



**3rd International Congress on
Materials & Structural Stability**

Eco-Friendly Sustainable and Energy Efficient Materials & Constructions

Rabat, Morocco, 24-26 November 2021

Organized by ASMATEC on HYBRID Onsite/Online model

General Program

Wednesday, November 24, Faculty of Science,

Belmahi Amphitheater

8⁰⁰- 9⁰⁰	Registration	
9⁰⁰- 9³⁰	Opening Ceremony Word from the President of Mohammed V University in Rabat Word from the dean of the Faculty of Science in Rabat Word from the President of Al Omrane Group Word from Congress Chair Word from Scientific Committee Chair	
9³⁰-10⁰⁰	Welcome Reception	
10⁰⁰- 11²⁰	General Session G1	Chairpersons: Mohammed Sonebi - Abdeljebbar Diouri
10 ⁰⁰ -10 ²⁰	Inaugural conference	Alternative binders to Portland cements: funny toys for researchers or weapons of mass construction? Martin Cyr, Université de Toulouse, France
10 ²⁰ -10 ⁴⁰	Plenary Lecture 2	LC3 breakthrough technology to reduce CO2 emissions from cementitious materials, Karen Scrivener, École polytechnique fédérale de Lausanne, Switzerland
10 ⁴⁰ - 11 ¹⁰	Plenary Lecture 3	Sustainability Assessment of Concrete Blended Cementitious Binders, Ravindra Gettu, Indian Institute of Technology Madras, Chennai, India
Questions		
11²⁰-12³⁰	Special Session S1	Chairpersons: Mohammed Sonebi - Abdeljebbar Diouri
11 ²⁰ - 11 ⁴⁰	Keynote 1	Assessment of excavated earth hemp mortars for repairing structure, Elhem Ghorbel, University Cergy-Pointoise, France

11 ⁴⁰ -12 ²⁰	OC1-O2-51 Onsite	Calcined marls as compound of binary binder system: Preliminary study <i>Amine El Mahdi Safhi, Mohammed VI Polytechnic University, Benguerir, Morocco</i>
	OC2-O1-126 Online	Synthesis and mechanical characterization of geopolymetric mortars derived from inorganic industrial waste from Peruvian informal mining <i>Fredy Huamán , Universidad Católica San Pablo, Perú</i>
	OC3 -O2-207 Onsite	Substitution of natural clay by Moroccan solid mining wastes to manufacture fired bricks <i>Azzeddine Benahsina, Cadi Ayyad University, FSSM, Marrakech, Morocco</i>
Questions		
12 ²⁰ -12 ⁵⁰	OC4-O1-247 Onsite	Durability of concrete produced with recycled cement from waste concrete, <i>José Alexandre Bogas, Universidade de Lisboa, Portugal</i>
	OC5-O1-138 Onsite	Synthesis of MgO-Belite calcium sulfoaluminate cement from phosphate mine waste rock and phosphogypsum <i>Yassine El Khessaimi, Mohammed VI Polytechnic University, Ben Guerir, Morocco.</i>
	OC6-O1-242 Online	Optimisation and validation of the compressive strength, environmental impact and cost of marine concrete mix designs containing GGBS <i>Luke Oakes, Queens University, United Kingdom</i>
	OC7-O1-206 Onsite	Innovative test for predicting the rheology of self compacting concrete <i>Ben Aicha Mouhcine, Ecole Nationale d'architecture de Rabat, Maroc</i>
Questions		
13⁰⁰	***Photo Participants CMSS21*** Entrance Hall	
13⁰⁰-14³⁰ Lunch		
14³⁰- 16³⁰	General Session G2	<i>Chairpersons: Ravindra Gettu - Nacer Khachani</i>
14 ³⁰ - 14 ⁵⁰	Plenary Lecture 4	Natural fibers in building: performances and durability <i>Mohammed Sonebi, Queen's University Belfast , United Kingdom</i>
14 ⁵⁰ - 15 ¹⁰	Plenary Lecture 5	Intelligent and Sustainable Infrastructure through SHM, <i>Su Taylor, Queen's University Belfast , United Kingdom</i>
15 ¹⁰ - 15 ³⁰	Plenary Lecture 6	Cold-formed steel structures in New Zealand <i>James lim, University of Auckland, New Zealand</i>

Questions		
15 ³⁰ - 16 ⁰⁰	OC8- O1-280 Onsite	Investigation of thermo-acoustic and mechanical performances of gypsum-plaster based construction materials for building envelope Saïd Bouzit , Faculty of Science, Ibn Zohr University of Agadir, Morocco
	OC9- O1-131 Online	Effect of Limestone fines as a partial replacement of cement on the chemical, autogenous, dryingshrinkage and expansion of mortars Hassan Ghanem , Beirut Arab University, Department of Civil Engineering, Beirut, Lebanon
	OC10 -O1-121 Onsite	Experimental study of the thermal and mechanical properties of concrete incorporating recycled polyethylene. Nacer Akkouri , Ecole Mohammadia des Ingénieurs, Mohammed V University in Rabat, Morocco
	OC11- O1-231 Online	Evaluation of the durability of concretes associated with flash metakaolin or silica fume Abdelilah Monadiri , Faculty of science, University Ibn Tofail, Kenitra, Morocco
Questions		
16¹⁰-16⁴⁰	Posters Session P1	Coffee break
16⁴⁰-18³⁰	Special Session S2	Chairpersons: Martin Cyr - Mhamed Taibi
16 ⁴⁰ - 17 ¹⁰	Keynote 2	The energy transition and resilience in efficient and sustainable buildings Consiglia Mocerino , Sapienza University of Rome, Italy
17 ¹⁰ -17 ⁴⁰	OC12-O1-125 Onsite	Valorisation des Bétons de démolition dans les nouveaux bétons de construction Safae Taieboune , Faculté des Sciences et techniques, Université Abdelmalek Essaadi, Tanger, Maroc
	OC13-O1-36 Online	Factorial design modelling of cement grout containing dolomitic quarry dust powder Ahmed Abdalqader , Queen's University Belfast, School of Natural and Built Environment, Belfast, UK
	OC14-O1-267 Online	Leachability of cement mortars containing sewage sludge ash Sara Naamane , National School of Applied Sciences, Al-Hoceima, Morocco.
Questions		
18 ⁰⁰ -18 ¹⁵	Keynote 3	Processing of earth-based materials: from vernacular construction to 3D-printing Arnaud Perrot , Université de Bretagne Sud, France
18 ¹⁵ -18 ⁴⁵	OC15-O1-322	Characterization of a mortar by ultrasonic resonance: experimental results and theoretical predictions

	Online	Hassan Bita , Laayoune Technology School, Ibn Zohr University, Agadir, Morocco
	OC16 -01-161 Online	An overview of mechanical, durability properties and microstructure evaluation of nano-silica assimilated cement composites (nano-sac). R. Abhishek , National Institute of Technology, Telengana State, India
	OC17-01-192 Onsite	Influence of fly ash activation on the mechanical properties of Moroccan Portland cement Nisrine El Fami , Faculty of Science, Mohammed V University in Rabat, Morocco
	OC18-05-223 Online	A pore network approach to estimate the soil water retention curve of a granular material Younes Salami , National School of Architecture of Fès, Morocco

Thursday , November 25, Faculty of Science , Belmahi Amphitheater

8³⁰- 10³⁰	General session G3	Chairpersons: Maria Teresa Blanco – Khadija Nabih
8 ³⁰ -8 ⁵⁰	Plenary Lecture 7	Towards massive use of biomass in construction building industry, Sofiane Amziane , Université Clermont Auvergne, France
8 ⁵⁰ -9 ¹⁰	Plenary Lecture 8	NORM (Naturally Ocurring Radioactive Materials) wastes in the preparation of cements and concretes, Francisca Puertas , Eduardo Torroja Institute for Construction Sciences, Madrid, Spain
9 ¹⁰ -9 ³⁰	Plenary Lecture 9	Innovation in Cements: Can We Meet Future Construction Needs Sustainably, John Provis , University of Sheffield, United Kingdom
Questions		
9 ³⁰ -10 ⁰⁰	OC19- 01-218 Onsite	Modelization of the rheological behavior of self-compacting concrete using artificial neural networks Yousef El Asri , Sciences and technologies Faculty, Abdelmalek Essaâdi University, Tangier, Morocco
	OC20- 01-124 Online	Influence of nanoclay on the fresh and rheological behaviour of a 3D printing concrete Sandipan Kaushik , School of Natural and Built Environment, Queens University Belfast, United Kingdom
	OC21- 01-225 Online	Analysis of the influence of the type of curing on the axial compressive strength of concrete Juliana Maria McCartney da Fonseca , Universidade Tecnológica Federal do Paraná, Curitiba, Brazil
	OC22- 01-63	Fresh view on hydraulic binders: some factors controlling the fresh state properties of cementitious materials

	Onsite	Hassan Ez-zaki , Faculty of Science, Mohammed V University in Rabat, Morocco-Padova, University of Padova, Italy
	Questions	
10 ⁰⁰ -10 ³⁰	OC23 -O2-270 Onsite	Investigation on the reuse of the sugar co-products (Bagasse, Molasses and Ash) as industrial wastes in the production of Compressed Earth Blocks (CEB) Farah Chantit , University of Cady Ayyad, Marrakech, Morocco
	OC24-O1-165 Online	Mechanical and durability performance evaluation of heat cured low calcium fly ash based sustainable geopolymer concrete B. Rajmohan , National Institute of Technology, Warangal, Telangana State, India
	OC25- O1-85 Onsite	Study of thermal and microstructural properties of foamed and unfoamed fly ash-based geopolymer using FT Raman spectroscopy Ghizlane Moutaoukil , High Normal School, Mohammed V University in Rabat, Morocco
	OC26-O1-160 Online	An Overview of Eco-Friendly Thermal Insulation Materials for Sustainable Building Nandini Ijjada , National Institute of Technology, Warangal, Telangana State, India
	Questions	
10³⁰-11⁰⁰	Posters Session P2	Coffee break
11⁰⁰-12³⁰	Special Session S3	Chairpersons: Sofiane Amziane - Ali Boukhari
11 ⁰⁰ - 11 ²⁰	Keynote 4	Chloride-induced corrosion damage of reinforced concrete structures: case studies and laboratory research Ioan Pepenar , ICECON GROUP, Bucharest, Romania
11 ²⁰ -11 ⁵⁰	OC27-O4-116 Onsite	Automatic pavement crack detection methods Oumaima Khelifati , High School of Technology, Mohammed V University in Rabat, Morocco
	OC28-O4-141 Online	Reinforced concrete long-term deterioration prediction for the implementation of a Bridge Management System P. Alonso Medina , Universidad Politécnic de Madrid, Spain
	OC29-O4-107 Onsite	Calcined clay for durability performance of concrete pipe in semi arid area Morocco Adil Ejbouh , Faculty of Science, Ibn Tofail University, Kenitra, Morocco
	OC30-O4-153 Online	Towards understanding the variations in concrete carbonation caused by changes in the structure's environmental temperature Khaoula Lagrini , Faculty of Science Ben Msik, University Hassan II, Casablanca, Morocco
	Questions	

12 ⁰⁰ -12 ³⁰	OC31-04-140 Onsite	Effets de la fissuration sur les structures en béton Loubna Enkaiki , Ecole Mohammadia d'Ingénieurs, Université Mohammed V de Rabat, Maroc
	OC32-04-320 Onsite	Strength of Eco-friendly Cement Mortars Leaching in Nitrate Solutions Bassam A. Tayeh , The Islamic University of Gaza, Palestine
	OC33-03-289 Online	The role of the organic/inorganic cation and halide anion on the structural, optical properties and stability of perovskite APbX₃ Hajar Moumine , Faculty of Science, Mohammed V University in Rabat, Morocco
	OC34-03-98 Onsite	FEM Analysis for the Behaviour of Two-Dimensional CHS Joints with Asymmetrical Full-Overlapped Top-Connection Patrick Heinemann , Faculty of Civil Engineering and Building Services, Technical University of Iasi, Romania
12 ³⁰ -13 ⁰⁰	Posters Session P3	
13 ⁰⁰ -14 ³⁰	Lunch	
14 ³⁰ - 16 ³⁰	Special Session S4	Chairpersons: Ioan pepenar - Ahmed Akhssas
14 ³⁰ - 14 ⁵⁰	Keynote 5	Recycling of mine wastes as raw materials in the construction sector: towards a smart circular economy Rachid Hakkou , Université Cadi Ayyad, Marrakech, Morocco
14 ⁵⁰ -15 ²⁰	OC35- 01-251 Onsite	Stabilization and characterization of dicalcium silicate belite phase by metallic zinc Jihane Moudar , Faculty of Science, Mohammed V University in Rabat, Morocco
	OC36-02-37 Online	Phase Change Materials (PCMs) for Thermal Energy Storage Implementations Gökhan Hekimoğlu , Karadeniz Technical University, Trabzon, Turkey
	OC37-02-128 Online	Room-Temperature Synthesis of ultra-green luminescent colloidal Formamidinium Lead Bromide perovskite nanoplatelets enable to Achieve Recommendation 2020 Displays Nabila Jarmouni , Faculty of science Ben M'sik, University Hassan II of Casablanca, Morocco
	Questions	
15 ²⁰ -15 ⁵⁰	OC38-02-208 Onsite	Mineralogical stabilization and morphology of Hardystonite-Petedunnite-Dicalcium silicate ternary mixtures Hind Agourrame , Faculty of Science, Mohammed V University in Rabat, Morocco
	OC39-02-38 Online	Shape Stabilized Attapulgit/Myristic-Palmitic Acid Composite PCM for Thermal Energy Storage Implementations in Buildings Gökhan Hekimoğlu , Karadeniz Technical University, Trabzon, Turkey

	OC40-O2-68 Onsite	Optical, magnetic and structural analysis of new 2AO-CoO-B₂O₃ (A = Ba, Sr) glasses. <i>Fatima Nfaoui, Ecole Normale Supérieure, Mohammed V University in Rabat, Morocco</i>
	OC41-O2-120 Online	The influence of thickness and final heat treatment on mechanical properties and dimensional stability of binderless fiberboards from steam exploded Arundo donax L. <i>Federica Vitrone, Rovira i Virgili University, Tarragona, Spain</i>
Questions		
16 ⁰⁰ -16 ³⁰	OC42-O1-52	Effect of wood waste powders on the mechanical properties of concrete <i>Oumaima Bourzik, Ecole Mohammadia des Ingénieurs, Mohammed V University in Rabat, Morocco</i>
	OC43-O2-152 Online	Preliminary characterization and evaluation of the potential use of clay materials from North-East Morocco in the ceramic industry <i>Hanane Ait Hmeid, Multidisciplinary Faculty of Nador, Mohamed First University, Nador, Morocco.</i>
	OC44-O2-109 Online	Stabilization of Reddish Clay using Traditional Quicklime from Sefrou (Morocco) for Potential Use in Building: Thermophysical and Mechanical Assessment <i>Fatima Zohra El Wardi, High School of Technology, Mohammed V University in Rabat, Morocco</i>
	OC45-O1-150 Onsite	Preliminary study on the influence of co-grinding on the substitution of cement by limestone dust in mortars <i>Abdelbar Elkhachine, Faculty of Science, University Mohammed V in Rabat, Morocco</i>
Questions		
16³⁰-17⁰⁰	Posters Session P4	Coffee break
17 ⁰⁰ - 18 ³⁰	Special Session S5	Chairpersons: <i>Elhem Ghorbel - Lahcen Bahi</i>
17 ⁰⁰ -17 ¹⁵	Keynote 6	Effect of Slag Coal Ash and Foamed Glass on the Properties of an Ecofriendly Two-stage concrete <i>Hakim S. Abdelgader, Faculty of Engineering University of Tripoli, Libya</i>
17 ⁰⁰ -17 ³⁰	OC46-O2-177 Onsite	Substitution of the sand in the matrix intended for the containment of radioactive waste by two Moroccan clays <i>Soumiya Labied, Faculty of Science, University Ibn Tofail, Kenitra, Morocco</i>
	OC47-O1-77 Online	Physico-chemistry of geopolymers based on recycled glass powder and metakaolin: effect of metakaolin content <i>Tohoué Monique Tognonvi, University of Peleforo Gon Coulibaly, Korhogo, Côte d'Ivoire</i>
	OC48- O1-75	Investigation on hydraulic properties of alkali activated fly ash <i>Jihane Moudar, Faculty of Sciences, Mohammed V University in Rabat,</i>

	Onsite	Morocco.
Questions		
17 ³⁰ -18 ⁰⁰	OC49 -O2-114 Online	Characterization of archaeological ceramics from Saadien Tombs (16th century) of Marrakech Morocco <i>Mouhssin El Halim, Faculté des Sciences et Techniques, Université Cadi Ayyad, Marrakech, Maroc</i>
	OC50-O1-191 Onsite	The effect of high volume fly ash on delayed ettringite formation <i>Loubaba Rida, Faculty of science and technology, Department of physics, Tangier, Morocco</i>
	OC51-O2-329 Onsite	Synthesis and catalytic activity of Ag₂Mn₂Fe(PO₄)₃ with Alluaudite-like structure <i>Elhassan Benhsina, Faculty of Sciences, Mohammed V University in Rabat, Morocco.</i>
	OC52-O1-321 Online	Nouvelle approche de porosimétrie au mercure pour l'évaluation de la microstructure des matrices cimentaires : application aux mortiers à base de ciment au laitier <i>Ahmed Hajd Sadok, Ecole Nationale Supérieure d'Hydraulique, Blida, Algérie</i>
Questions		
18 ⁰⁰ -18 ³⁰	OC53- O5-139 Onsite	Valorisation du phosphogypse marocain en technique routière <i>Chaimaa Diouri, Ecole Hassania des Travaux Publics, Casablanca, Maroc</i>
	OC54-O2-29 Online	Physico-chemical, mineralogical, and technological characterization of stabilized clay bricks for restoration of Kasbah Ait Benhadou-Ouarzazate (south-east of Morocco) <i>Mahdi Lechheb, Faculty of Sciences and Techniques, Moulay Ismail University, Errachidia, Morocco</i>
	OC55- O2-179 Online	Elaboration and characterization of lightweight Rammed earth containing hemp particles <i>Yassine Mabrouk, University of Picardie Jules Verne, France</i>
	OC56-O1-326 Online	Impact de l'ajout des fibres Alfa sur le comportement résiduel du béton soumis à des cycles de chauffage -refroidissement à l'eau <i>Zied Ben Hammed , Ecole Nationale des Ingénieurs de Tunis- Université El Manar- Tunisie</i>
Questions		
Friday , November 26, Faculty of Science , Belmahi Amphitheater		
8 ³⁰ - 10 ³⁰	General session G3	Chairpersons: Arnaud Perrot - Lahsen Aitbrahim
8 ³⁰ -8 ⁵⁰	Plenary Lecture 10	Silanes in the concrete industry, <i>María Teresa Blanco Varela, Eduardo Torroja Institute for Construction, Sciences, Madrid, Spain</i>

8 ⁵⁰ -9 ¹⁰	Plenary Lecture 11	Multiscale design of eco-compatible alternative cement systems <i>Arezki Tagnit Hamou, Sherbrooke University, Canada</i>
9 ¹⁰ -9 ³⁰	Plenary Lecture 12	Circular materials and value chains for sustainable, inclusive, and resilient urban developments in Africa <i>Schmidt Wolfram, Federal Institute for Materials Research and Testing, Berlin, Germany</i>
Questions		
9 ³⁰ -10 ⁰⁰	OC57-O5-100 Onsite	The workability and usefulness of Building Information Modelling based design for building performance <i>Khalil Idrissi Gartoumi, High National School of Crafts and Arts, Moulay Ismail University, Meknes, Morocco</i>
	OC58-O5-103 Online	Seismic vulnerability for irregular reinforced concrete buildings with consideration of site effects <i>Mohamed Mouhine, ENSA, Ibn Zohr University, Agadir, Morocco.</i>
	OC59-O5-162 Onsite	Drive-by monitoring of rail-bridges: a case study <i>Achraf Zouizza, Ecole Hassania des Travaux Publics, Département Ponts Chaussées et Transport, Casablanca, Morocco</i>
	OC60-O1-333 Onsite	Alumina sludge characterization and application in construction materials <i>Hajar Kourti, Faculty of Science, Mohammed V University in Rabat, Morocco</i>
Questions		
10 ⁰⁰ -10 ³⁰	OC61-O5-200 Onsite	Evaluation of the stress frequency for the rational design of bituminous pavements in Morocco <i>Mouncif Sarroukh, Ecole Hassania des Travaux Publics, Casablanca, Morocco</i>
	OC62-O5-127 Online	Tortuosity: a brief review <i>Marly Simões da Silva, Federal Technological University of Paraná, Curitiba, Brazil</i>
	OC63-O5-81 Online	Rehabilitation of Reinforced Concrete Slabs damaged by Impact loading using swimmers as shear reinforcement <i>Ali Jahami, Faculty of Engineering, Beirut Arab University, Lebanon</i>
	OC64-O2-193	Utilisation des coproduits de la filière Oléicole dans les briques de terre État de l'art <i>Hind Chraibi, FST, Cadi Ayyad University, Marrakech, Morocco</i>
	OC65-O2-222	Explore the thermal behaviour of construction materials: Terracotta, concrete hollow block and hollow brick, under the arid and semi-arid climate, case of Biskra-Algeria <i>Soumia Rahmani, Institute of architecture and urbanism, University of Blida1, Algeria</i>

10 ³⁰ -11 ⁰⁰	Posters Session P5	Coffee break
11 ⁰⁰ -12 ³⁰	Special Session S6	Chairpersons: Rachid Hakkou - Jilali Aride
11 ⁰⁰ - 11 ¹⁵	Keynote 7	Municipal Solid Waste Incineration Bottom Ash (MSWI-BA) Utilisation in Cementitious System Jamal Khatib , Beirut Arab University, Lebanon, University of Wolverhampton, UK
11 ¹⁵ - 11 ⁴⁵	OC66-O1-53 Onsite	Investigation on physical and mechanical properties of Moroccan composite cement based on fly ash and limestone Nisrine Elfami , Faculty of Science, Mohammed V University in Rabat, Morocco
	OC67-O5-96 Online	Strengthening of braced unreinforced brick masonry wall with (i) C-FRP wrapping, and (ii) Steel angle-strip system under blast loading S M Anas , Jamia Millia Islamia, New Delhi, India
	OC68-O2-156 Online	Effect of the occupation of Ba and Ti sites on the thermal and structural, properties of Fe and Co co-doped lead free BaTiO₃ Mohammed Tihthi , Institute of Ceramics and Polymer Engineering, Miskolc, Hungary
Questions		
11 ⁴⁵ -12 ⁰⁰	Keynote 8	3D-Printed Polymer Concrete and Composites for Structural Applications Mahmoud Reda Taha , University of New Mexico, USA
12 ⁰⁰ -12 ³⁰	OC69-O5-267 Onsite	Characterization of earthen construction in south-eastern Morocco Omar Khtou , ENSAM, Moulay Ismail University, Meknes, Morocco
	OC70-O5-217 Online	Modular construction opportunities and constraints in Moroccan market Mohammed Hilal , Ecole Hassania des Travaux Publics Casablanca, Morocco
	OC71-O5-230 Online	Thermal behaviour assessment of a wall built with earth-based adobes and reinforced with pinnate leaves fibers of date palm Abdellah Mellaikhafi , Faculty of Sciences and Techniques Errachidia, University Moulay Ismail , Meknès, Morocco
	OC72-O5-255 Online	Advanced expansion joints monitoring system based on IoT and intelligent development Soufiane Guessous , School of engineering's and business' sciences and technics , Casablanca, Morocco.
Questions		
12 ³⁰ -13 ⁰⁰	OC73-O5-268 Onsite	Modélisation du module Réversible (Mr) des matériaux latéritiques de l'Afrique tropicale (Burkina Faso et Sénégal) KI Bibalo Ida Josiane , Université Ibar Der Thiam, Thiès, Sénégal

	OC74-O5-266 Online	Evolution of a flexible pavement deterioration, analyzing the road inspections results Mohammed Amine Mehdi , Mohammadia School of Engineers, Mohammed V University in Rabat, Morocco.
	OC75-O5-233 Online	Towards introducing a numerical method for predicting the lifetime of asphalt concrete Yassine El Haloui , National School of Applied Sciences, Chouaib Doukkali University, El Jadida, Morocco
	OC76-O5-123 Online	Identification of Modal Parameters by the Random Decrement Method Mina Derife , ENSA, Ibn Zohr University, Agadir, Morocco
Questions		
13⁰⁰-13³⁰	Posters Session P6	
13³⁰-14³⁰	Lunch	
14³⁰- 16³⁰	General session G5	Chairpersons: Schmidt Wolfram - Latifa Oquadif
14 ³⁰ - 14 ⁵⁰	Plenary Lecture 13	Innovative insulation panels from waste as raw material for building applications in a circular economy perspective Cinzia Buratti , Department of Engineering, University of Perugia, Italy
14 ⁵⁰ -15 ¹⁰	Plenary Lecture 14	Use of recycled aggregates in concrete: Materials and Structural Aspects, Romildo Dias Toledo Filho , University Rio de Janeiro, Brasil
Questions		
15 ¹⁰ -15 ⁴⁵	OC77-O5-224 Online	Thickness optimization of exterior wall insulation for different climatic regions in Morocco Abderrahim Benallel , Faculty of Sciences and Techniques Errachidia, University Moulay Ismail, Meknès, Morocco.
	OC78-O5-339 Onsite	Sensitivity analysis of seismic performance of portfolio of bridge supports for multiple qualitative limit states Mohamed Saad Abbadi , Mohammadia School of Engineers, Mohammed V University in Rabat, Morocco
	OC79-O5-155 Online	Crack and Strength Assessment of Reinforced Concrete Cement Plant Blending Silo Structure Mubarak Azzaki , Universitas Syiah Kuala, Banda Aceh, Indonesia
	OC80-O5-58 Online	A Numerical Approach for Reliability Analysis of Concrete Filled Steel Tub Subjected to Axial Force Lydia Messaoudene , Faculty of Technology, Construction Engineering and Architecture Laboratory, University of Bejaia, Algeria

Questions		
16 ⁰⁰ -16 ⁴⁵	OC81- O5-338 Onsite	Elimination of Heavy metal Ni²⁺ from wastewater using Moroccan oil shale as bio sorbent Sanaa Saoiabi , Faculty of Science, Mohammed V University in Rabat Morocco
	OC82-O2-101 Online	Synthesis, crystal structure, spectroscopic characterization and catalytic oxidation studies of a new hybrid magnesium phosphate Mohamed Akouibaa , Faculty of Science, University Sidi Mohamed Ben Abdellah, Fez, Morocco
	OC83- O3-137 Onsite	Effect of Alumina on the thermal and chemical durability of some calcium potassium phosphate glasses Yasmina Alaoui , Faculty of Science , Mohammed V University jn Rabat, Morocco
	OC84-O5-54 Online	Numerical Evaluation for The Effective Slab Width Evaluation of Continuous Composite Beams Abdesselam Bahaz , Amar Telidji University, Laghouat, Algeria
Questions		
17³⁰	Closing session	

Poster Sessions

Wednesday, November 24, Faculty of Science		
Posters Session P1 : 16h00 - 16h40		
T1 Cementitious Materials		
Screen 1		
16h10	T1-118_Šovljanski_O.	Biocalcifying bacteria as a durable and sustainable solution for the improvement of cementitious materials
16h15	T1-145_Ouchte_I.	Effect of thermal treatment on mechanical properties of sustainable composite: experimental and simulation study
16h20	T1-168_Szelag_M.	Modified mesoporous silica and its influence on selected properties of cement pastes
16h25	T1-180_Kheml_P.	Summary of findings on magnetic orientation of fibres in cement composites
16h30	T1-181_Touite_A.	Treatment of organic radioactive waste by Stabilization / solidification into a cement/Alumina based mortar
Screen 2		
16h10	T1-182_Touite_A.	Investigations on the physicochemical and mechanical properties of cement matrix reinforced with red clay powder
16h15	T1-183_Ech-chebab_A.	Investigation of the effect of fly ash on the durability of concrete of the water treatment tank exposed to aluminum sulfate and ferric chloride by electrochemical impedance spectroscopy

16h20	T1-184_Berman_B.	<i>A review on the synthesis of emerging as green designer deep eutectic solvents and potential application in material science</i>
16h25	T1-186_Carrera_K.	<i>Rheological properties of sonogel and comparison with rheological properties of High-Performance Concrete</i>
16h30	T1-192_El Fami_N.	<i>Influence of fly ash activation on the mechanical properties of Moroccan Portland cement</i>
Screen 3		
16h10	T1-196_Bensalem_S.	<i>The creep of self-compacting concrete</i>
16h17	T1-202_Jaafri_R.	<i>Technico-economic interest of using an Expanded Silico-Limestone Alternative Material in buildings</i>
16h24	T1-203_Harrami_M.	<i>Physico-chemical characterization of composite clays "Coal waste-Olive pomace" of different granularities</i>
16h31	T1-235_Chalah_K.	<i>Effect of silica fume on cement rheology properties in presence of superplasticisers</i>
Screen 4		
16h10	T1-262_Moussadik_A.	<i>Preparation of lightweight geopolymer-based building material from waste coal gangue and fly ash</i>
16h17	T1-281_Raini_I.	<i>Reuse of concrete and brick waste as a partial replacement of fine aggregate in mortar for sustainable construction</i>
16h24	T1-292_Eladaoui_S.	<i>Thermal analysis and mechanical behavior of a composite material based on fly ash for construction applications</i>
16h31	T1-301_El Berdai_Y.	<i>Characterization of phosphate mine waste rocks for a potential use as coarse aggregates</i>
Thursday, November 25, Faculty of Science		
Posters Session P2 : 10h30 - 11h00		
Screen 1		
10h30	T1-309_Oliveros_D.	<i>Evaluating Self-Compacting Concrete Characteristics of Equivalent Mortars designed with Volcanic Ecuadorian Cements</i>
10h37	T1-310_Naranjo_F.	<i>Influence of Particle Size Distribution of a Fine Aggregate in Self-Compacting characteristics of a Concrete designed with a Volcanic Ecuadorian Cement</i>
10h44	T1-316_Boukhelkhal_A.	<i>Effet de type de sable sur les caractéristiques rhéologiques et physico-mécanique des bétons autoplaçants</i>
10h51	T1-317_Janek_M.	<i>Flexural strength recovery of microbiological cement mortars with diatomite and brick powder</i>
Screen 2		
10h30	T1-318_Tsilikis_I.	<i>Laboratory testing methods for the evaluation of cementitious mixtures' printability</i>
10h36	T1-320_Latroch_N.	<i>Effet d'agrégats à base des déchets plastiques sur les propriétés thermiques des matériaux composites Mortier-Polymère</i>

10h42	T1-321_Grzegorzcyk-Frańczak_M.	Effect of water with micro-nano bubbles of O ₂ and O ₃ on the properties of cement composites
10h48	T1-327_Szafraniec_M.	Effect of buckwheat hull granules content on thermal conductivity coefficient and water vapor diffusion resistance coefficient of hydrophobized lightweight concrete
10h54	T1-341_El Maatoufi_Y.	Study of the mineralogical and chemical properties of elgharb clay in morocco for its valorization in the construction industry
T2 Ceramics, Wood & Polymers		
Screen 3		
10h30	T2-003_Mansouri_A.	Characterization of clay materials from Jbel Lahbib (Tetouan) deposit
10h35	T2-005_El Bourki_A.	The use of natural fibers to reinforce the earth material for rammed earth construction: State of the art and perspectives
10h40	T2-048_Es-soufi_H.	Synthesis, structural characterization of the compound Ba _{1.15} Na _{1.7} Nb ₄ WO ₁₅ and its adsorption of methylene blue
10h45	T2-059_Laachir_A.	Coordination polymers constructed from copper ions and organic N-containing heterocyclic ligand: Crystal structures, spectroscopic study and magnetic properties
10h50	T2-082_Idrissi_S.	Optoelectronic Properties of KNO ₃ doped by carbon: DFT and TDDFT Studies
10h55	T2-87_Boudad_L.	Structural, morphological, thermal, and oxygen-vacancy-related dielectric relaxation behaviors in EuFeO ₃ perovskite
Screen 4		
10h30	T2-91_Boudad_L.	Elaboration, characterization, and giant dielectric permittivity in solid state synthesized Fe half-doped LaCrO ₃ perovskite
10h35	T2-095_El Gharrak_A.	Bio-based polyurethane derived from oxypropylated lignin as a coating for controlled release fertilizers
10h40	T2-101_Akouibaa_M.	Synthesis, crystal structure, spectroscopic characterization and catalytic oxidation studies of a new hybrid magnesium phosphite
10h45	T2-104_Harmal_A.	Bioinspired Brick-and-Mortar Geopolymer Composites with Ultra-high Toughness
10h50	T2-110_Atbir_A.	Amelioration of thermomechanical characteristics of multilayer biomaterial of sheep wool networks and clay
10h55	T2-117_Elmajd_A.	The effects of plant fibers on the swelling of clay soils
Posters Session P3 : 12h30 - 13h00		
Screen 1		
12h30	T2-122_Harrati_A.	Effect of lizardite rich clay material addition on thermomechanical performances of ceramics made from Moroccan magnesite and dolomite
12h37	T2-128_Jarmouni_N.	Room-Temperature Synthesis of ultra-green luminescent colloidal Formamidinium Lead Bromide perovskite nanoplatelets enable to Achieve Recommendation 2020 Displays

12h44	T2-129_Elaaraj_I.	Synthèse étude des propriétés spectroscopiques et activité anti oxydante du ligand base de schiff [(n1z,n2z)-n1,n2-bis(4-nitrobenzylidene)benzene-1,2-diamine] et de leur complexes métalliques de Cu(II), Ni(II), Zn(II) ET Co(II)
12h51	T2-130_Arroug_L.	Selective leaching of low-grade phosphate sludges using a mixture of organic acids
Screen 2		
12h30	T2-135_Ouachouo_L.	Effect of halide addition on thermal and elastic properties of binary Li ₂ O-P ₂ O ₅ glasses
12h37	T2-136_Jerroudi_M.	Effect of the manganese-cobalt substitution on the microhardness and thermal properties of zinc phosphate glasses
12h44	T2-166_El Harmouchi_H.	Infrared spectra and Electrochemical studies of M ₂ CuP ₂ O ₇ (M = Ca, Ba, Zn) Diphosphates
12h51	T2-177_Labied_S.	Substitution of the sand in the matrix intended for the containment of radioactive waste by two Moroccan clays
Screen 3		
12h30	T2-178_Moumouche_O.	vibrational spectra and Electrochemical studies of A ₂ MnP ₂ O ₇ (M = Li, Na, K) Diphosphates
12h37	T2-185_El Yacoubi_A.	Low-cost and eco-friendly Moroccan natural clay to remove many bivalent heavy metal ions: Cu ²⁺ , Co ²⁺ , Pb ²⁺ , and Ni ²⁺
12h44	T2-187_Bassam_R.	Physico-chemical characterization of natural rocks and their valorization on the removal of arsenic from aqueous solution
12h51	T2-195_Laourayed_M.	Thermal, Structural and Dielectric properties of Ta ₂ O ₅ -Bi ₂ O ₃ -P ₂ O ₅ phosphate glasses
12h58	T2-240_Asekouri_A.	Structural and optical proprieties of Nanocomposites (Polyvinyl alcohol– Polyethylene Oxide– Mg ₂ -Al _{0.5} –Fe _{0.5} (CO ₃))
Screen 4		
12h30	T2-243_Khiar_H.	Stabilization of silver phosphate photocatalyst by substitution with indium (III) and visible light activity enhancing effect
12h37	T2-246_Ben Seddik_N.	Preparation and characterization of novel organo-mixed-layer clay minerals
12h44	T2-248_Assimeddine_M.	Physicochemical Characterization of Moroccan Natural Clays and the Study of their Adsorption Capacity for the Methyl Orange and Methylene Blue Removal from Aqueous Solution
12h51	T2-249_Farid_Z.	Optimization of phosphate ore flotation parameters at neutral pH using box- Behnken design
12h58	T2-250_El Makhloufy_S.	Synthesis, Crystal Structure, IR spectroscopy and DFT computation of the new variety of 2-carboxyanilinium dihydrogen phosphate
Posters Session P4 : 16h30 - 17h00		
Screen 1		
16h30	T2-251_Kornienko_O.	Formation of solid solutions and advanced ceramic in the ternary CeO ₂ -La ₂ O ₃ -Ln ₂ O ₃ systems

16h37	T2-253_Ait Hssi_A.	Electrodeposition of nanostructured Cu ₂ O thin films on different conductive substrates
16h44	T2-258_Khnifira_M.	Combined DFT and MD simulation approach for the study of SO ₂ and CO ₂ adsorption on carbon graphite (111) surface in aqueous medium
16h51	T2-259_Boumegnane	Inkjet printing of silver conductive ink on textiles for wearable electronic applications
16h58	T2-260_Ighnih_H.	Preparation of novel nanocomposite based on clay mineral and iron oxide with excellent adsorption performance for removal of toxic dye
Screen 2		
16h30	T2-261_Soussi_A.	First principle and experimental studies of electronic and optical properties of Anatase TiO ₂
16h37	T2-265_Asbayou_A.	Method using simple RLC circuit for electrical characterization of PV panels
16h44	T2-273_Kamga Samen_V.E.L.	Sustainable process for structural composites with low thermal conductivity
16h51	T2-276_Khouchani_O.	Effect of Cellulose Nanocrystals on Chemical Bonding and Gel Phases of Metakaolin-based Geopolymer Nanocomposites
16h58	T2-277_Akhrouf_A.	Effect of boron addition on structure, properties and bioactivity of phosphate-based glasses
Screen 3		
16h30	T2-278_Chouni_K.	Phosphate material study by using impedance spectroscopy (IS)
16h37	T2-279_Haiqiang Ma	Microstructure, Properties and Growth Mechanism of Si ₃ N ₄ Ceramics with Different Contents of Fe ₂ O ₃
16h44	T2-282_Dong_W.	Fabrication and properties of SiO ₂ /SiO ₂ composite ceramics based on additive manufacturing technology
16h51	T2-284_Akhsassi_B.	Enhanced photocatalytic activity of Zn ₃ (PO ₄) ₂ /ZnO composite semiconductor
Screen 4		
16h30	T2-286_Ait Abdallah_A.	The effect of alkaline treatment for cellulose isolation from banana peduncle and sugarcane bagasse
16h35	T2-290_Hajjaoui_H.	Novel Synthesis of SiO ₂ @Pani composite for heavy metal and dye decontamination from wastewater
16h40	T2-292_Shijia_L.	Study on diatomite slurries based on stereolithography
16h45	T2-294_Iqajtaoune_A.	Organo-clay material CTAB/Bentonite for removal of Methylene Blue from aqueous solution
16h50	T2-296_Abara_H.	Physicochemical properties of a raw clay sampled in the northern region of Morocco
Friday , November 26, Faculty of Science		
Posters Session P5 : 10h30 - 11h00		

Screen 1		
10h30	T2-299_Cao_Z.	<i>Effect of V doping on the microstructure and mechanical properties of Mo₂FeB₂-based cermets</i>
10h34	T2-303_Janani_F.Z.	<i>ZnO-Al₂O₃-CeO₂-Ce₂O₃ mixed metal oxides derived from the Layered Double Hydroxide structure: Synthesis, characterization and photocatalytic performance</i>
10h38	T2-305_Zriaa_I.	<i>Kinetic investigation of non-isothermal crystallization of Li₂NiP₂O₇ glass</i>
10h42	T2-307_Imgharn_A.	<i>Engineering of polyaniline-based biomaterial for the Orange G dye removal using Adsorption in dynamic regime</i>
10h47	T2-309_Kumar_R.	<i>Effect of Hydroxy propyl methyl cellulose polymer modification on properties of low carbon cementitious composites</i>
10h51	T2-314_Bouchehma_A.	<i>Impedance spectroscopy analysis of the kaolin material: electrical properties</i>
10h55	T2-315_Es-saddik_M.	<i>Synthesis, characterization and modeling for predicting the mechanical properties of a ternary composite of Hydroxyapatite/β-tricalcium phosphate/Alumina</i>
Screen 2		
10h30	T2-316_Er-rafai_A.	<i>Synthèse et caractérisation des verres de K-Mo-P</i>
10h34	T2-328_Hidaoui_S.	<i>Synthesis, crystal structure, Spectroscopic Studies, Thermal Behavior and catalytic properties of a new hybrid phosphate</i>
10h38	T2-331_labrag_J.	<i>Porous magnetic hydroxyapatite for the photodegradation of organic pollutants in water</i>
10h42	T2-334_Khmiyas_J.	<i>Elaboration and characterization of a new phosphate Mg_{1.74}Cu_{1.26}(PO₄)₂.H₂O with morphotropic structure</i>
10h47	T2-338_Lazar_N.E.	<i>Structural and Electrical Properties of TiO₂-substituted LiTaO₃ and LiNbO₃</i>
10h51	T2-316_Er-rafai_A.	<i>Synthèse et caractérisation des verres de K-Mo-P</i>
10h55	T2-340_Jamil_Y.	<i>The effect of esparto fibers on the physicochemical properties of compressed earth blocks for earthen construction in morocco</i>
T3 Metallic Materials		
Screen 3		
10h30	T3-070_Zakir_O.	<i>Effects of anodizing potential on structural, morphological, and electrochemical properties of nanostructured TiO₂ thin films</i>
10h37	T3-086_Ait-Karra_A.	<i>Synthesis of copper sulphide (Cu_xS) thin films using electrodeposition method for solar cell applications</i>
10h44	T3-113_Lahkale_R.	<i>Mixed metal oxides based solid solution series of Layered Double Hydroxides: Synthesis and characterization for investigation of their optical properties</i>

10h51	T3-234_Harrati_F.Z.	Contribution to the study of the mechanical behavior of Polypropylene polymer under the effect of strain rate variation in the construction of acid pipes in steel pickling lines
Screen 4		
10h30	T3-252_Charif Alaoui_Y.	Magnetic and magnetocaloric properties in metallic antiperovskite compound Mn_3InC
10h37	T3-274_Zarki_Y.	Study of corrosion inhibition of mild steel by new corrosion inhibitors based on natural materials
10h44	T3-275_Chchiyai_Z.	Investigations on the effect of Bi and Fe co-doping on the microstructure, optical and dielectric properties of $BaTiO_3$ perovskite ceramics
10h51	T3-283_El Garchani_F.Z.	Study of heat treatments of 2024 and 7075 aluminum alloys for aeronautical applications.
Posters Session P6 : 13h00 - 13h30		
Screen 1		
13h00	T3-285_El ghmari_B.	Green synthesis and catalytic application of silver oxide nanoparticles Ag_2O
13h05	T3-291_Soufi_A.	Synthesis of magnesium substituted copper ferrites $Cu_{1-x}Mg_xFe_2O_4$ via sol gel auto-combustion technique: A study of their catalytic activity for the degradation of tartrazine dye using Fenton reaction
13h10	T3-302_Chakib_K.	Thermodynamic study of aluminum chloride-based electrolytes of the binary system in aqueous solutions at temperature 298.15 K
13h15	T3-306_Fritah_K.	Photodegradation of Rhodamine B under visible light irradiation in aqueous medium by a bismuth-based catalyzed
13h20	T3-308_Elmourabit_M.	Development of anti-corrosion pigments based on phosphate sludge for mild steel in chloride medium.
13h25	T3-324_Kadiri_M.	Anticorrosion activitie of Mild Steel in 1.0 Hydrochloric Acid Solution by <i>Wathania frutescens</i> L. Essential Oil
P4- Pathologies		
Screen 1		
13h00	T4-72_Sudharsan_R.	Estimation of service life for binary and ternary blends of concrete subjected to chloride ingress: A review and case study
13h05	T4-245_Benabbouha_T.	Corrosion Inhibitor Power of Brown Algae <i>Cystoseira Baccata</i> Extract on Carbon Steel in Acidic Media
T5 Building & Structures		
Screen 2		
13h00	T5-028_Assouli_A.	Faults mechanical characteristics diagnosis of sewn sandwich plate impacted at different energies
13h07	T5-057_Klouche_B.	On the modeling of dynamic behavior of orthotropic composite plates using a simple nth-HSDT
13h14	T5-097_El Garouge_S.	Ship design and Prediction of slamming characteristics: Effect of Impact Velocity on the Mechanical Behaviour of a Composite Plate

13h21	T5-170_Bouarda_M.	<i>Hydrogeological study of the Maâmora's Groundwater using Geographic Information System</i>
13h28	T5-171_Mishra_A.	<i>Building Information Modelling (BIM) Approach in Architecture, Engineering and Construction for Luxury Villa Building in Guwahati, India – A Case Study</i>
Screen 3		
13h00	T5-172_Zmemla_R.	<i>Transformation of a container into an energy efficient and sustainable building</i>
13h07	T5-246_Alothman_A.	<i>Causes of Delay in Construction Projects: A Literature Review</i>
13h14	T5-250_Koutous_A.	<i>Earth Construction: A comprehensive experimental approach to better select, prepare, and implement earth-based materials</i>
13h21	T5-254_Draiche_K.	<i>An accurate first-order shear deformation theory for bending analysis of antisymmetric composite plates</i>
13h28	T5-272_Rabouli_M.	<i>Regulatory framework for the valuation of dredged sediments as construction materials in Morocco</i>
Screen 4		
13h00	T5-288_Rhandouriate_S.	<i>Optimization study of biogas production from vegetable and fruit waste from neighborhood markets</i>
13h07	T5-302_M'hamdi_Y.	<i>Thermal behaviour of buildings using phase change materials</i>
13h14	T5-314_Razzouk_Y.	<i>The Influence of Spectral Responses on The Structures Heights: Case of The Rhiss River Earthquake in Morocco (6.3MW) – Seismogenic Source 4 (Rif Oriental – Al Hoceima – Alboran)</i>
13h21	T5-315_Harizi_S.	<i>Feasibility study of a 15km highway section in the Tenira region of Sidi Bel Abbès</i>
13h28	T5-319_Ben Hmamou_D.	<i>Parameters identification and electrical characterization of photovoltaic modules using an hybrid approach</i>