RYS 2025: The first RILEM Youth Symposium Held online on 20–21 October, 12:00–15:30 CEST (UTC+2, Paris time)

Held online on 20–21 October, <u>12:00–15:30 CEST (UTC+2, Paris time)</u>

DAY 1 - 20/10/2025

Time

14.40-15.20

12-12.15	Opening Opening				
12.15-12.45	Keynote "Advancements in numerical modelling of masonry and historical structures" Associate Professor A. M. D'ALTRI (University of Bologna, Italy)				
	Room 1 Earthen materials	Room 2 Cement, Cementitious materials, and Concrete	Room 3 Innovative, low-carbon materials	Room 4 Bio-based materials / <u>Heritage and Historic materials</u>	Room 5 Structural and mechanical performance
12.45-13.05	Recent advancements on the effect of bio-stabilisation on the mechanical and hygrothermal properties of earthen building materials Losini et al.	Influence of Magneto-Rheological Response on Early Hydration and Microstructure in Cement Paste <i>Hu and Jiao</i>	Toward One-part Alkali-activated Low-grade Metakaolin via Inter- grinding: Assessing Reaction Kinetics and Nanostructure Evolution Setiawan and White	Enhancing Olive Husk Properties Through Alkali, Thermal, and Biopolymer Treatments for Sustainable Building Applications <i>Hallma and Brás</i>	Low-velocity impact behavior of auxetic cementitious cellular composites (ACCCs) Xie and Savija
13.05-13.25	Mold growth in biostabilized earth construction materials: a potential ally in enhancing water durability Walter et al.	Investigation of carbonation for low carbon concretes under indoor, sheltered and unsheltered temperate climate using a diffusive method Qacami et al.	A Novel Pathway to Low-Carbon Cements via Analcime Sand Valorisation Jain et al.	Enhancing Urban Biodiversity Through Bioreceptive Materials: Insights on Design, Properties, and Additive Manufacturing Applications Castillo et al.	Structural and energy retrofitting of masonry-infilled RC frames subjected to in-plane cyclic loading Monastridou et al.
13.25-13.45	Building with Earth: Unveiling Reaction Mechanisms in soil-cement Systems Bastola et al.	Mixer power consumption as an indicator of water content and concrete properties Aboagye et al.	Predictive Modeling of Consistency Class Using Machine Learning Techniques on Industrial Concrete Datasets Hafidi et al.	Modelling Transport Phenomena of Cementitious Mortars made with bioPCM-Recycled Wood Aggregates Salhab et al.	Point Cloud-Based Damage Detection for Reinforced Concrete Structures by Deep Learning Shibano et al.
13.45-14.05	Potential of Treating War-Polluted Soils for Earth-Based Construction in Ukraine Pomazanna et al.	Micromechanical Modeling of Spatially Heterogeneous Interfacial Transition Zone (ITZ) in Recycled Aggregate Concrete Shittu et al.	A model material and an adapted protocol for the study of the shear thickening of low-carbon cement-based materials Delattaignant et al.	Polylaminate Waste Valorisation into Mycellum-Based Composites for Sustainable Insulation Applications Wildman et al.	GNP-Coated Aggregates for improving Concrete's Mechanical Properties Abongo and Maglogianni
14.05-14.25	Bio-based fluidification of earth mortar using tannin addition Auger et al.	Comparison between different methods of determining apparent elasticity modulus of cementitious materials de Silva Filho et al.	Evolution of phase composition and pore water in fresh OPC paste during accelerated carbonation and natural carbonation Yu et al.	Climate-proof, climate-neutral renovations for the Finnish building stock Dadssi and Posani	Uniaxial Tensile Stress Relaxation and Cracking Behavior of SHCCs Incorporating Blast Furnace Slag and Fly Ash Hafiz Zadah and Luan
14.25-14.45	Exploring alternative stabilization for compressed earth blocks: a systematic literature review Cruz et al.	Rheological and mechanical analysis of alkali-activated concretes with BSSF steel slag as precursor and aggregates Souza et al.	Industrial-scale production of low-dinker LC3 cements using low- grade clays Galindo-Barajas et al.	Carbonation Pathways of Mayan Engineering: Mineralogical Insights into Lime-Based Mortars from the Muyil Pyramid Montaseer Meraz et al.	Stochastic multi-hazard vulnerability assessment of railway masonry arch bridges subject to seismic and flood hazards Cabanzo et al.
14.45-15.05	A combined laboratory and field study to assess the durability of CEBs against water-mediated weathering Panagiotou and loannou	Quasistatic Crack Propagation in Cement-Based-Materials Induced by Pyrrhotite Oxidation Dehwah et al.	Evaluating The Performance of Limestone Calcined Clay Cement (LC3) Incorporating Low-Kaolinite Clays from The Ceramic Industry Ozbakan Orhan and Over	Non-Destructive Methods for Assessing Hygric Properties in Heritage Masonry: Karsten and Pleyers tube Verbruggen et al.	Performance and Evolution of Materials for 3D Construction Printing: An Overview from Conventional to Extreme Environments Valentino Sangiorgio et AL.
15.05-15.10			Closing		
Time	DAY 2 - 21/10/2025				
12-12.15	Opening				
12.15-12.45	Keynote "Early-age shrinkage - A concern for 3D-printable concrete?" Assistant Professor A. V. RAHUL (IIT Tirupati, India)				
	Room 1 Earthen materials	Room 2 Cement, Cementitious materials, and Concrete	Room 3 Innovative, low-carbon materials	Room 4 3D- printed materials	Room 5 Durability and degradation phenomena / Bituminous materials
12.45-13.05	Sodium hexametaphosphate as superplasticizer for MgO-silicate cement stabilized clays Kuhn et al.	Synthesis and processing of dense tricalcium and dicalcium silicates for surface-sensitive characterization Tugelbayev et al.	Recycling fiber-reinforced polymer waste in the construction industry Li et al.	Hygro-Tech: Towards high-tech, low-carbon building components for passive indoor humidity control Jingyi and Posani	Durability Performance of Ternary Blended Self-Consolidating Concrete: A Comparative Study with Portland Limestone Cement- based SCC Koff Ametere and Bediako
13.05-13.25	Regenerative Retrofitting of Built Environment Assets Via Ecologically Active Soils Jiménez Ríos et al.	Active Rheology Control of Cementitious Materials: Comparing Residual Materials with Potentially Magnetic Particles Heik et al.	Development of Alkali-Activated Lunar Regolith for Sustainable Space Construction Driouich et al.	Adaptation of low environmental impact mortar formulations for 3D printing Ellouch et al.	How to Protect Our Façade Coating Mortars? A Glance at Different Approaches to Improve Surface Protection Bersch et al.
13.25-13.45	Bio-stabilisation of earthen materials: a perspective on the potential contribution to climate change adaptation and mitigation Posani et al.	Effects of blending water reducing admixtures (WRAs) on rheology and workability retention of limestone metakaolin blended cement <i>Tran et al.</i>	Porosity investigations of metakaolin based geopolymers Pacente et al.	Extrusion-based 3D printing of fiber-reinforced concrete Li and Khayat	Comparison between different total sulfur measurement techniques for the screening of aggregates with potential oxidation issues from ion sulfide minerals Banik and Brand
13.45-14.05	Recyclability of Soil Stabilised with Natural Hydraulic Lime for Earthen Constructions Turco et al.	Influence of partial replacement of cement by glass powder waste and glass microspheres on rheology of self-compacting concretes <i>Melo et al.</i>	Key Mineralogical Events as Temperature Indicators in Microwave- Calcination of Palygorskite Clay Faria et al.	Correlating in-line sensor data to hardened state material properties in Digital Fabrication with Concrete Bos et al.	Effect of modification conditions on recovery and non-recoverable creep compliance of polymer-modified bitumen Bitaryté et al.
14.05-14.25	Ultralight Earth: A Preliminary Look into Thermal Performance of Locally Sourced Fibre-Earth Composites Hyrkâ's et al.	Nanotechnology as a feasible strategy for sustainable precast concrete production Rapelli et al.	Silicate solidified lunar regolith: A novel scheme from material properties to processing methods Geng and Geng	3D printing of wood particle reinforced clay composite in direct ink writing Gyawali et al.	Determination of Complex Modulus from a Back-Analysis Process of Frequency Response Functions for Asphalt Mixtures using FEM modeling Ximenes Cavalcante et al.
14.25-14.40			15min Break		

Awards Ceremony: Best Paper, Best Presentation, and Best Poster Awards

& Closing