2016 International Concrete Sustainability Conference

Tentative Schedule

Sunday, May 15, 2016

8:00 – 17:00	**MST, RILEM and NRMCA committee meetings** **SCHEDULE TBD** **POTOMAC ROOMS and WASHINGTON ROOMS**
18:00 – 19:00	**Reception in Exhibit Area** **REGENCY BALLROOM FOYER**

Monday, May 16, 2016

7:00 – 8:00	**Continental Breakfast in Exhibit Area** **REGENCY BALLROOM FOYER**	
8:00 – 9:30	**Plenary Session 1** **REGENCY BALLROOM** Opening Remarks VIP – TBD Chris Drew - Jeddah Tower, Sustainability of Tall Buildings Olafur H. Wallevik - From Low Binder Self Consolidating Concrete (Eco-SCC) to Vibration Free Stiff Concrete (VFC)	
9:30 – 10:00	**Break in Exhibit Area** **REGENCY BALLROOM FOYER**	
10:00 – 12:00	**Session D-1: Environmental Impact Reduction** **WASHINGTON A** Recent Advances on the Use of Sustainable Structural Concrete: A Materials Perspective, *Leandro Sanchez, Martin Noël, Gholamreza Fathifazl and Bruno Damineli* Design and Application of the Precast Concrete Anchor Blocks for the TRNC Water Supply Project, *Aydin Saglik and Emre Ozalp* Sustainability of Rubberized Concrete as Highway Pavement Construction Material, *Rui Liu* The Effects of Zeolite as Supplementary Cement Material on Pervious Concrete, *Alireza Joshaghani*	**Session E-1: Material Science** **WASHINGTON B** Effect of Using 'Chat' on Mechanical Properties of Concrete, *Goli Nossoni and Feksi Basha* Recycling of Sewage Sludge Ash (SSA) as Construction Materials, *Zhen Chen and Chi Sun Poon* Effect of Sustainable Nanofibers on Cement-based Materials, *Jessica Flores and Ali Ghahremaninezhad* Obtaining Optimum Workability using Rice Husk Ash in a Modified Cementitious System, *Nsesheye Susan Msinjili, Wolfram Schmidt and Andreas Rogge*

	Optimization of Concrete for Prefabrication and Quantification of its Environmental Impact, *Stijn Onghena, Steffen Grünewald and Geert de Schutter* Minimizing Paste Content in Concrete Using Limestone Powders - Demonstration Mixtures, *Dale P. Bentz, Scott Z. Jones and Didier Lootens*	Field Trials with Concrete Incorporating Biomass Fly Ash, *Ahmed Omran, Ailing Xie, Tatyana Davidenko and Arezki Tagnit-Hamou* Properties and Performance of Ground Glass Fiber as a Pozzolan in Portland Cement Concrete, *Prasad Rangaraju, Hassan Rashidian, Gordon Nameni and Godwin Amekuedi*
12:00 – 13:30	**Lunch** **REGENCY BALLROOM**	
13:30 – 15:10	**Session D-2: Environmental Impact Reduction** **WASHINGTON A** Evaluating the Albedo-induced Radiative Forcing and CO2 Equivalence Savings: A Case Study on Reflective Pavements in Selected U.S. Urban Areas, *Xin Xu, Jeremy Gregory and Randolph Kirchain* Approximation Assessment of Photocatalytic Air Cleaning Pavements, *James E. Alleman, Joel K. Sikkema, Peter C. Taylor* Going Green on Campus with Pervious Concrete Pavement, *Marleisa Arocho and Sangchul Hwang* Multi-Functional Concrete Inlays for Pavement Preservation and Sustainability, *Sushobhan Sen, Daniel King and Jeffery Roesler* Microbial Challenges for Long-lived Concrete Formulations, *Don Satchell*	**Session E-2: Material Science** **WASHINGTON B** Adhesion and Rheology of Joints Fresh Mortars, *C. Sihadj Mohand, R. Bouras and M. Sonebi* Effect of Recycled Fine Aggregate on Mortar Properties, *Xinsheng Wu, Yue Hou, Zhi Ge and Renjuan Sun* Mechanical Properties of Pumpable Steel Fiber Reinforced Lightweight Concrete for Application in Load-bearing Walls, *Florian Junker, Torsten Mueller, Hubertus Kieslich and Klaus Holschemacher* Effect of Fibres on High Volume Fly Ash Self Compacting Concrete, *Chetan Modhera and Ujjaval Shah* The Effects of Cellulose Ether Admixture on Fresh Cement Pastes Submitted to a Hydraulic Gradient, *Alexandre Pierre, Arnaud Perrot and Vincent Picandet*
15:10 – 15:40	**Break in Exhibit Area** **REGENCY BALLROOM FOYER**	
15:40 – 17:20	**Session D-3: Environmental Impact Reduction** **WASHINGTON A** Recycling of End of Life Concrete to New Concrete, *Francesco Di Maio, Somayeh Lotfi, Peter Rem, Han Xia, Maarten Bakker and Mingming Hu* Material Flow Analysis of the Concrete Chain in the Netherlands, *Mingming Hu, René Kleijn, Jeroen Guinée and Francesco Di Maio* Behavior of Confined Recycled Aggregate Concrete, *Mohamed*	**Session E-3: Material Science** **WASHINGTON B** Self-sensing Cementitious Composites with Graphene Nanoplatelets, *Radhika Pavgi, Zhangfan Jiang, Andrei Ramniceanu, Osman E. Ozbulut and Devin K. Harris* Optimization of Packing Density for a Self-compacting Clay Concrete (SCCC), *Gnanli Landrou, Coralie Brumaud and Guillaume Habert* Early-Age Expansion of Wastepaper Sludge Ash: Reduction and Benefits,

	Mahgoub SEACON – A New Research Project Towards the Sustainability of Concrete, *Antonio Nanni* Strength Performance and Life Cycle Assessment of Recycled Aggregate Concrete with Class C Fly Ash, *Austin Dada*	*Ahmed Omran, Majid Jerban, Arezki Tagnet-Hamou* Investigation of Rheological Behaviour of Self-Compacting Marbled Paste, *F. Messaoudi, O. Haddad, R. Bouras, M. Sonebi and S. Kaci* In-situ Production of Nano/Micro Particles in Fresh Concrete, *Jialai Wang and Xin Qian*
17:20 – 19:30	**Poster Session and Reception in Exhibit Area** **REGENCY BALLLROOM FOYER** See SCC 2016 schedule for poster topics	

Tuesday, May 17, 2016

7:00 – 8:00	**Continental Breakfast in Exhibit Area** **REGENCY BALLROOM FOYER**	
8:00 – 9:30	**Plenary Session 2** **REGENCY BALLROOM** Henry Green – Pathways to Resilient Communities (invited) Nicolas Roussel - New Trends in Rheology Driven by Sustainable SCC Robert Flatt, Timothy Wangler, Lex Reiter, Heinz Richner, Ena Lloret-Kristensen, Norman Hack, Matthias Kohler, Fabio Gramazio - Digital Fabrication and Concrete: Opportunities and Challenges	
9:30 – 10:00	**Break in Exhibit Area** **REGENCY BALLROOM FOYER**	
10:00 – 12:00	**Session D-4: Resilience and Durability** **WASHINGTON A** Assessment of Resilience and Sustainability of Cement Based Facades for Mid-rise Commercial Buildings Exposed to Coastal and Seismic Hazards, *Gonzalo Barluenga, Oluwateniola Ladipo, Georg Reichard and Roberto T. Leon* Context-dependence of Hazard Mitigation Strategies: Building Case Studies Around the US, *Reed Miller, Jeremy Gregory and Randolph Kirchain*	**Session E-4: Material Science** **WASHINGTON B** Microstructural Characteristic of Alkali-activated Fly Ash Exposed to CO2-rich Environment, *S.M. Park, J.G. Jang, G.M. Kim and H.K. Lee* Low CO2 Supersulfated Cement Mortars: Mix-design and Mechanical Performances, *Alexandre Pierre, Christophe Lanos, Bérenger Aranda and Mélissa Laurans* The Characterıstıcs Of Boron Modıfıed Actıve Belıte (BAB) Cement And Its Utılızatıon In Concrete Technology, *Aydin Saglik*

	Post-impact Assessment of Reinforced Concrete Plate Load Capacity, *Gilberto Nery, Falk Hille and Andreas Rogge* Design of Sustainable and Resilient Concrete Mixtures via Multi-objective Optimization, *Wil V. Srubar III and Joseph R. Kasprzyk* Pavement Management Under Uncertainty: A Heuristic Approach, *Omar Swei, Jeremy Gregory and Randolph Kirchain* Is the Concrete Profession Ready for Peformance Specifications that Provide an Alternative to Prescriptive w/c and Air Content Requirements?, *Jason Weiss*	Utilization of Industrial Waste (Foundry Slag) as a Partial Replacement of Cement and Sand, *Shubham Kumar Sharma, Sanjay Meena and Shahrukh* Performance of Calcium-Sulphoaluminate Cement for Concrete Pavements Applications: A Numerical and Experimental Investigation, *Sergio Tortelli, Adriano Reggia, Giovanni Plizzari and Maurizio Marchi* Internal Curing using Perforated Cenospheres, *Fengjuan Liu and Jialai Wang*
12:00 – 13:30	**Lunch** **REGENCY BALLROOM**	
13:30 – 15:10	**Session D-5: Resilience and Durability** **WASHINGTON A** Super Absorbing Polymers Increasing the Frost-thaw Resistance of Concrete Roads, *Bart Craeye, Gilles De Brabander, Joop Bovend'Eerdt and Geert Cockaert* New Permeability Reducing Admixture for Sustainable Concrete, *Giorgio Ferrari, Vincenzo Russo, Danilo Passalacqua, Gilberto Artioli and Luca Valentini* Sustainability and Durability of Concrete Placed in Cold Weather, *Nash Hasan* An Engineering Approach for Permeability Assessment of Virtual Cement-based Materials, *Kai Li, Piet Stroeven, Martijn Stroeven and Bert Sluys* The Influence of Pore Size and Freezing Rate on Ice Formation in Concrete, *H. S. Esmaeeli, Y. Farnam, D. P. Bentz, P. D. Zavattieri and J. Weiss*	**Session E-5: Life Cycle Assessment** **WASHINGTON B** Streamlined Building Life Cycle Assessment, *Josh Hester, Reed Miller, Jeremy Gregory and Randy Kirchain* Comparing Concrete EPDs: Motivation, Challenges and Next Steps, *Kathrina Simonen and Barbara Rodriguez Droguett* Factors Affecting Embodied Carbon Comparison of Timber and Concrete, *Frances Yang, Hans-Erik Blomgren and Lauren Wingo* CO2-binding by Concrete Carbonation into LCA and EPD of Concrete Products, *Anne Rønning, Kari-Anne Lyng and Christian J. Engelsen* The New Industry Average Slag Cement EPD Provides a Basis for Assessing Effect of Slag Cement on the Environmental Impact of Concrete Mixtures and Structures, *Jamie Meil and John Melander*
15:10 – 15:40	**Break in Exhibit Area** **REGENCY BALLROOM FOYER**	
15:40 – 17:20	**Session D-6: Resilience and Durability** **WASHINGTON A** Drying Shrinkage of Alkali Activated Cements and the Influence of Curing	**Session E-6: Environmental Impact Reduction** **WASHINGTON B** Using Eco-Friendly Cementitious Materials for Sustainable Concrete,

	Conditions, *Maryam Hojati, Farshad Rajabipour and Aleksandra Radlinska* The Durability of Concrete Produced Using CO2 as an Accelerating Admixture, *Sean Monkman, Mark MacDonald and Doug Hooton* Effect of Recycled Concrete Aggregates Properties on Long Term Shrinkage and Cracking, *Ahmed Z. Bendimerad, Hamza Samouh, Emmanuel Roziere and Ahmed Loukili* Study on the Effect of Expansive Additive on Autogenous Deformation in Early Age, *Atsushi Teramoto, Kazuhiro Hotta, Takaaki Ohkubo and Ippei Maruyama* Mitigating Drying Shrinkage of Alkali-activated Slag: A Closer Look at the Influence of Curing Condition and Expansive Reaction, *Hailong Ye and Aleksandra Radlinska*	*Fadel AbuShaaban* Life Cycle Approach to Green Concrete in Dubai, *Rabih Fakih* Ecocrete-Xtreme : Holistic Solution for Concrete Sustainability, *Olafur Wallevik, Thordur Kristjansson, Wassim Mansour and Fouad Yazbeck* Case Study: Successful Market Place Implementation of More Sustainable Ready-Mixed Concrete using Portland-Limestone Cement, *Tim Cost and Mark Stovall* Statistical Mixture Design to Optimize Eco-efficient Binder for Infrastructure Construction, *Seyedhamed Sadati and Kamal H. Khayat*
17:20 – 18:00	**BREAK**	
18:00 – 19:00	**Reception in Exhibit Area** **REGENCY BALLROOM FOYER**	
19:00 – 21:00	**Banquet** **REGENCY BALLROOM**	

Wednesday, May 18, 2016

7:00 – 8:00	**Continental Breakfast in Exhibit Area** **REGENCY BALLROOM FOYER**	
8:00 – 10:00	**Session D-7: Resilience and Durability** **WASHINGTON A** Improving Concrete Sustainability through Design for Durability, *R. Douglas Hooton and Majella Anson-Cartwright* Effect of Different Environmental Exposure on the Efficiency of Bacteria Encapsulated Self-healing Concrete, *Goli Nossoni, Daniel Hussey and Marisa Budziszewski* Effect of using Mineral Admixture on the Effiiciency of Bacteria Encapsulated Self-healing Concrete, *Goli Nossoni and Daniel Hussey*	**Session E-4: Environmental Impact Reduction** **WASHINGTON B** Responsible Sourcing Certification for Concrete, *James Bogdan* What's Your Biodiversity KPI?, *Margaret O'Gorman* Guide to Material Ingredient Disclosure for Concrete, *Tien Peng* ProScale: A Life-Cycle Approach to Hazard, Risk and Exposure Assessment for the Construction Industry, *David Green* Theory and Reality: EDPs and Low Carbon Concrete in Construction, *David Walsh*

	Tensile Behaviour of Distinct Hooked End Steel Fibre Shape and Geometry on Material Properties of Self-compacting Concrete, *A O Okeh, David W Begg, Stephanie J Barnett, Nikos Nanos* Innovative Sample Design for Corrosion Rate Measurements in Carbonated Blended Concrete, *Matteo Stefanoni, Ueli Angst and Bernhard Elsener* Comparing the Mechanical and Fracture Properties of Concrete Made using Ordinary Portland Cement (OPC) and Calcium Silicate Cement (CSC), *Andrew Wiese, Jitendra Jain, and Jason Weiss*	Green Chemistry of Concrete Recycling, *Jialai Wang, Liang Wang and Peiyuan Chen*
10:00 – 10:30	**Break in Exhibit Area** **REGENCY BALLROOM FOYER**	
10:30 – 12:30	**Plenary Session 3** **REGENCY BALLROOM** Geert De Schutter - Vision for Future Advancement of SCC Industry TBD Suru Shah - Constructability, Sustainability, and Nanotechnology Closing Remarks	