

Time	DAY 1 - 20/10/2025				
12-12.15	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	Room 5 Structural and mechanical performance
12.45-13.05	Recent advancements on the effect of bio-stabilisation on the mechanical and hydrothermal properties of earthen building materials	Influence of Magneto-Rheological Response on Early Hydration and Microstructure in Cement Paste	Toward One-part Alkali-activated Low-grade Metakaolin via Inter-grinding: Assessing Reaction Kinetics and Nanostructure Evolution	Integrating Bio-Based Materials to Mitigate Urban Heat Island Effects	Low-velocity impact behavior of auxetic cementitious cellular composites (ACCs)
13.05-13.25	Mold growth in biostabilized earth construction materials: a potential ally in enhancing water durability	Investigation of carbonation for low carbon concretes under indoor, sheltered and unsheltered temperate climate using a diffusive method	A Novel Pathway to Low-Carbon Cements via Analcime Sand Valorisation	Enhancing Urban Biodiversity Through Bioreceptive Materials: Insights on Design, Properties, and Additive Manufacturing Applications	Structural and energy retrofitting of masonry-infilled RC frames subjected to in-plane cyclic loading
13.25-13.45	Building with Earth: Unveiling Reaction Mechanisms in soil-cement Systems	Mixer power consumption as an indicator of water content and concrete properties	Predictive Modeling of Consistency Class Using Machine Learning Techniques on Industrial Concrete Datasets	3D printing of wood particle reinforced clay composite in direct ink writing	Stochastic multi-hazard vulnerability assessment of railway masonry arch bridges subject to seismic and flood hazards
13.45-14.05	Potential of Treating War-Polluted Soils for Earth-Based Construction in Ukraine	Micromechanical Modeling of Spatially Heterogeneous Interfacial Transition Zone (ITZ) in Recycled Aggregate Concrete	A model material and an adapted protocol for the study of the shear thickening of low-carbon cement-based materials	Modelling Transport Phenomena of Cementitious Mortars made with bioPCM-Recycled Wood Aggregates.	GNP-Coated Aggregates for improving Concrete's Mechanical Properties.
14.05-14.25	Bio-based fluidification of earth mortar using tannin addition	Comparison between different methods of determining apparent elasticity modulus of cementitious materials	Evolution of phase composition and pore water in fresh OPC paste during accelerated carbonation and natural carbonation	Polyamine Waste Valorisation into Mycelium-Based Composites for Sustainable Insulation Applications	Uniaxial Tensile Stress Relaxation and Cracking Behavior of SHCCs Incorporating Blast Furnace Slag and Fly Ash
14.25-14.45	Exploring alternative stabilization for compressed earth blocks: a systematic literature review	Rheological and mechanical analysis of alkali-activated concretes with BSSF steel slag as precursor and aggregates	Industrial-scale production of low-clinker LC3 cements using low-grade clays	Climate-proof, climate-neutral renovations for the Finnish building stock	DEM Simulation on Creep of Calcium Silicate Hydrate in Microscale
14.45-15.00	A combined laboratory and field study to assess the durability of CEBs against water-mediated weathering	Quasistatic Crack Propagation in Cement-Based-Materials Induced by Pyrrhotite Oxidation	Evaluating The Performance of Limestone Calcinad Clay Cement (LC3) Incorporating Low-Kaolinite Clays from The Ceramic Industry	15min Break	15min Break
15.00-15.05	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 + Heritage and Historic materials	Room 5 Durability and degradation phenomena + Bituminous materials
12.45-13.05	Sodium hexametaphosphate as superplasticizer for MgO-silicate cement stabilized clays	Synthesis and processing of dense tricalcium and dicalcium silicates for surface-sensitive characterization	Recycling fiber-reinforced polymer waste in the construction industry	Hygro-Tech: Towards high-tech, low-carbon building components for passive indoor humidity control	Durability Performance of Ternary Blended Self-Consolidating Concrete: A Comparative Study with Portland Limestone Cement-based SCC
13.05-13.25	Regenerative Retrofitting of Built Environment Assets Via Ecologically Active Soils	Active Rheology Control of Cementitious Materials: Comparing Residual Materials with Potentially Magnetic Particles	Development of Alkali-Activated Lunar Regolith for Sustainable Space Construction	Adaptation of low environmental impact mortar formulations for 3D printing	How to Protect Our Façade Coating Mortars? A Glance at Different Approaches to Improve Surface Protection
13.25-13.45	Recyclability of Soil Stabilised with Natural Hydraulic Lime for Earthen Constructions	Effects of blending water reducing admixtures (WRAs) on rheology and workability retention of limestone metakaolin blended cement	Porosity investigations of metakaolin based geopolymers	Extrusion-based 3D printing of fiber-reinforced concrete	Point Cloud-Based Damage Detection for Reinforced Concrete Structures by Deep Learning
13.45-14.05	Ultralight Earth: A Preliminary Look into Thermal Performance of Locally Sourced Fibre-Earth Composites	Influence of partial replacement of cement by glass powder waste and glass microspheres on rheology of self-compacting concretes	Key Mineralogical Events as Temperature Indicators in Microwave-Calcination of Palygorskite Clay	Correlating in-line sensor data to hardened state material properties in Digital Fabrication with Concrete	Comparison between different total sulfur measurement techniques for the screening of aggregates with potential oxidation issues from iron sulfide minerals
14.05-14.25	Bio-stabilisation of earthen materials: a perspective on the potential contribution to climate change adaptation and mitigation.	Nanotechnology as a feasible strategy for sustainable precast concrete production	Silicate solidified lunar regolith: A novel scheme from material properties to processing methods	Unravelling the Secrets of Mayan Engineering: Mineralogical Insights into Lime-Based Mortars from the Muyil Pyramid	Effect of modification conditions on recovery and non-recoverable creep compliance of polymer-modified bitumen
14.25-14.45	15min Break			Non-Destructive Methods for Assessing Hygric Properties in Heritage Masonry: Karsten and Pavers tube	Determination of Complex Modulus from a Back-Analysis Process of Frequency Response Functions for Asphalt Mixtures using FEM modeling
14.45-14.55	10min Break				
14.55-15.05	Awards Ceremony: Best Paper, Best Presentation, and Best Poster Awards				
15.05-15.15	Closing				