

## Tuesday, April 20, 2021

8:30 – 9:00	30 min	REGISTRATION		
<b>PLENARY STAGE</b>				
9:00 – 9:15	15 min	<b>Opening ceremony</b> Aleš Žnidarič, PhD, Slovenian National Building and Civil Engineering Institute, Director Tomaž Boh, PhD, Ministry of Education, Science and Sport, General Science Directorate, Director Patrik Kolar, PhD, European Climate, Infrastructure and Environment Executive Agency (CINEA), Head of Department C (Green Research and Innovation)		
PLENARY 1	25 min	PLENARY SPEAKER Ueli Angst, PhD, ETH Zürich, Switzerland: Size effects in corrosion of steel in concrete		
9:15 – 10:05	25 min	PLENARY SPEAKER John Provis, PhD, The University of Sheffield, United Kingdom: Alkali-activated materials – from talk to action		
10:05 – 10:15	10 min	BREAK		
		<b>BLUE STAGE</b>	<b>GREEN STAGE</b>	<b>YELLOW STAGE</b>
	<b>SESSION</b>	<b>Innovations in materials and technologies</b> (moderator Andraž Legat, PhD)	<b>Sustainable design</b> (moderator Friderik Knez)	<b>Recycling and circular economy</b> (moderator Vesna Zalar Serjun, PhD)
10:15 – 11:05	20 min	KEYNOTE SPEAKER Karen Scrivener, PhD, Switzerland: Limestone calcined clay cements: progress in implementation and understanding mechanisms	KEYNOTE SPEAKER Andreja Kutnar, PhD, Slovenia: Wood as a building material for sustainable construction	KEYNOTE SPEAKER Ana Mladenovič, PhD, Slovenia: Establishing circular economy practices in the construction sector in Slovenia
	15 min	Electromagnetic fibre alignment to optimize the fibre utilization of ultra -high performance concrete (UHPC), Martin Schneider, Austria	Challenges in LCA of existing building, Tajda Potrč Obrecht, Slovenia	Materials and design principals for a Circular, Bio-based construction industry, Barrie Dams, United Kingdom
	15 min	On the use of metallurgical slags alternative to blastfurnace slags in the formulation of alkali-activated binders, Maurizio Bellotto, PhD, Italy	Renewable Materials in Buildings for Occupant Wellbeing and Performance, Michael Burnard, PhD, Slovenia	Reactivity of Siliceous Fly Ashes, Anya Vollpracht, PhD, Germany
11:05 – 11:20	15 min	BREAK		
11:20 – 12:05	15 min	Industrialization of an alkali-activated slag binder: solving the issues of early strength and superplasticizer efficiency, Luka Zevnik, PhD, Slovenia	Pavement-Watering Applied to Traditional and Cool Pavement Structures, Martin Hendel, PhD, France	Sustainable pre-treatment of wood biomass ash for partial cement replacement, Karmen Kostanič Jurič, Croatia
	15 min	Using Bacteria for Early Age Strength Improvement of Concrete, Lorena Skevi, United Kingdom	LCA and LCC assessment of UHPFRC application for railway steel bridge strengthening, Aljoša Šajna, PhD, Slovenia	FLAME - Fly Ash to Valuable Minerals: Upscaling of A New, Dry Classification Technology for Recovery of Performant Cementitious Materials, Ruben Snellings, PhD, Belgium
	15 min	Effect of crystalline admixtures on self-healing, Lina Ammar, France	ECORoads (Economical Concrete roads), Johannes Horvath, PhD, Germany	Mud From the Sitarjevec Mine as a Pigment for Textile Printing, Darja Rant, PhD, Slovenia
12:05 – 13:15	70 min	LUNCH BREAK		
<b>PLENARY STAGE</b>				
PLENARY 2	25 min	PLENARY SPEAKER Alexander Passer, PhD, TU Graz, Austria: Sustainable Construction – New Chances for our Future?		
13:15 – 14:05	25 min	PLENARY SPEAKER Kristina Mjörnell, PhD, Research Institutes of Sweden, Sweden: Estimation of presence of hazardous substances in the existing building stock using machine learning on building specific data		
14:05 – 14:15	10 min	BREAK		
	<b>SESSION</b>	<b>Innovations in materials and technologies</b> (moderator Lidija Korat, PhD)	<b>Energy efficiency</b> (moderator Andreja Kutnar, PhD)	<b>Inspection, monitoring, assessment and repair</b> (moderator Irina Stipanovič, PhD)
14:15 – 15:05	20 min	RILEM TC 267-TRM Report: Optimisation of R3 Reactivity Test, Most Promising Method for Supplementary Cementitious Materials, Diana Londono-Zuluaga, PhD, Switzerland	KEYNOTE SPEAKER Sabina Jordan, PhD, Slovenia: Energy efficiency of buildings in the context of sustainability	KEYNOTE SPEAKER Andrej Anžlin, PhD, Slovenia: Inspection and monitoring of bridges to support the management activities of critical infrastructure
	15 min	Influence of Density on Tensile and Compressive Properties of Polyurethane Foam, Paulina Krolo, PhD, Croatia	Consumption and potential energy savings in the office building, Arta Sylejmani, Kosovo	Inspection, Assessment and Repair of Fire Damaged Concrete Structure, Meri Cvetkovska, PhD, North Macedonia
	15 min	Sustainable insulating composite from almond shell, Filip Brleković, Croatia	Thermal bridge assessment in prefabricated ventilated façade systems with recycled aggregates, Mergim Gaši, Croatia	Comprehensive permanent remote monitoring system of a multi-span highway bridge, Doron Hekič, Slovenia
15:05 – 15:20	15 min	BREAK		
15:20 – 16:05	15 min	Mode of operation of bio-based polymers for the control of fresh concrete properties, Wolfram Schmidt, PhD, Germany	The impact of building zone elements on airtightness, Sanjin Gumbarevič, Croatia	Corrosion-cracking parameter in the concrete structure and impact in reinforced steel bars, Mihrie Bajoku, Croatia
	15 min	Mechanical Properties of Concrete Containing Wood Biomass Ash, Jelena Šantek Bajto, Croatia	Street furniture design as a means to mitigate urban heat island phenomenon: A case study, Andrej Bernik, France	Monitoring of steel corrosion in concrete exposed to marine environment, Miha Hren, PhD, Slovenia
	15 min	Effects of Waste Glass in Properties of Concrete, Naser Kabashi, PhD, Kosovo	Effects of energy renovation measures implemented on a residential building, Jože Hafner, PhD, Slovenia	Migratory Corrosion Inhibitors Technology for Improving Durability of Europe's Bridges Infrastructures, Ivana Lipoščak, Croatia

## Wednesday, April 21, 2021

9:00 – 9:10	10 min	REGISTRATION		
<b>PLENARY STAGE</b>				
PLENARY 1 9:10 – 10:00	25 min	PLENARY SPEAKER Andreas Rogge, PhD, BAM Federal Institute for Materials Research and Testing, Germany: Future Challenges in Construction Engineering		
	25 min	PLENARY SPEAKER Erik Schlangen, PhD, Delft University of Technology, The Netherlands: 3D-printing for construction at different scales		
10:00 – 10:10	10 min	BREAK		
		<b>BLUE STAGE</b>	<b>GREEN STAGE</b>	<b>YELLOW STAGE</b>
	<b>SESSION</b>	<b>Digitalization and automation</b> (moderator Andrej Anžlin, PhD)	<b>Material – environment interaction</b> (moderator Miha Hren, PhD)	<b>Construction, maintenance and modelling</b> (moderator Aljoša Šajna, PhD)
10:10 - 11:00	20 min	KEYNOTE SPEAKER Ksenija Marc, Slovenia: Implementing BIM in Slovenian Public Sector	KEYNOTE SPEAKER Marijana Serdar, PhD, Croatia: The importance of understanding microstructure of alternative binders to predict their durability	KEYNOTE SPEAKER Irina Stipanović, PhD, Croatia: Predictive maintenance planning for concrete structures
	15 min	Designing generatively to achieve an efficient and optimised solution, Gradišar Luka, Slovenia	Measurement of the chloride resistance of Environmentally friendly and Durable concrete, Alisa Machner, Germany	Ductility of Hybrid FRP – Steel Reinforced Concrete Sections, Tvrtko Renić, Croatia
	15 min	Extending BIM for Air Quality Monitoring, Michael Mrissa, PhD, Slovenia	Sulfate resistance of cement with different volumes of fly ash, Toni Arangelovski, PhD, North Macedonia	Flexible polymer connections for CLT structures, Boris Azinović, PhD, Slovenia
11:00 – 11:15	15 min	BREAK		
11:15 – 12:00	15 min	BIM application in civil engineering projects, Marina Davidović, Serbia	Comparative Study Selected Properties of Three Binders: Ordinary Portland Cement, Calcium Sulfoaluminate Cement and Alkali Activated Material Based Mortars, Ivana Vladić Kancir, Croatia	Fibre Reinforcement - the Key to Sustainable Reinforced Concrete Structures, Darko Nakov, PhD, North Macedonia
	15 min	Education for zero energy buildings using BIM, Bojan Milovanović, PhD, Croatia	Sulfate Resistance of Concrete after Two Years Exposure to Aggressive Solutions, Vesna Bulatović, Serbia	Experimental and numerical investigation of restrained shrinkage of concrete, Lucija Hanžič, PhD, Slovenia
	15 min	Characterization of the reaction degree of slag in a cement by neural networks based electron microscopy image analysis, Priscilla Teck, Belgium	Effect of Chemical Admixtures on Corrosion Behaviour of Structural Steel in Mortar: Comparison between Standardized and Alternative Method, Kiran Ram Porikam Poil, Croatia	Seismic Strengthening of Stone Masonry Structures – State of the Art, Ivan Hafner, Croatia
12:00 – 13:00	60 min	LUNCH BREAK		
	<b>SESSION</b>	<b>Digitalization and automation</b> (moderator Lucija Hanžič, PhD)	<b>Material – environment interaction</b> (moderator Nina Gartner)	<b>Construction, maintenance and modelling</b> (moderator Marijana Serdar, PhD)
13:00 – 14:00	15 min	Novel Cementitious Materials for extrusion-based 3D printing, Richard Ball, PhD, United Kingdom	Study on mechanical and durability properties of concrete with RTPF after high temperature exposure, Marija Jelčić Rukavina, PhD, Croatia	Numerical Modelling of Concrete Beam Reinforced with FRP Bars Subjected to Bending Until Failure, Tomislav Kišiček, PhD, Croatia
	15 min	Temperature pre-treatment of gypsum for powder based 3D printing technology, Vesna Zalar Serjun, PhD, Slovenia	Effect of Binder Composition on Carbonation Resistance of Sustainable Concrete Formulations, Ognjen Rudić, Austria	Evaluating the impact of age on the behaviour of SFRC during flexural loading, Jakob Šušteršič, PhD, Slovenia
	15 min	Development of sustainable lightweight 3D printing mixtures for 3D printing, Pawel Sikora, PhD, Poland	Steel reinforcement in slag containing binders and its susceptibility to chloride-induced corrosion, Shishir Mundra, PhD, United Kingdom	Modelling the durability of novel cementitious materials exposed to the drying and carbonation, Yushan Gu, PhD, France
	15 min	3D multi scale imaging in additive manufacturing, Lidija Korat, PhD, Slovenia	Influences of the combined application of polysaccharides and superplasticizers on early hydration of cement, Alexander Mezhov, PhD, Germany	Flexural Behaviour of High Strength Concrete with Steel and Polypropylene Fibers, Natalija Bede, PhD, Croatia
14:00 – 14:15	15 min	BREAK		
<b>PLENARY STAGE</b>				
14:15 – 15:15	60 min	<b>Panel discussion</b> Kristina Mjörnell, PhD, Research Institutes of Sweden Andreja Kutnar, PhD, InnoRenew CoE & University of Primorska Erik Schlangen, PhD, Delft University of Technology, The Netherlands: 3D-printing for construction at different scales Friderik Knez, Slovenian National Building and Civil Engineering Institute Aleš Ugovšek, PhD, moderator		
15:15 – 15:30	15 min	Closing		