete material and civil infrastructures)

Session Chairs: Prof. Sandra Nunes Barbosa, Prof. Moncef Nehdi

Tuesday 27 August

Time slot	start	end	Title	Authors
11:30 – 1:00	11:30	11:55	WHERE DOES ARTIFICIAL INTELLIGENCE FIT WITHIN OUR CONSERVATIVE CONSTRUCTION WORLD?	Nathan Tregger
	11:55	12:10	PROPOSING AN EXPLICIT MODEL TO PREDICT STRENGTH AND OPTIMIZE MIX DESIGN USING LARGE DATASETS	Züleyha Kanpara Civaş, Milan Kundra, Martin Liska, Leon Black, Emilio Garcia-Taengua
	12:10	12:25	EXPLORING DATA FOR PREDICTING CONCRETE PROPERTIES AT EARLY AND LATE AGES	Arnaud Delaplace, Paul O'Hanlon, Louise Harding, Régis Bouchard
	12:25	12:40	A DATA-DRIVEN APPROACH FOR TENSILE STRENGTH OPTIMIZATION IN CEMENT PASTES	Jinane Murr, Syed Yasir Alam, Frederic Grondin
	12:40	12:55	FUNDAMENTAL STUDY ON POROSITY EVALUATION OF PERVIOUS CONCRETE USING DEEP LEARNING	Ridengaoqier E, Imamoto Kei-Ichi, Chizuru Kiyohara, Tamako Abe
1:00 – 2:00	lunch break - poster session			
2:00 – 4:00	2:00	2:15	MACHINE LEARNING AND CONCRETE TECHNOLOGY: NEW FRONTIERS	Ravi Patel
	2:15	2:30	NUMERICAL ANALYSIS ON FEASIBLE DATA STRUCTURING AND MODELING POLICIES FOR MACHINE LEARNING APPLICATION TO CEMENTITIOUS MATERIALS	Satoshi Fujimoto
	2:30	2:45	MACHINE LEARNING-BASED PREDICTION OF SCC MORTAR PROPERTIES ACROSS VARIOUS CEMENT TYPES	Woubishet Zewdu Taffese, Sandra Nunes
	2:45	3:00	MULTI-OBJECTIVE OPTIMIZATION OF RECYCLED CONCRETE MIX DESIGN USING MACHINE LEARNING	Haodong Ji, Hailong Ye
	3:00	3:15	PREDICTION OF DEGRADATION IN CEMENTITIOUS SYSTEMS EXPOSED TO ORGANIC ACID ENVIRONMENTS USING ARTIFICIAL INTELLIGENCE	Chinnu Mariam Ninan, Anandhakrishnan M, K P Ramaswamy, Alexandra Bertron, R Sajeeb
	3:15	3:17	IMPACT OF DATA CLEANING ON AI MODELS PREDICTING COMPRESSIVE STRENGTH OF ALKALI-ACTIVATED MATERIALS	Woubishet Zewdu Taffese, Sandra Nunes
	3:17	3:19	ENHANCING PREDICTIONS FOR SELF-COMPACTING MORTAR PROPERTIES WITH MULTILAYER PERCEPTRON AND DATA AUGMENTATION	Haji Sami Ullah, Sandra Nunes, Neil Yorke-Smith, Max Hendriks
	3:19	3:21	ARTIFICIAL NEURAL NETWORK FOR PREDICTING THE DURABILITY OF REINFORCED CONCRETE STRUCTURES SUBJECTED TO CARBONATION AND CHLORIDE IONS INGRESS	Paulo Claude, Frédéric Duprat, Thomas De Larrard, Jonathan Mai-Nhu, Patrick Rougeau, Louis Marracci,
	3:21	3:23	PREDICTION OF COMPRESSIVE STRENGTH OF ALKALI-ACTIVATED FLY ASH-GGBS-METAKAOLIN MORTAR USING MACHINE LEARNING MODELS	Muralidhar Kamath, Rahul Ralegaonkar, Adithya Tantri
	3:23	3:25	USING BIG DATA TO DERIVE GGBS ACTIVITY INDICES	Züleyha Kanpara Civaş , Milan Kundra, Martin Liska, Leon Black , Emilio Garcia-Taengua
3:25	3:27	AI-POWERED TOOL FOR PREDICTING LOW CARBON EMISSION CONCRETE MIX DESIGN IN COMPLIANCE WITH INDIAN STANDARDS	Nivin Philip, Jyothish KJ, Jotsna Mariam, Stephy Susan Sebastian, Krishnaraj Sankar	

Wood in structures

Session Chairs: Dr. Juan Li, Dr. Bohumil Kasal

Tuesday 27 August

Time slot	start	end	Title	Authors
16:00-16:30	coffee break - poster session			
16:30-17:30	16:30	16:45	DURABILITY OF WOOD STRUCTURES	Guilhem Greffier, Marianne Perrin, Luis Espinosa, Florent Eyma
	16:45	17:00	FUNDAMENTAL STUDY ON DIAGNOSIS OF TERMITE-INDUCED DETERIORATED TIMBER BY NON SEMI-DESTRUCTIVE METHODS	Sota Ogura, Kei-Ichi Imamoto, Ridengaoqier E, Chizuru Kiyohara
	17:00	17:02	WOOD ADHESIVES FOR STRUCTURAL ENGINEERING WOOD PRODUCTS: LATEST ADVANCES	Anuj Kumar
	17:00	17:02	BASIC STUDY ON DURABILITY OF YAKISUGI	Ryosuke Nakajima, Kei-Ichi Imamoto, Ridengaoqier E, Chizuru Kiyohara
	17:02	17:04	MANUFACTURING AND STRUCTURAL PERFORMANCE OF STRUCTURAL PARTICLEBOARD	Min Lee, Sang-Min Lee
	17:04	17:06	INTRODUCING A NOVEL VEGETAL INSECTICIDE FOR WOOD PROTECTION	Daouia Messaoudi, Katia Ruel, Jean-Paul Joseleau
	17:06	17:21	DURABILITY AND FIRE RESISTANCE OF STRUCTURAL PARTICLE BOARD	Min Lee, Sang-Min Lee
	17:21	17:23	MODELLING OF A FULL-SCALE THREE-STORY MASS TIMBER BUILDING COLLAPSE COMPARISON OF PRE-TEST PREDICTION	Prashanna Mishra, Majtaba Harati, Patricio Uarac, John W. Van De Lindt, Andre R. Barbosa, Steve Pryor,
	17:23	17:25	SHAKE TABLE TESTING OF A SIX-STORY MASS TIMBER BUILDING	Patricio A. Uarac P., Andre R. Barbosa, Steven Kontra, Arijit Sinha, Shiling Pei, Steve Pryor, Barbara G.

Materials for energy storage (Sensible-Heat, Latent-Heat, and Thermochemical)

Session Chairs: Prof. Antonio Caggiano, Prof. Jorge Dolado

Wednesday 28 August

Time slot	start	end	Title	Authors
10:30 – 11:00	Lunch break - poster session			
11:00 – 13:00	11:00	11:25	DEVELOPMENT OF A NEW GENERATION OF MULTI-FUNCTIONAL CONCRETE	Paulo J.M. Monteiro
	11:25	11:40	NEW LOW CARBON FOOTPRINT CEMENT-LIME MORTAR WITH PHASE CHANGE MATERIALS (PCM) AND BIOMASS ASH FOR THERMAL ENHANCEMENT OF BUILDINGS	Cynthia Guardia, Ana Guerrero, Gonzalo Barluenga, Laura Ramallo, Irene Palomar
	11:40	11:55	SUSTAINABLE GEOPOLYMER CEMENTITIOUS COMPOSITE FOR THERMOELECTRIC ENERGY HARVESTING	Mohamad Barzegar, Guido Goracci, Pavel Martauz, Jorge Dolado
	11:55	12:10	CEMENT-BASED ELECTROLYTES FOR ENERGY STORAGE APPLICATIONS	Birhan Alkadir Abdulahi, Juan Wang, Luping Tang, Liming Huang, Arezou Babaahmadi, Ergang Wang
	12:10	12:25	FOAM GLASS LIGHTWEIGHT AGGREGATE LOADED WITH PHASE CHANGE MATERIAL FOR ENERGY STORAGE	Fan Zheng, Hailong Ye
	12:25	12:40	ASSESSING ENERGY PERFORMANCE AND CO2 EMISSION OF BUILDING ENVELOPES ACCOUNTING FOR STRUCTURAL CONSTRAINTS: BUILDING PERFORMANCE	Mohammad Mahdi Khodavirdi Zanjani, Víctor Fachinotti, Luca Moereschi, Stefano Spotorno, Adriana Del Borghi,
12:40	12:55	FEW-LAYER GRAPHENE-BASED ALKALI-ACTIVATED MORTAR IN THERMAL ENERGY STORAGE ENVELOPES: COMPOSITION AND MECHANICAL PROPERTIES	Mohammad Mahdi Khodavirdi Zanjani, Antonio Caggiano, Víctor Fachinotti, Salvatore Polverino, Juan Basbus	
13:00-14:00	coffee break - poster session			
14:00-15:00	14:00	14:25	DEVELOPMENT OF A LARGE-SCALE CALCIUM SULFO-ALUMINATE (CSA) FOAMED MATERIAL FOR THERMAL ENERGY STORAGE	Stéphane Ginestet, Noé Beaupere, Tamar Nahhas, Alexandre Malley-Ernewein, Gabriel Samson, Martin Cyr
	14:25	14:40	THERMAL EVALUATION OF LOW-CARBON LIME CEMENT MORTARS WITH PCM FOR 3D PRINTING ARCHITECTURAL APPLICATIONS	Laura Ramallo, Gonzalo Barluenga, Irene Palomar
	14:40	14:55	EFFECTS OF ELECTROLYTIC COPPER POWDER ON REACTIONS AND THERMAL PROPERTIES OF ONE-PART GEOPOLYMER EXPOSED TO HIGH TEMPERATURE	Nghia Tran, Tuan Nguyen, Tuan Ngo
	14:55	14:57	<i>PHASE CHANGE MATERIALS FOR BUILT ENVIRONMENT APPLICATION</i>	<i>Mohamed Katish, Veronica Ferrandiz-Mas, Steve Allen, Adam Squires</i>
	14:57	14:59	SYNTHESIS OF AMORPHOUS MAGNESIUM CARBONATES AND POTENTIAL APPLICATIONS	Kanwal Shahid, Hoang Nguyen, Cise Unluer, Paivo Kinnunen

Energy-efficient buildings, comfort, IAQ

Session Chairs: Prof. Stéphane Ginestet

Wednesday 28 August

Time slot	start	end	Title	Authors
15:00 – 16:00	15:00	15:15	DESIGN AND IMPLEMENTATION OF AN AEROSOLIZATION EXPERIMENTAL BENCH TO INVESTIGATE THE RELEASE OF PARTICLES FROM SURFACES OF MATERIALS INTO AIR UNDER CONTROLLED CONDITIONS	Mohamad Al Hallak, Thomas VERDIER, Alexandra Bertron, Christine Roques
	15:15	15:30	INVESTIGATING THE DESIGN AND IMPLEMENTATION REQUIREMENTS FOR PROPOSED SUSTAINABLE CITIES IN TWO CASE STUDIES OF ARID AND COLD CLIMATES	Suaad Ridha, Claire Oms, Berangere Lartigue
	15:30	15:45	INFLUENCE OF RADIATIVE PROPERTIES OF INTERIOR COATING ON THE SUMMER THERMAL COMFORT. SENSITIVITY STUDY ON A DWELLING IN TOULOUSE	Valentin Lahaye, Marion Bonhomme, Claire Oms, Nicolas Duport, Stéphane Ginestet
	15:45	15:47	ANALYSIS OF THE INFLUENCE OF OPAQUE WALL THERMAL INERTIA ON SUMMER COMFORT IN RESIDENTIAL BUILDINGS	Zineb Boutayeb, Matthieu Labat, Claire Oms, Stéphane Ginestet
	15:47	15:49	ANALYSIS OF AIR-WATER COUPLED TRANSFER IN INDOOR SWIMMING POOLS AND ITS IMPACT ON INDOOR AIR QUALITY AND ENERGY CONSUMPTION	Younes Benakcha, Matthieu Labat, Ion Hazyuk, Stéphane Ginestet

Historic materials and buildings and cultural heritage

Session Chairs: Prof. Enrico Sassoni, Prof. Corina Papanicolaou

Wednesday 28 August, room

Time slot	start	end	Title	Authors
11:00 – 13:00	11:00	11:25	LIFE CYCLE ASSESSMENT OF STONE CONSOLIDANTS: WHAT FUNCTIONAL UNIT SHOULD BE ADOPTED?	Alessandro Dal Pozzo, Giulia Masi, Alessandro Tugnoli, Enrico Sassoni
	11:25	11:40	PRECIPITATION TRIGGERED DYNAMICS IN STONE AND CERAMIC TILES: A MESOSCOPIC VIEW	Hannelore Derluyn, Syrine Ben Elhadj Hamida, Tinhinane Chekai, Rozeline Wijnhorst, Leo Pel, Peter Moonen,
	11:40	11:55	STRAIN RATE SENSITIVITY OF PURE HYDRATED LIME MORTAR	Ashraf Nayel, Christian Malaga-Chuquitaype, Lorenzo Macorini
	11:55	12:10	IN-SITU CO2 MIXING FOR CARBONATION ACCELERATION IN AERIAL LIME MORTAR	Hee-Young Hwang, Sung-Hoon Kang, Sung-Gul Hong
	12:10	12:25	BRIDGING TRADITION AND INNOVATION: ADVANCING SUSTAINABLE ARCHITECTURAL PRACTICES WITH IN SITU POZZOLANIC REACTION TESTING OF LIME-	Marlene Sámano Chong, Alberto Muciño Vélez, Luis Fernando Guerrero Baca, Teresa Pi Puig, Ivonne Rosales
	12:25	12:40	IMPACT OF WIND ON THE SALT WEATHERING RESISTANCE OF MASONRY MORTARS	Anupama V A, Dr. Manu Santhanam
	12:40	12:55	MARBLE CONSERVATION BY AMMONIUM PHOSPHATE: HOW DOES SALT CONTAMINATION AFFECT THE TREATMENT OUTCOME?	Alessio Gabrielli, Greta Ugolotti, Giulia Masi, Elisa Boanini, Enrico Sassoni
13:00 – 14:00	lunch break - poster session			
14:00 – 16:00	14:00	14:15	THCM BEHAVIOR CHARACTERISATION OF PLATE LIMESTONE SUBMITTED TO FIRE – FROM MICRO TO MACRO SCALE – CULTURE HERITAGE CONSERVATION	Jérémy Lhomme, Emilie Huby, David Giovannacci, Claire Lorentz, Stéphane Logel, Jean-Didier Mertz, Yannick Melinge
	14:15	14:30	SIMULATION OF THE HYGROTHERMAL BEHAVIOUR OF WALLS COMPOSED OF TRADITIONAL AND BIO-BASED MATERIALS USING AN URBAN CLIMATE MODEL	Margot Ruiz, Valéry Masson, Marion Bonhomme, Stéphane Ginestet
	14:30	14:45	HYGROTHERMAL PERFORMANCE INVESTIGATION OF BUILDING LIMESTONES IN VARIABLE CLIMATE	Placide Uwizeyimana, Arnaud Regazzi, Faiza Mnasri, Laurent Clerc, Eric Garcia-Diaz, Philippe Devillers, Frédéric Dubois,
	14:45	15:00	CONDITION ASSESSMENT OF CENTURY-OLD REINFORCED CONCRETE BUILDING WITH MORE THAN 60% OF GROUND GRANULATED BLAST FURNACE SLAG	Kei-Ichi Imamoto, Chizuru Kiyohara, Yasufumi Nerome, Yuri Odajima, Ridengaoqier E, Junyi Chen, Toru Kinose
	15:00	15:15	<i>ADAPTATION OF EXISTING BUILDINGS IN RESPONSE TO CLIMATE CHANGE</i>	<i>Brunella Balzano, Shahram Sharifi</i>
	15:15	15:30	INFLUENCE FROM FORMING PRESSURES ON PROPERTIES OF FIRED CLAY DISCS CONTAINING SEWAGE SLUDGE ASH	Frederikke Brandt Feldthus, Gunvor M. Kirkelund, Lisbeth M. Ottosen, Ida Bertelsen
	15:30	15:32	ANALYZING HISTORICAL MORTARS FOR THE DESIGN OF RESTORATION-COMPATIBLE ONES: APPLICATION TO THE RAYMOND BASTION, CORFU, GREECE	Pagona Noni Maravelaki
15:32	15:34	THE EARTH BRICK HOUSE “24H” OF UGA CAMPUS, AS PEDAGOGIC OBJECT AND THERMAL COMFORT REAL TIME DEMONSTRATOR IN SERVICE	Dominique Daudon, Martin Pointet, Laurent Galichet, Thierry Joffroy, Yannick Sieffert, Laurent Oxarango, Team E-	
16:00-16:30	coffee break - poster session			
16:30-18:00	16:30	16:55	TRM-TO-MASONRY RESIDUAL BOND CHARACTERISTICS AS A FUNCTION OF TEMPERATURE	Corina Papanicolaou
	16:55	17:10	SEISMIC STUDY OF REINFORCED BRICK MASONRY STRUCTURES	Nadia Tarifa, Zakaria Ilyes Djamaï, Frédéric Duprat
	17:10	17:25	MECHANICAL BEHAVIOUR OF THE SEXPARTITE VAULTS OF NOTRE-DAME DE PARIS CATHEDRAL	Pierre Morenon, Anne-Sophie Colas, Frédéric Dubois, Denis Garnier, Stéphane Morel, Paul Nougayrède, Thomas Parent,
	17:25	17:40	<i>COMPARATIVE ANALYSIS OF ADOBE STRUCTURES BUILDING CODES OF DIFFERENT COUNTRIES PRONE TO SEISMIC HAZARDS</i>	<i>Somayeh Omidvari, Thierry Joffroy, Philippe Garnier, Majid Hajmirbaba</i>
	17:40	17:55	(DE)CONSTRUCTION OF FORTIFIED HERITAGE IN THE MINHO RIVER VALLEY	Tiago Rodrigues, João Cabeleira, Ana M. T. Martins-Nepomuceno
	17:55	17:57	SEISMIC RISK ASSESSMENT OF TERRACES WITH DRY STONE RETAINING WALLS TYPICAL OF THE CENTRAL ZONE OF THE ANDES	Sandra Santa-Cruz, Paola Ita, Dominique Daudon
	17:57	17:59	SEISMIC BEHAVIOR OF DRY STONES WALLS : DEM SIMULATION FOR UNCERTAINTY ESTIMATION	Dominique Daudon, Ansheng Chen, Julien Baroth

Low-CO₂, low-energy, low-resources processes, recycling

Session Chairs: Prof. Cédric Patapy, Prof. Ruben Snellings

Wednesday 28 August

Time slot	start	end	Title	Authors
11:00 – 1:00	11:00	11:25	CARBON SEQUESTRATION IN CONCRETE – POTENTIAL AND CHALLENGES	Mateusz Wyrzykowski, Pietro Lura
	11:25	11:40	COMPARING THE DEGREE OF CARBONATION OF HARDENED CEMENT PASTE BY WET-DRY CYCLE CARBONATION METHODS	Dayoung Oh, Zhiwei Zhao, Zhijiang Li, Yaming Jin, Ryoma Kitagaki
	11:40	11:55	CO ₂ SEQUESTRATION EFFECT ON THE PORE STRUCTURE OF CEMENT PASTE ANALYSED VIA TIME-DOMAIN PROTON NUCLEAR MAGNETIC RESONANCE (1H NMR)	Muhammad Haseeb Zaheer, Namkon Lee, Jung Jun Park
	11:55	12:10	UNDERSTANDING THE ROLE OF HIGH TEMPERATURE (120°C VS 20°C) ON CARBONATION REACTIVITY OF CEMENT WASTE AND STEEL SLAG POWDERS	Hao Yu, Tung-Chai Ling
	12:10	12:25	EVALUATION OF STEEL SLAG AS CO ₂ -BINDER AND SUPPLEMENTARY CEMENTITIOUS MATERIAL (SCM)	Giada Biava, Maciej Zajac, Mohsen Ben Haha, Claudia Capone, Elza Bontempi
	12:25	12:40	AQUEOUS CARBONATION OF BASIC OXYGEN FURNACE SLAG: A REVIEW OF MECHANISM, INFLUENCING FACTORS, AND APPLICATION POTENTIAL	Hamideh Mehdizadeh
	12:40	12:55	THE POTENTIAL OF BIO-MEDIATED CO ₂ SEQUESTRATION IN CEMENTITIOUS MATERIALS	Xiulin Chen, Zhidong Zhang, Ueli Angst
	12:55	12:57	STUDY ON THE ACCELERATED CARBONATION OF RECLAIMED WATER SLUDGE IN CO ₂ NANOBUBBLE WATER FOR CO ₂ SEQUESTRATION	Hoon Moon, Namkon Lee, Jung Jun Park, Indong Jang, Gi-Joon Park, Gum-Sung Ryu
	12:57	12:59	EFFICIENCY OF DRY ICE-BASED CO ₂ SEQUESTRATION IN CONCRETE	Deepak Kumar Kamde, Shihas Melikkattil Shamsudheen, Surendra K. Manjrekar, P.A. Muhammed Basheer
13:00 – 14:00	Lunch break - poster session			
14:00 – 16:00	14:00	14:15	STUDY ON THE PHYSICAL PROPERTIES OF MORTAR USING Γ-C2S BASED CO ₂ -FIXING ADMIXTURE	Hara Hirofumi, Masataka Ushiro, Taiichiro Mori
	14:15	14:30	DEVELOPMENT OF CARBON NEUTRAL CONCRETE CONTAINING RECYCLED CCU MATERIALS AND Γ-C2S AND REDUCTION OF CO ₂ IN THE APPLICATION OF	Yukiko Nishioka, Kouhei Eguchi, Daijiro Tsuji, Masaro Kojima
	14:30	14:45	CONCRETE WITH RECYCLED (BELITE) CEMENT CLINKER - A COMBINATION OF CLIMATE PROTECTION AND RESSOURCE EFFICIENCY	Macielle Vivienne Deiters, Jesko Gerlach, Katrin Schumacher, Tobias Schack, Uwe Schweike,
	14:45	15:00	CONCRETE CARBON MIXING FOR SUSTAINABLE CONCRETE PRODUCTION	Marco Davolio, Stefano Gelain, Federico Furlani, Giovanni Muciaccia, Liberato Ferrara
	15:00	15:15	DEVELOPMENT OF CO ₂ IMMOBILIZED INTERLOCKING BLOCK WITH RECYCLED GLASS CULLET AGGREGATE BY HIGH-CONCENTRATION ACCELERATED CARBONATION	Hiroshi Kasai, Toshinari Mukai, Takemasa Kitahara, Koji Fushimi
	15:15	15:30	EFFECT OF STRENGTH AT THE START OF CARBONATION IN EARLY AGE ON FINAL STRENGTH AND CO ₂ FIXATION	Hiroaki Yamano, Mio Sakai, Kumar Avadh, Takeshi Torichigai, Kengo Seki, Haru Tanabe
	15:30	15:45	NOVEL TYPOLOGY OF ACCELERATED CARBONATION CURING: USING DRY AND PRE-SOAKED BIOCHAR TO TUNE CARBON CAPTURE AND MECHANICAL PROPERTIES OF	Harn Wei Kua, Sarah Ming Hwee Tan
	15:45	16:00	CARBONATION SHRINKAGE EVALUATION IN ORDINARY PORTLAND CEMENT AND HIGH SLAG CONTENT BLENDED CEMENT-BASED HARDENED MATERIALS	Karen Midori Masunaga, Panisa Sangkeaw, Takeshi Iyoda
16:00-16:30	Coffee break - poster session			
16:30-17:30	16:30	16:45	CHARACTERIZATION SCHEME FOR ASHES TO SUPPORT THE UTILIZATION IN DIFFERENT CONSTRUCTION MATERIALS	Lisbeth M. Ottosen, Gunvor M. Kirkelund, Ebba Schnell, Frederikke Brandt Feldthus, Godfred Appiah, Huilin Li,
	16:45	17:00	CALCINATION OF TUNNEL EXCAVATION MATERIAL AND USE AS SUPPLEMENTARY CEMENTITIOUS MATERIAL IN CONCRETE	Björn Siebert, Christoph Budach, Pierre Müller, Thomas Heiermann, Stephan Uebachs
	17:00	17:15	REVIEW OF RECYCLED AGGREGATE PROCESSING TECHNIQUES AND QUALITY CONTROL MEASURES IN THE SOUTH AFRICAN CONTEXT	Areej Gamielien, Hans Beushausen, Mark Alexander
	17:15	17:17	ALKALI-ACTIVATED MATERIAL – OIL COMPOSITES: TOWARDS RESOURCE EFFICIENCY, HIGH DURABILITY AND CO ₂ NEUTRALITY	Cyrill Grengg, Ognjen Rudic, Marcella Ruschi Mendes Saade, Florian Mittermayr
	17:17	17:19	UTILIZING GREEN CARBONATE-ACTIVATED SLAG BINDERS FOR ECO-FRIENDLY STABILIZATION OF WASTE MARINE MUD	Zhen Tan, Hailong Ye
	17:19	17:21	THE FEASIBILITY STUDY OF USING RECYCLED CONCRETE POWDER WITH INCREASED CEMENTITIOUS CONTENT AS A BINDER MATERIAL	Rong Huang, Junjie Wang, Kefei Li, Lei Xu
	17:21	17:23	BUILDING WITH BIOLOGY: ARCHITECTURAL ADVANCEMENTS THROUGH ADDITIVE MANUFACTURING	Maria De Los Angeles Ortega Del Rosario, Antonio Alberto Jaén Ortega, Miguel Chen Austin
	17:23	17:25	THE UTILIZATION OF RECYCLED CELLULOSE IN CEMENTITIOUS MATERIALS	David Law, Chamini Liyanage, Chamila Gunasekara
	17:25	17:27	MECHANICAL AND THERMAL PERFORMANCE OF LIGHTWEIGHT ULTRA-HIGH-PERFORMANCE CONCRETE WITH EXPENDED GLASS AGGREGATE	Zushi Tian, Hailong Ye
	17:27	17:29	THERMAL AND MICRO-STRUCTURAL ANALYSIS OF SYNTHESIZED CALCIUM CARBONATE ADDITIONS TO PORTLAND CEMENT	Anfal Alaibani, Mariam ALSaeedi, Mohammad Abdulsalam

Thursday 29 August

13:00 – 14:00	lunch break - poster session			
14:00 – 16:00	14:00	14:25	PILOT SCALE DEMONSTRATION OF CAMBRIDGE ELECTRIC CEMENT	Shiju Joseph, Rohit Prajapati, Patricio Burdiles, Julian Allwood, Cyrille Dunant
	14:25	14:40	UPDATE ON TECHNOLOGIES FOR CLAY CALCINATION	Fernando Martirena-Hernandez
	14:40	14:55	BREAKING THROUGH THE 50% CLINKER CONTENT LIMIT WITH LC3 CEMENTS	Franco Zunino
	14:40	14:55	EFFECTS OF QUARRY AND RECYCLED CONCRETE WASTE AS RAPID USE STABILIZERS FOR CLAY SOILS	Lee Leon
	14:55	15:10	THE FEASIBILITY STUDY OF USING RECYCLED CONCRETE POWDER WITH INCREASED CEMENTITIOUS CONTENT AS A BINDER MATERIAL	Rong Huang, Junjie Wang, Kefei Li, Lei Xu
	15:10	15:25	MULTI-OBJECTIVE DECISION-MAKING IN THE REALM OF BLENDED CEMENT MIXTURES	Debadri Som, Tobias Hertel, Glenn Beersaerts, Panagiotis Patrinos, Yiannis Pontikes

	15:25	15:40	PHYSICAL PROPERTIES OF PERVIOUS CONCRETE WITH CLINKER-FREE CEMENT	Tamako Abe, Kei-Ichi Imamoto, Ridengaoqier E, Chizuru Kiyohara
	15:40	15:55	STRENGTH OPTIMIZATION OF SUSTAINABLE LIGHTWEIGHT HYBRID BINDER MORTARS BASED ON VOLCANIC PUMICE AND DURABILITY TESTS.	Jesús López Salas, José Iván Escalante-García
16:00-16:30	coffee break - poster session			
16:30-17:00	4:30	4:45	HYGROSCOPIC BEHAVIOUR OF ECO-FRIENDLY GYPSUM MORTAR WITH RECYCLED POLYURETHANE FOAM	Alba Rodrigo-Bravo
	4:45	4:47	MIXTURE DESIGN AND COMPRESSIVE STRENGTH OF CONCRETE WITH POSITIVE INTRODUCTION OF A LARGE QUANTITY OF AIR	Naoki Hashimoto, Hiroki Suyama, Koji Takasu, Hidehiro Koyamada
	4:47	4:49	<i>EVALUATION OF SHEAR STRENGTH PARAMETERS OF SUSTAINABLE UTILIZATION OF SCRAP TIRES DERIVED GEO-MATERIALS FOR CIVIL ENGINEERING APPLICATIONS</i>	<i>Ahmad Hakamy</i>
	4:49	4:51	SUSTAINABLE REPURPOSING OF ELECTROPLATING WASTE SLUDGE FOR DEVELOPING POLYMER BASED ECOFRIENDLY BRICKS	Sivasankara Rao Meda, Sanjay Kumar Sharma, G D Tyagi, Sharma Charul, Tank Ishan

Corrosion, Maintenance and Repair of Reinforced Concrete Structures

Session Chair: Prof. Deepak Kumar Kamde

Wednesday 28 August

Time slot	start	end	Title	Authors
11:00 – 13:00	11:00	11:25	LESSONS FROM THREE DECADES OF RESEARCH ON THE DURABILITY OF REINFORCED C	Hans Beushausen
	11:25	11:40	THE ROLE OF INTERFACIAL VOIDS ON THE CORROSION OF STEEL IN REINFORCED CONCRETES – PECULARITIES AND RELEVANCE	Shishir Mundra, Emanuele Rossi, Luka Malenica, Mohit Pundir, Ueli M Angst
	11:40	11:55	ELECTROCHEMICAL STUDY OF STEEL REINFORCEMENT IN SYNTHETIC PORE SOLUTIONS OF GGBFS-CONTAINING CEMENTS	Ali Nikoonasab, Marina Licht, Michael Raupach, Gregor J. G. Gluth
	11:55	12:10	EXPERIMENTAL AND NUMERICAL EVIDENCE OF MACRO CELL CORROSION CURRENT PREVALENCE IN CHLORIDE-INDUCED CORROSION AT LOAD-INDUCED CRACK	Lucas Hess, Raoul François, Laurent Boutillon, Lionel Linger, Valérie L'Hostis
	12:10	12:25	EFFECTS OF VARIOUS WATER REPELLANT COATINGS ON MOISTURE, ELECTRICAL RESISTIVITY AND CARBONATION OF CONCRETE	Pakawat Sancharoen, Somnuk Tangtermsirikul
	12:25	12:40	COMPARATIVE CORROSION BEHAVIOUR OF PLASTICALLY-DEFORMED MILD, TMT AND STAINLESS STEEL BARS IN CHLORIDE-CONTAMINATED SIMULATED CONCRETE	Bhanu Prakash Malladi, Prasanna Kumar Behera
	12:40	12:55	THE ROLE OF MOISTURE IN CARBONATED CONCRETE: THE CORROSION PERFORMANCE OF BLENDED CEMENTS	Thilo Schmid, Cristhiana Albert, Zhidong Zhang, Ueli Angst
13:00 – 14:00	lunch break - poster session			
14:00 – 16:00	14:00	14:15	THE CORROSION BEHAVIOUR OF STEEL IN MG-BASED BINDERS	Fabio Enrico Furcas, Alexander German, Frank Winnefeld, Ueli Angst
	14:15	14:30	SPATIAL DISTRIBUTION OF CORROSION PRODUCTS IN REINFORCED CONCRETE UNDER STRAY CURRENT ENVIRONMENT	Wenjun Zhu, Yi Ren, Raoul François
	14:30	14:45	ENHANCING CEMENT DURABILITY AGAINST SALT CRYSTALLIZATION THROUGH THE INTRODUCTION OF A CARBOXYLIC ACID-DERIVED INHIBITOR	Maria Carla Ciacchella
	14:45	15:00	A PRACTICAL MODEL FOR REPAIR EVALUATION AND SERVICE LIFE ESTIMATION OF FIELD STRUCTURE UNDER MARINE EXPOSURE	Harshit Agrawal, Swathy Manohar, Salman Muhammad
	15:00	15:15	EVALUATION OF INPUT PARAMETERS FOR THE ELECTROCHEMICAL MODELLING OF CATHODIC PROTECTION SYSTEMS IN REINFORCED CONCRETE	Keerthi Vadakke Thalakkal, Radhakrishna Pillai
	15:15	15:30	INVESTIGATION OF CHANGES IN CEMENT PASTE ELECTROCHEMICAL PROPERTIES UNDER THE EFFECT OF IMPOSED CURRENTS MAINTAINED OVER TIME	Abdel Razzak El Zohby, Raphaëlle Pouhet, Laurie Lacarrière, Stéphane Laurens
	15:30	15:45	REHABILITATION OF MARITIME WORKS USING GFRP REINFORCEMENTS: SPANISH PRACTICAL CASES	Asunción Morales Hortelano, Laura Juárez Gonzalez, Álvaro Ruiz Emparanza, Rafael Ybarra Huesa
15:45	16:00	SUSTAINABLE INFRASTRUCTURE CONSTRUCTION: AN INDIAN CASE STUDY ON HYDEL STRUCTURES	S. Thalaimalaisamy, A. Basavaraj, D. Joseline And P. Arunachalam	
16:00-16:30	coffee break - poster session			
16:30-18:00	4:30	4:55	PRINCIPLES OF THE IMPACT OF CLIMATE ON THE CORROSION PROPAGATION PROCESS	Carmen Andrade
	4:55	5:10	SPATIAL DISTRIBUTION OF CORROSION PRODUCTS IN REINFORCED CONCRETE UNDER STRAY CURRENT ENVIRONMENT	Wenjun Zhu, Yi Ren, Raoul François
	4:55	5:10	EVALUATION OF BOND STRENGTH BETWEEN SUPERABSORBENT POLYMER-ADDED SHCC AND CONCRETE SUBSTRATE	Yao Luan, Keita Suzuki, Muhammad Ejaz
	5:10	5:25	BOND-SLIP BEHAVIOUR OF CEMENT-LESS CONCRETE WITH STEEL AND FRP BARS	Maria Antonietta Aiello Aiello, D Coffetti, L Coppola, M Leone, A Napoli, R Realfonzo, V Romanazzi
	5:25	5:40	HOW FRP REINFORCEMENT CONTRIBUTES TO THE SUSTAINABILITY OF CONCRETE STRUCTURES	Laura Juárez Gonzalez, Asunción Morales Hortelano, Álvaro Ruiz Emparanza, Francisco De Caso
	5:40	5:42	STUDY ON DETERMINATION OF MEASUREMENT POINTS FOR QUANTITATIVE ANALYSIS OF CHLORIDE CONCENTRATION IN CONCRETE STRUCTURES	Hojae Lee, Eun-A Seo
	5:42	5:44	ASSESSING STEEL CORROSION RESISTANCE IN LIMESTONE CALCINED CLAY CEMENT (LC3) WITH CORROSION INHIBITOR EXPOSED TO CARBONATION	Umesh Hule, Radhakrishna G. Pillai
	5:44	5:46	THE CHEMISTRY AT THE STEEL-CONCRETE INTERFACE AND ITS INFLUENCE ON CORROSION OF THE STEEL REINFORCEMENT	Shishir Mundra, Mohit Pundir, Barbara Lothenbach, David S. Kammer, Ueli M Angst
	5:46	5:48	EFFECTS OF MOISTURE TRANSPORT ON DURABILITY OF STEEL REINFORCED CONCRETE: WORK PROPOSED BY RILEM TC MMS	Zhidong Zhang, Chunsheng Zhou
	5:48	5:50	SERVICE LIFE OF REINFORCED CONCRETE (RC) SYSTEMS WITH CORROSION INHIBITING ADMIXTURES	Shefali Aggarwal, Radhakrishna Pillai
	5:50	5:52	STUDY OF LONG-TERM EFFECT OF AMINO-ALCOHOL BASED CORROSION INHIBITOR IN CONCRETE	Ting-Yu Hao, Chao Xu, Da Shi
	5:52	5:54	ELECTROCHEMICAL BEHAVIOR OF CONTINUOUS GALVANIZED REBARS IN SEVERE CORROSIVE ENVIRONMENT	Vimal Mohan, Radhakrishna Pillai, P. Srinivasan
	5:54	5:56	THE INFLUENCE OF SILICA ON THE FORMATION OF CORROSION PRODUCTS IN CEMENTITIOUS SYSTEMS	Fabio Enrico Furcas, Shishir Mundra, Barbara Lothenbach, Ueli Angst
	5:56	5:58	ANALYSING THE STRUCTURAL BEHAVIOUR OF CORROSION DAMAGED HIGH STRENGTH CONCRETE STRUCTURE	Jaya Nepal And Salim Barbhuiya
5:58	6:00	OPTIMIZING CONCRETE CRACK CLOSURE WITH DOUBLE-SLEEVES HYBRID TENDONS	Shahram Sharifi, Viviana Novelli, Brunella Balzano, Glen Thompson, John Sweeney	

Non-destructive inspection of concrete materials and structures

Session Chair: Prof. Dimitrios Aggelis

Thursday 29 August

Time slot	start	end	Title	Authors
10:30 – 13:00	10:30	10:55	NDT METHODS AND STRUCTURAL HEALTH MONITORING TECHNIQUES FOR THE INVESTIGATION AND CONSERVATION OF HISTORIC BUILDINGS	Christian Grosse
	10:55	11:10	USE OF NON-DESTRUCTIVE CONCRETE QUALITY ASSESSMENT FOR SELECTIVE DEMOLITION OF A HIGHWAY BRIDGE	Marija Nedeljkovic
	11:10	11:25	DETECTION OF TILE DETACHMENT ON EXTERNAL FINISHING WALL BY SOLENOID TAPPING DEVICE REBOUNDING	Yosuke Ito, Daiki Tanaka, Shinji Kawabe
	11:25	11:40	TRC-TO-CONCRETE BOND CHARACTERIZATION THROUGH ACOUSTIC EMISSION MONITORING	Klajdi Toska, Dimitrios Aggelis, Tine Tysmans, Anne-Lise Beaucour, Albert Noumowe
	11:40	11:55	LESSONS LEARNT ON QUANTITATIVE SPATIAL CHLORIDE ANALYSIS USING LIBS AND μ XRF	Sabine Kruschwitz, Annika L. Schultheiss, Gerd Wilsch, Andreas Bogner, Ravi A. Patel
	11:55	12:10	MONITORING THE EFFECT OF C-S-H SEED ON THE HYDRATION AND STRENGTH DEVELOPMENT OF TERNARY BINDER CONCRETE	Liming Huang, Tang Luping, Ingemar Löfgren, Arezou Babaahmadi
	12:10	12:25	MONITORING OF REINFORCED CONCRETE DURABILITY: WEATHER EFFECT	Nuria Rebolledo, Julio Torres, Javier Sanchez
	12:25	12:40	MULTIMODAL NON-DESTRUCTIVE MONITORING OF TRC SANDWICH PANELS IN BENDING	Nicolas Ospitia, Ali Pourkazemi, Eleni Tsangouri, Johan Stiens, Dimitrios Aggelis
	12:40	12:55	NON-DESTRUCTIVE EVALUATION OF LOAD-CARRYING CONCRETE ELEMENTS WITH LIMITED CORE SAMPLES	Serkan Karatosun, Katja I.M. Thygesen, Thomas Ingeman-Nielsen, Jesper Stærke Clausen, Lisbeth M.
13:00 – 14:00	lunch break - poster sesison			
14:00 – 16:00	2:00	2:25	ANALYSIS OF FAILURE PRECURSORS PARAMETERS IN HETEROGENEOUS MATERIALS USING ACOUSTIC EMISSION SIGNALS	Giuseppe Lacidogna, Leandro Ferreira Friedrich, Édiblu Cezar, Ignacio Iturrioz
	2:25	2:40	ULTRASONIC INSPECTION FOR ADVANCED STRUCTURAL APPLICATIONS	Nicolas Ospitia, Gerlinde Lefever, Nele De Belie, Dimitrios Aggelis
	2:40	2:55	HAMMERING TEST FOR THE EXTERNAL TILE FINISHING WALL BY PATTERN RECOGNITION OF SPECTROGRAM	Daiki Tanaka, Yosuke Ito, Shinji Kawabe
	2:55	3:10	INFLUENCE OF INCLUSION ON THE VOLUME CHANGES IN SEALED CONDITIONS OF SLAG ACTIVATED BY SODIUM HYDROXIDE: A MULTI-TECHNIQUE INVESTIGATION	Maité Lacante, Brice Delsaute, Dimitrios Aggelis, Stéphanie Staquet
	3:10	3:25	EFFECT OF SUPPLEMENTARY CEMENTITIOUS MATERIALS ON THE PERFORMANCE OF REINFORCED CONCRETE STRUCTURES UNDER CORROSION USING EMI TECHNIQUE	Tarun Morwal, Shilpa Pal, Nirendra Dev, Tushar Bansal
	3:25	3:40	APPLICATION OF ELASTIC WAVE TOMOGRAPHY TO ACESS ADDITIVELY MANUFACTURED CONCRETE	Tomoki Shiotani, Hisafumi Asaue, Norihiko Ogura, Nobuhiro Okude, Sagradyan Artur, Tetsuya Ishida
	3:40	3:55	ASSESSMENT OF TEST RESULT PRECISION FOR INDIRECT ULTRASONIC PULSE VELOCITY PERFORMED ON CONCRETE	Katja I.M. Thygesen, Lisbeth Ottosen, Serkan Karatosun
16:00-16:30	coffee break - poster session			
16:30-17:00	16:30	16:45	A COMBINATION OF NON-DESTRUCTIVE TECHNIQUES FOR MONITORING EARLY-AGE CONCRETE	Eleni Korda, Eleni Tsangouri, Didier Snoeck, Geert De Schutter, Dimitrios Aggelis
	16:45	16:47	ENHANCED HYDRAULIC FRACTURE TRACKING IN LABORATORY SCALE USING COMPRESSED SENSING	Chen Gu
	16:47	16:49	STUDY ON AI-BASED CRACK IMAGE DIAGNOSIS OF EXTERIOR FINISH COATINGS	Matsuzawa Koichi, Kaori Nemoto, Naoki Mishima, Naoko Tsuchiya, Kiyofumi Nakada, Tadatsugu Kage
	16:49	16:51	POTENTIAL OF ELECTRIC AND ELECTROMAGNETIC SIGNAL FOR HYDRIC STATE DIAGNOSIS OF BUILDING STRUCTURES. CASE OF 2 INNOVATIVE TEHCNICS	Anne-Laure Perrier, Noémie Prime, Andre Revil, Cédric Bermond
	16:51	16:53	<i>ENHANCING RETURNED FRESH CONCRETE REUSABILITY THROUGH DIGITAL SURVEILLANCE</i>	<i>Emeso Ojo</i>

Earth-based materials and construction

Session Chairs: Prof. Céline Perlot-Bascoulès, Prof. Antonin Fabbri

Thursday 29 August

Time slot	start	end	Title	Authors
10:30 – 1:00	10:30	10:55	EARTH CONSTRUCTION: A CLAY SCIENCE PERSPECTIVE	Fionn Mc Gregor
	10:55	11:10	DRYING-INDUCED CRACKING OF RAW EARTH PLASTER	Karbala Ghida, Keita Emmanuel, Vandamme Matthieu, Belin Patrick, Maillet Benjamin, Sidi-Boulououar Rahima
	11:10	11:25	EXCAVATED EARTH AS A SUBSTITUTE FOR CONCRETE AGGREGATES	Secret Marion, Claude Sophie, Aubert Jean-Emmanuel, Tornay Nathalie, Fourment Yvon, Broilliard Philippe
	11:25	11:40	SEISMIC VULNERABILITY OF REINFORCED MASONRY STRUCTURES	Vieux-Champagne Florent
	11:40	11:55	EXTRUDING EARTH-BASED MATERIALS CONTROLLING GEOMETRICAL STRAND PROPERTIES BY MATERIAL AND PROCESS PARAMETERS IN 3D PRINTING	Charkhab Esmaeili Mehrzad, Noda Sakiko, Mai Inka
	11:55	12:10	FIRE BEHAVIOUR OF A CAST POURED EARTH CONCRETE	Gombault Jules, Molez Laurent, Maigen Hervé, Lanos Christophe
	12:10	12:25	INFLUENCE OF BIO-GEObASED MATERIAL FORMULATION ON DRYING KINETICS AND MICROBIAL PROLIFERATION	Eva Taillade, Thomas Verdier, Sophie Claude, Hugo Cagnon, Jean-Emmanuel Aubert
	12:25	12:40	OPTIMIZING HEAVY COB WALL DESIGN FOR TEMPERATE-SEMI-OCEANIC ENVIRONMENTS	Kabore Aguerata, Ouellet-Plamondon Claudiane
	12:40	12:42	POTENTIAL IMPACT OF COB AND LIGHTENED EARTH ON THE AMBIENT QUALITY OF A BUILDING PROTOTYPE	Phan Alexiane, Chehade Rime, Fabbri Antonin, Bahrar Myriam, Streiff François, Sebaibi Nassim
	12:42	12:44	DESIGN FOR ADDITIVE MANUFACTURING (DFAM) IN CLAY-BASED CONSTRUCTION: A PATHWAY TO SUSTAINABLE BUILDING SOLUTIONS	Melany N. Medina P., Maria De Los Angeles Ortega Del Rosario, Antonio Alberto Jaén Ortega, Rafael Duque, Luis
12:44	12:46	<i>INFLUENCE OF SYNTHETIC CARBON FIBER PRESENCE ON THE MULTI-PHYSICAL BEHAVIOR OF RAMMED EARTH</i>	<i>Rouba Kassab, Hamza Allam, Laurent Ibos</i>	
1:00 – 2:00	lunch break - poster session			
2:00 – 3:00	2:00	2:15	EXPERIMENTAL EVALUATION OF THE THERMAL PERFORMANCE OF A TRADITIONAL ADOBE WALL AND A TYPICAL BRICK WALL	Kyritsi Eirini, Kyriakidis Andreas, Philokyprou Maria, Ioannou Ioannis
	2:15	2:30	DETERMINATION OF THE POROSITY OF EARTH-BASED BUILDING MATERIALS USING VACUUM-ASSISTED SATURATION WITH ORGANIC LIQUIDS	Panagiotou Rafail, Ioannou Ioannis
	2:30	2:45	STABILIZED EARTH: RETHINKING OLD APPROACHES	Selina Vaculik, Thomas Matschei
	2:45	2:47	THE IMPACT OF PROTOCOL IN THE COMPRESSIVE STRENGTH OF UNSTABILIZED RAMMED EARTH.	Eluckkiya Angalakurichi Nallasamy, Florent Vieux-Champagne, Yannick Sieffert, Yann Malecot, Martin Pointet

Innovation Day

Session Chairs: Lionel Linger, Ivan Drouadaine

Thursday 29 August

Time slot	start	end	Title	Authors
10:30 – 1:00	10:30	10:55	THE FUTURE OF THE EUROPEAN STANDARDIZATION OF CEMENT: INPUT OF THE RILEM TC-PHC	Laurent Izoret
	10:55	11:10	LOW CARBON CONCRETE BASED ON HIGH FILLER CONTENT	François Cussigh, Lionel Linger, Matthieu Jeusset, Yvan Thiebaut, Thomas Holder
	11:10	11:25	LOW CARBON CONCRETE DEVELOPED VIA PERFORMANCE-BASED APPROACH: A CASE STUDY OF THE NEW LARIVOT BRIDGE IN FRENCH GUIANA	Mouna Boumaaza, Thomas Holder, Paul-Alexandre Franco, Julien Crespy, Ferdinand Vitry, Line Ladouceur, Rani Antoun,
	11:25	11:40	MODELLING AND BENCHMARK OF WATER POST-COOLING PIPES IN MASS CONCRETE USING EMBEDDED ELEMENTS WITH A FINITE VOLUME APPROACH	Thomas Jochyms, Pierre-Edouard Denis, Yvan Thiebault, Laurent Boutillon, Lionel Linger
	11:40	11:55	PERFORMANCE-BASED STANDARDS FOR HYDRAULIC CEMENTS: MECHANICAL STRENGTH AND DIMENSIONAL STABILITY	Federica Boscaro, Laurent Izoret, Karen Scrivener
	11:55	12:10	STUDY ON TECHNICAL STANDARDS FOR CONCRETE CONTRIBUTES TO THE REDUCTION OF CO2 EMISSIONS	Tadatsugu Kage, Koichi Matsuzawa, Kiyofumi Nakada
	12:10	12:25	FULLY RECYCLED LOW-CARBON CONCRETE FOR TWO NEW BUILDINGS NEAR PARIS, FRANCE	Valère Eichwald, Serge Nana, Blandine Albert, Lilia Caragacean, Jean-Michel Laye, Mouloud Behloul, Christophe
	12:25	12:40	VALORIZATION OF EXCAVATED SOILS IN THE PRODUCTION OF P1-TYPE CURBS	Younes Farez, Khadim Ndiaye, Prosper Plyia, Salima Aggoun, Romain Lafon
	12:40	12:55	ENVIRONMENTAL IMPACT OPTIMISATION OF ISOSTATIC BEAMS	Noémie Riez, Sébastien Maitenaz, Xavier Estrella, Nicolas Metge, Corentin Fivet
1:00 – 2:00	lunch break			
2:00 – 3:00	2:00	2:15	DESIGN AND CONSTRUCTION OF FRC TUNNEL PRECAST SEGMENT WITH FIBRE ENABLED CARBON FOOTPRINT REDUCTION	Benoit De Rivaz
	2:15	2:30	DURABILITY DESIGN OF TUNNELS AND UNDERGROUND STRUCTURES IN THE ONTARIO LINE SOUTH	Mehdi Bakhshi, Behrouz Esmailkhanian, Verya Nasri, Lionel Linger
	2:30	2:45	GENERAL NEEDS FROM INDUSTRY FOR COLAS	Xavier Carbonneau
	2:45	3:00	FULL-DEPTH RECLAMATION (FDR) – PROPOSAL FOR MECHANISTICAL-EMPIRICAL DESIGN PARAMETERS - FEEDBACK FROM THE REGINA BYPASS PPPS PROJECT	Mustapha Masdan, Marc Proteau, Alan Ezaoui, Amélie Griggio, Bertrand Pouteau
3:00 – 4:00	3:00	3:15	IMPLEMENTATION AND ASSESSMENT OF SEVERAL CRACKING TESTS TO BETTER ASSESS THE DURABILITY OF ASPHALT MIXES	Fayçal Lahjiri, Bertrand Pouteau, Eshan Dave, Amélie Griggio, Marc Proteau
	3:15	3:30	ROUND TABLE DISCUSSION	
	3:30	3:45		
3:45	4:00			
4:00-4:30	coffee break			

Corrosion of engineering materials – Session for young scientists

Session Chairs: Dr. Meeke van Ede, Dr. Lucas Michel

Thursday 29 August

Time slot	start	end	Title	Authors
10:30 – 1:00	10:30	10:45	INTRODUCTION OF THE RILEM YOUNG SCIENTIST CORROSION GROUP	Meeke van Ede, Lucas Michel
	10:45	11:00	DOES THE STEEL MANUFACTURING PROCESS AFFECT THE CORROSION SUSCEPTIBILITY OF REINFORCING STEEL BARS?	Ahmad Takriti, Sylvia Kessler
	11:00	11:15	PASSIVATION OF STRESSED STEEL IN SIMULATED CONCRETE PORE SOLUTION	Zheng Dong, Zhou Meng, Chuanqing Fu
	11:15	11:30	PRELIMINARY RESULTS FROM AN EXPERIMENTAL STUDY ON REINFORCEMENT CORROSION IN SIMULATED NATURAL CONDITIONS	C. Martens, R. Caspeepe and E. Verstrynge
	11:30	11:45	IMPACT OF CRACKS ON CHLORIDE-INDUCED REINFORCEMENT CORROSION	Samanta Robuschi, Karin Lundgren, and Mette Rita Geiker
	11:45	12:00	CHLORIDE-INDUCED CORROSION OF STEEL IN THREE LOW-CARBON CONCRETES: LOW-CLINKER, ALKALI-ACTIVATED SLAG AND SUPERSULFATED CEMENT	Lola Doussang, Gabriel Samson, Fabrice Deby, Bruno Huet, Emmanuel Guillon, Martin Cyr
	12:00	12:15	CORROSION ASSESSMENT OF EMBEDDED STEEL IN NANO-MODIFIED SEAWATER-MIXED CONCRETE	Sundar Rathnarajan, Pawel Sikora
	12:15	12:30	THE INFLUENCE OF CARBONATION ON THE PENETRATION DEPTH OF HYDROPHOBIC SEALANTS IN CONCRETE WITH VARIOUS BINDER TYPES	Tais Mei Dos Santos Soares, Hans Beushausen, Joanitta Ndawula
	12:30	12:45	DISCUSSION	
12:45	13:00			
1:00 – 2:00	lunch break - poster session			
2:00 – 4:00	2:00	2:15	SERVICE LIFE OF REINFORCED CONCRETE (RC) SYSTEMS WITH CORROSION INHIBITING ADMIXTURES	Shefali Aggarwal, Radhakrishna Pillai
	2:15	2:30	ELECTROCHEMICAL MONITORING OF REINFORCED CONCRETE WITH PLANT-BASED CORROSION INHIBITOR	Natalia Delbianco, Rocio Peralta Ring, Carla Priano, Edgardo Fabian Irassar
	2:30	2:45	EFFECT OF STRAY CURRENTS FROM DC-POWERED RAIL SYSTEMS ON THE DURABILITY AND STRENGTH OF REINFORCED CONCRETE COLUMNS	Igor Lapiro, Kovler Konstantin, Eid Rami
	2:45	3:00	INVESTIGATION OF CATHODIC PROTECTION OF REINFORCED CONCRETE COVERED WITH BIOFILMS FOR THE APPLICATION OF FOWTS	Deeksha Arya Margapuram, Marie Salgues, Raphael Lami, Benjamin Erable, Michel Groc,
	3:00	3:15	INTERPRETATION OF ELECTROCHEMICAL RESPONSES TO UNDERSTAND THE CORROSION INITIATION OF PRESTRESSING STEEL IN SLAG BASED BINDERS	Sreelakshmi S, Radhakrishna Pillai
	3:15	3:30	DISCUSSION	
3:30	3:45			
4:00-4:30	coffee break - poster session			

Characterisation and modelling on small scales

Session Chairs: Prof. Amine Bouibes, Prof. Laurie Lacarrière

Wednesday 28 August

Time slot	start	end	Title	Authors
11:00 – 1:00	11:00	11:25	UNDERSTANDING CEMENT PASTE COHESION AND DEGRADATION MECHANISMS FROM ATOMISTIC MODELLING	Roland Pellenq
	11:25	11:40	ADVANCED SUSTAINABLE GRAPHENE NANO-COATED GEOPOLYMER MATERIALS	Ali Zaoui
	11:40	11:55	ATOMIC STRUCTURE OF CALICUM SILICATE HYDRATES: BULK AND SURFACE STRUCTURE	Aslam Kunhi Mohamed, Ziga Casar, Bowen Paul, Karen Scrivener
	11:55	12:10	MICROSCOPIC MECHANISM OF CREEP BEHAVIOR IN CALCIUM SILICATE HYDRATES: REAXFF-BASED MOLECULAR DYNAMICS STUDY	Ouail Reguieg, Amine Bouibes, Laurie Lacarrière
	12:10	12:25	ENHANCING NANOMECHANICAL AND MICROSTRUCTURAL PROPERTIES OF CEMENT COMPOSITES WITH CARBON NANOFIBERS AND GRAPHITIZED MULTI-WALLED CARBON	Salim Barbhuiya, Bibhuti Das
	12:25	12:40	EXPLORING THE IMPACT OF IRON (FE) DOPING ON ETTRINIGTE STABILITY IN CEMENT-BASED MATERIALS : INSIGHTS FROM ATOMISTIC SIMULATIONS	Majdouline Laanaïya, Amine Bouibes, Laurie Lacarrière
	12:40	12:55	TOWARD A COMPUTATIONAL MOLECULAR TECHNOLOGY FOR COMPLEX REACTION SYSTEMS IN CEMENTITIOUS MATERIALS: THE RED MOON APPROACH	Masataka Nagaoka, Amine Bouibes, Ouail Reguieg, Laurie Lacar
1:00 – 2:00	lunch break - poster session			
2:00-4:00	2:00	2:15	WHY MUD IS STICKY (OR, HOW CLAY PARTICLES INTERACT ACROSS THIN WATER FILMS)	Ian Bourg
	2:15	2:30	ASR PRODUCTS AT THE MOLECULAR AND COLLOIDAL SCALE	Tulio Honorio
	2:45	3:00	DEFORMATION BEHAVIOR OF SYNTHETIC MAGNESIUM SILICATE HYDRATE PASTES WITH VARIOUS MG/SI RATIOS AT THE ATOMIC SCALE	Sumin Im, Sungchul Bae
	3:02	3:17	BRIDGING FROM NANO-SCALE MODEL TO CHEMICAL KINETICS IN REAL TIME DOMAIN WITH THE REDMOON METHOD: APPLICATION TO POLYOLEFIN SYNTHESIS BY	Kentaro Matsumoto
	2:30	2:45	STRUCTURAL, MECHANICAL AND VIBRATIONAL PROPERTIES OF THAUMASITE FROM CLASSICAL ATOMISTIC SIMULATIONS	Evgeny Tararushkin, Andrey Kalinichev
	3:00	3:02	STRUCTURE AND PROPERTIES OF CALCIUM ALUMINATES AS ADSORBENTS FOR ANIONIC RADIONUCLIDES	Artem Glushak, Evgeny Tararushkin, Grigory Smirnov, Andrey K
	3:17	3:19	MOLECULAR DYNAMICS SIMULATION FOR MULTIFUNCTIONAL SMART CONCRETE	Xiaohui Jia, Olivier Plé, Anna Lushnikova
4:00-4:30	3:19	3:21	EFFECT OF BIO-SOURCED ADDITIONS AND WATER CONTENT ON MECHANICAL PROPERTIES OF KAOLINITE : A MOLECULAR DYNAMICS APPROACH	Ruifeng Di, Olivier Plé, Anna Lushnikova
	coffee break - poster session			

Circular Economy, Life Cycle Analysis, Regional Practices

Session Chair: Prof. Gilles Escadeillas

Thursday 29 August

Time slot	start	end	Title	Authors
10:30 – 1:00	10:30	10:55	SUSTAINABLE BUILDING MATERIALS IN THE MIDDLE EAST AND NORTH AFRICA REGION: TRENDS, OPPORTUNITIES AND CHALLENGES	Mohammed Sonebi, Ahmed Abdalqader
	10:55	11:10	A LITERATURE REVIEW FOR MEASURING CIRCULAR ECONOMY IMPLEMENTATION IN THE BUILT ENVIRONMENT	Maher Hodroj, Christelle Tribout, Gilles Escadeillas
	11:10	11:25	REUSE OF STRUCTURAL CONCRETE COMPONENTS IN NEW BUILDINGS – DOCUMENTATION	Lisbeth M. Ottosen, Katja I.M. Thygesen, Serkan Karatosun, Thomas Ingeman-Nielsen, Karoline
	11:25	11:40	RECOVERY OF HIGH-PURITY CEMENT PASTE FROM CONCRETE WASTE	Rohit Prajapati, Julian Allwood, Cyrille Dunant
	11:40	11:55	DINABAU: INTEGRATING DIGITAL BUILDING MODELS FOR TEACHING SUSTAINABLE CONSTRUCTION WITH RENEWABLE RESOURCES	Aline Gruner, Florian Kopf, Dominik Schöne, Katharina Kleinschrot, Katharina Meyer, Michael Engelmann
	11:55	12:10	CONCEPT DEVELOPMENT FOR THE USE OF RECYCLED CARBON FIBRES IN THE CONSTRUCTION INDUSTRY	Vanessa Overhage, Hannah F. Wilms, Thomas Gries
	12:10	12:25	A POSSIBLE RE-USE OF SHEEP WOOL IN CONCRETE	Giuliana Somma
	12:25	12:40	A SUSTAINABLE CONSTRUCTION PERSPECTIVE: INDUSTRIAL APPLICATION OF GEOPOLYMER CONCRETE IN BLOCK MANUFACTURING	Gaone Koma, Patrick Müller
	12:40	12:42	WASTE CONCRETE FINES AS A SUSTAINABLE ALTERNATIVE FOR CEMENT MORTAR	Haripan Vislavath, Ravindra Gettu , Manu Santhanam
	12:42	12:44	RECYCLING OF MATERIALS FROM RENOVATION AND DEMOLITION OF BUILDING STRUCTURES	Slawomir Czarnecki, Marlena Moj
	12:44	12:46	INVESTIGATING THE POZZOLANIC REACTION OF GLASS FIBRES - THERMOSET RESIN COMPOSITES POWDER IN CEMENT PASTE	Natalia Lora Acevedo, Hela Bessaies-Bey, Thierry Sedran, Radhouane Masmoudi, Loïc Divet, Arezki
12:46	12:48	BALANCING CIRCULARITY AND DECARBONISATION POTENTIAL OF CONCRETES WITH RECYCLED AGGREGATES	Bruno Fernandes, Hisham Hafez, Susan Bernal, Leon Black	
1:00 – 2:00	lunch break - poster session			