



# CACers

## Composites and Advanced Ceramics Society

# Scientific Programme

# CGCA

International Conference on  
Ceramics and Geomaterials  
in Central Africa

Yaounde | Cameroon | Nov 28 – Dec 01, 2023



ÉCOLE  
D'INGÉNIEURS  
DE LIMOGES



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## SCIENTIFIC AND TECHNICAL PROGRAMME

Tuesday 28, November 2023, AM - UYI

|       |  |  |  |
|-------|--|--|--|
| 8.00  | <b>Registration</b>  |  |  |
|       |  |  |  |
| 9.00  | <b>Opening ceremony</b>  |  |  |
|       |  |  |  |
| 10.00 | <b>Plenary lecture</b><br><b>Prof. Emeritus BLANCHART Philippe</b><br><i>Decarbonation of the ceramic industry</i> |  |  |
|       |  |  |  |
| 10.50 | <b>Coffee break</b>  |  |  |

|       | ROOM 1 (Salle Multimédia)   | ROOM 2 (Amphi S01)   | ROOM 3 (Salle R105)   |
|-------|---|--|---|
|       | <b>Session ST3a</b><br>Sintering and consolidation mechanisms   | <b>Session ST1a</b><br>Geomaterials prospections and characterization  | <b>Session ST4a</b><br>Characterization, Structure Properties correlation   |
| 11:10 | <b>SEREWANE DERAMNE Rosellyne</b><br>Valorization of clays of Central African Republic: optimization of formulations regarding the properties of use and the sintering behavior | - <b>Keynote (01) NKOUUMBOU Charles</b><br>Clay materials for ceramics in Cameroon: the state-of-the-art   | - <b>Keynote (02) / YONGUE Rose</b><br>Latérites et sols latéritiques : géoressources de la zone intertropicale   |
| 11:40 | <b>GUILLEMIN Fleur</b><br>Investigation of the influence of iron concentration onto the sintering behavior of phyllosilicate  | <b>KANKAO OUMLA Oumar</b><br>Physicochemical, mineralogical and ceramic properties of clay materials from the eastern part of the Douala sub-basin, Cameroon   | <b>TATANG Herve Barye</b><br>Complexes d'intercalation de quelques kaolinites désordonnées et d'urée  |
| 12:00 | <b>NTCHAYI TANKEU Solange</b><br>Effect of bauxite content and temperature on the properties of anode baking furnace refractories   | <b>NGONO MBENTI EMVANA Michèle Stella</b><br>Evaluation de l'aptitude à la confection des briques de terre des argiles latéritiques et des matériaux de termitières en zone de plateau (Adamaoua-Cameroun) | <b>SUFFEU TALLA Thierry Blondel</b><br>Évaluation géotechnique des graveleux latéritiques de Baleng (Ouest-Cameroun) comme couche de chaussées routières              |
| 12:20 | <b>TCHAKOUNTE MBAKOP Theophile</b><br>Enhancing the crystallization phenomena and strength of porcelain stoneware: the role of CaO  | <b>MOMDJO TOKO Verdiane</b><br>Potentialités des formations superficielles de Maroua (extrême-nord Cameroun) pour la production des matériaux de construction  | <b>SONTIA METEKONG Jordan Valdès</b><br>Microstructure and mechanical properties of laterite-based geopolymers and OPC concretes: Influence of the type of aggregates |
| 12:40 | <b>SAWADOGO Youssouf</b><br>Study of behavior in the chemicals attack of a porcelain formulated from local raw materials from Burkina Faso                                      | <b>MAKHALY Ba</b><br>Geotechnical properties of sand-asphalt for use in road base layer instead of conventional materials  | <b>ZOUNRANA Jean Baptiste</b><br>Caractérisation des phosphates du gisement de Kodjari au Burkina Faso pour une utilisation en agriculture                            |
| 13.00 | Lunch   |  |   |

**Tuesday 28, November 2023, PM - UYI**

|       |   |  |  |
|-------|---|--|--|
| 14.00 | <b>Plenary lecture</b><br><b>Prof. William G. FAHRENHOLTZ</b><br><i>Ultra-High Temperature Ceramics for Energy applications</i>   |  |  |
|       | <b>Session ST3b</b><br><b>Sintering and consolidation mechanisms</b>  | <b>Session ST1b</b><br><b>Geomaterials prospections and characterization</b>   | <b>Session ST4b</b><br><b>Characterization, Structure Properties correlation</b>   |
| 14.45 | <b>- Keynote (03) / BI IRIÉ GOURÉ Hervé</b><br>Influence des tourteaux de karité sur les propriétés mécanique, hydrique et thermique de blocs de terre argileuse stabilisés avec 5% de ciment                                       | <b>- Keynote (04) BOULINGUI Jean-Eudes</b><br>Contribution aux Enseignements des Géomatéraux dans les Sciences de la Terre : Cas des Argiles de Libreville au Gabon  | <b>FOMEKONG Roussin Lontio</b><br>Heterostructuring in modern ceramic materials: A good strategy for improving their energy conversion properties.   |
| 15:15 | <b>NJINDAM Oumar Ramadan</b><br>Porcelain stoneware tiles based on clays mixture and waste glass powder: Effect of soaking time   | <b>- Keynote (05) EPOSSI NTAH Zoila Luz</b><br>Étude archéométrique des céramiques issues des sites archéologiques du Cameroun : technologie et provenance   | <b>RIYAP Hamed Ismailla</b><br>Compressive Strengths and Microstructural Properties of Geopolymeric Materials Arising from the Addition of Semi-Crystalline Alumina to Silica-rich Aluminosilicate Sources                             |
| 15:35 | <b>KIEUFACK Gervaise</b><br>Effects of feldspar addition on ceramic properties of alluvial clays from Bamendou-Balessing (West Cameroon)  | <b>EBONGUE Milong</b><br>Stabilité thermique des polymères inorganiques phosphates obtenus à base de scories volcaniques   | <b>MOUNTAPMBEME KOUOTOU Patrick</b><br>Investigation of the effect of thermal annealing of Ni-cobaltite nanoparticles on their structure, electronic properties and performance as catalysts for the total oxidation of dimethyl ether |
| 15:55 | <b>MOUDIO NJAWA A. M.</b><br>Influence of CaO/Al <sub>2</sub> O <sub>3</sub> molar ratio of synthetic calcium aluminate hydrates on the microstructural properties and compressive strengths of metakaolin-based geopolymer cements | <b>NANA Achile Romeo</b><br>Design and characterization of Cameroonian pegmatite-calcined clay binary mortars via geopolymmerization   | <b>SAïDJO</b><br>Modélisation du comportement non linéaire des fibres végétales par le spectre de relaxation   |
| 16.15 | <b>Afternoon refreshments</b>   |  |  |
| 16.35 |   | <b>TAMBA FOKO Calos</b><br>Design of a geotechnical database on lateritic soils used in road construction in the intertropical zone by GIS processing techniques: the case of lateritic graveled soils of the north of Mount Bangou, West Cameroon | <b>KOUADIO Lucas Moses</b><br>Characterization of Clay Materials from Ivory Coast for Their Use as Adsorbents for Wastewater Treatment   |
| 16:55 |   | <b>KESSOUM ADAMOU Jean Marc</b><br>Mineralogical, geochemical, and geotechnical features of lateritic soils from termite mounds in two contrasting savannah areas (Central Cameroon) as raw materials for brick making.                            | <b>SEUMOU EVA L.</b><br>Pore Analysis and the Behavior of the Unreacted Metakaolin Particles in the Networks of Geopolymer Cements Using metakaolins from kaolinitic and Halloysitic Clays   |
| 17.35 | <b>Poster Session 1</b><br><b>Industrial stands</b>   |  |  |
| 18.45 | <b>Welcome cocktail at UYI</b>  |  |  |

**Wednesday 29, November 2023, AM - UYI**

|       | ROOM 1 (Salle Multimédia)   | ROOM 2 (Amphi S01)   | ROOM 3 (Salle R105)   |
|-------|---|--|---|
| 8:00  | Plenary lecture<br>Prof. BAUDIN Carmen<br><b>Tricalcium phosphate-diopside ceramics for bone regeneration</b>   |  |   |
|       | <b>ST2a</b><br>Ceramics and geomaterials processing   | Session ST6a<br>Waste valorization and recycling   | Session ST5a<br>Low carbon materials, Environmentally Friendly Materials and Sustainability   |
| 8:40  | - Keynote (06) HOUIVET David<br>Powder mixing and grinding processes with controlled viscosity  | - Keynote (07) KENNE DEDZO Gustave<br>Clay minerals modification and environmental applications  | - Keynote (08) / BILLONG Ndigu<br>Maturation des résultats de recherche et d'innovation sur les céramiques et ciments écologiques, une opportunité pour leur valorisation économique        |
| 9:10  | <b>MBAYE Abdou</b><br>Mineralogical and physico-chemical characterizations of clay from Allou Kagne (Senegal)   | <b>TCHUISSEU MINKLA Nathalie Laure</b><br>Formulation by a composite plane of a membrane from the combination of sand, plastic and porogen: application to the retention of water from septic tanks            | <b>KAZE Rodrigue Cyriaque</b><br>Investigation of the calcined halloysite content on reactivity and rheological behavior of Limestone Calcined Clay Cement (LC3)                            |
| 9:30  | <b>MILLOGO Younoussa</b><br>Raw earth bricks amended with cement and kenaf fibres: microstructure and physico-mechanical properties   | <b>MOUMOUNI WAGE Abdoul Razak</b><br>Traitement des lixiviats par les graines de Moringa oleifera: cas de la décharge de Kouibia (Niamey-Niger)  | <b>ABIR Fatima-Zahra</b><br>Effect of the addition of iron oxide on the formation and microstructure of ye'elimité  |
| 9:50  | <b>BOURRET Julie</b><br>Efficient fragmentation of mineral raw materials - impact of experimental parameters  | <b>TCHAKOUTE KOUAMO Hervé</b><br>Preparation of low-cost nano and microcomposites from chicken eggshell, nano-silica and rice husk ash and their utilizations as additives for producing geopolymers materials | <b>NOUEMSI SOUBGUI Epiphanie</b><br>Plant fiber-inorganic binder based composite board and their correlation with building insulation properties: state-of-the-art and perspectives         |
| 10:10 | <b>NDZANA Emma Juliette Augustine</b><br>Effect of an organic compared with a mineral fluxing agent on the characteristics of kaolinite clay-based stoneware ceramics                         | <b>NDONGO EBONGUE Louise</b><br>Effet du remplacement partiel des scories volcaniques par les résidus de poudre de fer sur les propriétés des polymères inorganiques phosphatés.                               | <b>EL KHOMSI Anass</b><br>Formulation of a geopolymer grout from Callovian-Oxfordian argillite for radioactive waste disposal   |
| 10:30 | <b>SAWADOGO Moustapha</b><br>Valorisation de trois matières premières dans la formulation de matériaux réfractaires   |  | <b>BILLONG Ndigu</b><br>Low-carbon materials, the case of compressed earth blocks stabilized with optimized lime-calcined clay cement (OLC2)  |
| 10:50 | Coffee break  |  |   |
|       | <b>Session ST2b</b><br>Ceramics and geomaterials processing<br>Session chairs: HOUIVET David  | <b>Session ST6b</b><br>Waste valorization and recycling<br>Session chairs :  | <b>Session ST5b</b><br>Low carbon materials, Environmentally Friendly Materials and Sustainability<br>Session chairs: BILLONG Ndigu   |
| 11:10 | - Keynote (09) / PAGNOUX Cécile<br>Formulation of mixed emulsion/suspension systems for the preparation of ceramics with architected porosity   | <b>MALBILA Etienne</b><br>Analyse multicritère des composants des pavés écologiques à base de déchets plastiques et de verre, et de renforts granulaires   | - Keynote (10) / JOUDA Jean Bosco<br>Opportunities for metabolomics-based molecular networking synthesis of metal nanoparticles from medicinal plants and microorganisms                    |
| 11:40 | <b>BOUTIANALA Michèle</b><br>Optimisation des paramètres de synthèse d'un composite géopolymère/oxyde fer : application à la détection des ions Pb <sup>2+</sup> en solution aqueuse          | <b>LAMAH Labilé</b><br>Utilisation des déchets d'équipements électriques et électroniques dans la confection des mortiers : Le cas des verres  | <b>TCHANGA Baudouin</b><br>Physical properties and microstructures of poly(phospho-siloxo) and poly(sialate-siloxo) networks from two metakaolins)  |
| 12:00 | <b>ZERBO Lamine</b><br>Preparation and characterization of foamed concrete using a foaming agent and local mineral resources from Burkina Faso  | <b>GARBA LABO Mahaman Nazirou</b><br>Caractérisation de cendre de biomasse agricole : perspective de valorisation des ressources locales dans les matériaux de construction                                    | <b>RUDMIN Maxim</b><br>Synthesis, characterization, and agricultural application of glauconite-ammonium dihydrogen phosphate nanocomposites: advancing environmentally friendly fertilizers |
| 12:20 | <b>KENNE TAZUNE Franklin</b><br>Investigation of the properties of metakaolin-based geopolymers using ferrisilicates as additives synthesized in sodium hydroxide solution or distilled water | <b>NYONDA YANZE Annick</b><br>Development of calcium sulfoaluminate cement from rich-alumina bauxite and marble wastes: physico-chemical and microstructural characterization                                  | <b>TCHIO Julson aymard</b><br>Design and characterization of iron-calcium-aluminium-silicate-hydrate at low-temperature as a binder for precursor stabilization                             |
| 12:40 | Lunch   |  |   |

**Wednesday 29, November 2023, PM - UYI**

|       | Session ST7a<br>Porous ceramics<br>Session chairs:<br>Wilfried A.   | Session ST6c<br>Waste valorization and recycling<br>& ST8a<br>Properties of use and Industrial applications   | Session ST2c<br>Ceramics and geomaterials processing  |
|-------|---|---|---|
| 14:00 | - Keynote (11) / LETAH NZOUEBET<br>Wilfried A.<br>Waste materials for the removal of emerging contaminants in wastewater: a viable alternative for developing countries   | Keynote (12) / NJOYA André<br>Clay minerals: from the earth to the table  | DIEUHOU Cedric M.<br>Influence of alumina on the compressive strengths and microstructural properties of the acid-based geopolymers from calcined indurated laterite and metakaolin -     |
| 14:30 | <b>MVOGO Brice Armel</b><br>Rhéologie des pâtes pour impression 3D de biocomposites à matrice plâtre renforcés de fibres courtes état de l'art et perspectives  | <b>NKENGUE Pierre Lionel</b><br>Characterization of cementitious composite materials based on calcined clay activated by silicate from rice husk ash and Ingessil silicate-activator: Sodium hydroxide (NaOH)                                       | <b>NDIORO MAGON Anna Christa</b><br>Trona as local source of alkali in the production of ecological binder  |
| 14:50 | <b>KOUOTOU MFOMBOUM Yacouba</b><br>Effect of palm kernel shells and mango seed coats in the kaolinite clay based ceramic membranes: Application for the wastewater treatment from breweries in Cameroon                   | <b>DONFACK NANFACK Sylvie Léa</b><br>Proposition des éléments de décoration pour architecture d'intérieur à partir des géoressources locales et des éléments du patrimoine culturel immatériel : exemple des mosaïques murales et des pots de fleur | <b>NOUPING FEKOUA Joëlle Nadia</b><br>Effects of curing cycles on developing strength and microstructure of goethite-rich aluminosilicate (corroded laterite) based geopolymer composites |
| 15:10 | <b>NJUHOU Saliou</b><br>Membrane céramique à base de kaolin et de balle de riz : Optimisation par la méthodologie de surface de réponse (MSR) et de l'analyse de l'interdépendance des réponses                           | <b>SOUAIBOU</b><br>Mechanical Properties and chemical stability of Roof Tiles: a mixture of Cathode-Ray Tube (CRT) waste glass and Allophane rich soil fired at different temperatures.   | <b>NGNINTEDEM VOFO Dimace Lionel</b><br>Effects of iron minerals on the compressive strengths and microstructural properties of metakaolin-based geopolymer materials                     |
| 15:30 | <b>OUEDRAOGO LAREBA Adélaïde</b><br>Caractérisation de quelques propriétés thermo-physiques et mécaniques du béton moussé au Burkina Faso   |   |   |
| 15:50 | <b>Afternoon refreshments</b>   |   |   |
|       | Session ST7b<br>Porous ceramics<br>Session chairs: LETAH NZOUEBET<br>Wilfried A.  | Session ST8b<br>Properties of use and Industrial applications<br>Session chairs: NJOYA André  | Session ST2d<br>Ceramics and geomaterials processing<br>Session chairs:   |
| 16:10 | <b>LEKUNA DUNA Linda</b><br>Performances of laterite-based geopolymer matrix filters on the Bacteriological filtration of contaminated groundwater and microstructure   | <b>ABO Tatiane Marina</b><br>Géopolymère et composites avec les fibres de bananier  | <b>THIEBLESSON Lydie Marcelle</b><br>Thermal behavior and fire resistance of material based on paper granule, starch and clay mortar  |
| 16:30 | <b>MOUNTOUNJOU Olivier</b><br>Ceramic membranes based on kaolinite, bentonite clays and limestone for bacteria removal  | <b>SALL Mamoudou</b><br>Characterization of fine sewage sludge ash (FSSA) and coal fly ash (CFA) for Reuse as construction material   | <b>GANON François</b><br>Formulation d'un éco-ciment (ciment pouzzolanique) à base d'une argile locale  |
| 16:50 | <b>DJOMOU DJONGA Paul</b><br>Microfiltration ceramic membranes from Cameroonian in Allophane rich soils and husked rice: physico-mechanical, chemical characterization and application to the treatment of drinking water | <b>NGOME NKOME Elvis</b><br>Historizing the transformation of solid plastic waste into bricks: evidence from field studies in Cameroon  | <b>GANSONRE Yassia</b><br>Variability, classification and mechanical properties of lateritic soils in Burkina Faso  |
| 17.10 | <b>Poster Session 2<br/>Industrial stands</b>   |   |   |
| 18.00 | <b>General Assembly of the CACers<br/>Cocktail</b>  |   |   |

**Thursday 30, November 2023 - UYI**

|       | ROOM 1 (Salle Multimédia)  | ROOM 2 (Amphi S01)   | ROOM 3 (Salle R105)  |
|-------|--|--|--|
| 8.30  |  | Chairman's additional remarks  |  |
| 8.50  |  | Plenary lecture<br>Prof. NANA ENGO<br>Artificial Intelligence: state of the art, applications, and Impact  |  |
|       | Session ST9a<br>Modelling and Artificial intelligence for materials science  | Session ST9b<br>Modelling and Artificial intelligence for materials science  | Session ST8c<br>Properties of use and Industrial applications  |
| 9:40  | - Keynote (13) / TSOPZE Norbert<br>Artificial intelligence methods and applications  | - Keynote (14) IMAD Abdellatif   | KANKAO OUMLA Oumar<br>Mineralogical, geochemical and adsorptive properties of clay materials from Japoma and its surroundings, Douala Cameroon                                       |
| 10:10 | EL KHESSAIMI Yassine<br>New insights into the application of machine learning in predicting properties of calcined clay cements  | MOUNTAPBEME Ibrahim Cherif<br>Elaboration and characterization of kaolinitic clays and cassava peel-based ceramic membranes using simplex centroid design  | NGU YERIMA Elton<br>A State-of-the-Art Review on the Evolution of Geopolymer Application in Water and Wastewater Treatment   |
| 10:30 | TAGNE FONKOU Ervert<br>Applicabilité des réseaux de neurones pour la prédiction de la résistance mécanique du béton haute pression base sur les facteurs optimaux                  | TCHENEGHON MOTCHEYO Herman<br>Automatic selection of attributes based on porosity-hygroscopy correlations of geopolymer matrix   |  |
| 10:50 | Coffee break   |  |  |
|       | Session ST9c<br>Modelling and Artificial intelligence for materials science  | Session ST9d<br>Modelling and Artificial intelligence for materials science  | Session ST8d<br>Properties of use and Industrial applications  |
| 11:10 | - Keynote (15) / David Hughes<br>Circular approaches for waste based geopolymer feedstocks   | KAMENI Jaurès S. H<br>Optimization of information retrieval systems for learning contexts  | OWONO FOUDA Achilles François<br>De la barbotine d'argile du Nyong à la création des céramiques pour revêtement des murs ; regard sur l'état de l'industrie céramique camerounaise ? |
| 11:40 | ANANJOU TSAFACK Ornélia Stéla<br>Ensemble learning for predicting the compressive strength of high-performance concretes   | TCHIMOE KEMLE Symphorien<br>Evaluation of the physico-chemical properties of a ferrous geopolymer using molecular dynamics: amorphous silicate construction and analysis                           | TSOPBOU NGUEAGNI Patrick<br>Preparation of Simple and Cation-Doped Bovine-Derived Hydroxyapatite Thin-Films by Radio-Frequency Magnetron Sputtering for Antimicrobial Applications   |
| 12:00 | DJADJEU MENKAM Rosta frank<br>Optimization of concrete performance using the particle packing concept based on the modified empirical mathematical model of Andreasen and Andersen | KEMDJIO LATIEU Steve Lionet<br>Interprétation digitale des séquences de substitution de l'Aluminium par le Fer dans la formation des latérites : dynamique moléculaire de leur activation alcaline | DIBANDJO NDANKOU Charnella Stevine<br>Development of activated carbon-chitosan beads: effective removal of Congo red in aqueous solution   |
| 12:20 | NFONGOH Thiophine Fenjeh<br>Optimization of geopolymer concrete produced from laterite and pozzolan using the simplex centroid mixture design method                               | MBIBU S.<br>Contributions to the diagnosis of engine failures by vibration analysis using artificial intelligence  | Yao Yao Jules<br>Géoresources et développement durable en Afrique d'hier à aujourd'hui : cette combinaison est-elle possible ?   |
| 12.40 | Lunch  |  |  |
| 14:00 | - Keynote (16) / ROSSIGNOL Fabrice<br>Future prospects in advanced ceramics manufacturing  |  |  |
| 14:30 | Debate / Round table on the topic<br>"Artificial intelligence, Modelling and Circular Economy in material science in Africa".<br>Moderator: ROSSIGNOL Fabrice                      |  |  |
| 16.20 | Concluding Recommendations   |  |  |
| 16.30 | Chairman's closing   |  |  |
| 19.30 | Gala Dinner and Awards at the "Institut Français" of Cameroon, Yaounde   |  |  |

**Friday 1, December 2023 – Visits: MIPROMALO and Yaounde**

|       |  |                      |                      |
|-------|--|----------------------|----------------------|
| 9.00  | Welcome from the Director of MIPROMALO   |                      |                      |
|       |  |                      |                      |
| 9.15  | Visit of Mipromalo   | Practical workshop 1 | Practical workshop 2 |
|       |  |                      |                      |
| 11.00 | Coffee break   |                      |                      |
|       |  |                      |                      |
| 11.20 | Sightseeing of Yaoundé and visits (historical monuments, museum, artisanal complex...) |                      |                      |
|       |  |                      |                      |
| 12.30 | Lunch  |                      |                      |
|       |  |                      |                      |
| 14.00 | Sightseeing of Yaoundé and visits (historical monuments, museum, artisanal complex...) |                      |                      |
|       |  |                      |                      |
| 16.00 | Afternoon refreshments   |                      |                      |
|       |  |                      |                      |
| 18.00 | Back to the pick-up point  |                      |                      |

## Poster's order

| <b>ST1 - Geomaterials prospections and characterization</b>     |   |
|---|---|
| P1  | <b>BANZOUZI SAMBA Vivien Igor</b><br>Amélioration des propriétés technologiques et mécaniques d'une argile moins plastique (argile de Ntokou) à partir d'une argile très plastique (argile de Dongou), extraites en République du Congo |
| P2  | <b>AMANA AMBIANA Christian Dieudonné</b><br>Etude de la stabilisation des sols à l'aide de la chaux et du ciment : cas de la zone de pk 21  |
| P3  | <b>MAKITA MABAKA Edwin Audrey</b><br>Les Ressources Minérales à Talc de la Dola au Gabon  |
| P4  | <b>HELLA KOMI Edoudji</b><br>Etude sur la stabilisation des sols avec la chaux : application aux sols sédimentaires   |
| P5  | <b>NOKO MPAH Bris Martial</b><br>Study of the effects of artificial pozzolan obtained from rice husk ash on the hydraulic properties of Portland cement   |
| P6  | <b>NJIMBOUM Aboubakar Sidiki</b><br>Geotechnical, physico-chemical and mineralogical characteristics of vertisols from the Far North (Cameroon): Potential valorisation in the elaboration of low-carbon stabilized materials           |
| P7  | <b>MOONGON OBAM Irma Bertha</b><br>Physico-chemical, mineralogical and thermal characteristics of raw clay materials used by local artisans to produce fired clay bricks in Sudano-Sahelian area of Cameroon                            |
| P8  | <b>HELL BISSAY Joseph</b><br>Characterization of a geopolymer based on calcined laterite substituted for oyster shell powder  |
| P9  | <b>NGWEM BAYILA Blaise</b><br>Characterization of a metakaolin-based geopolymer mortar and marble reinforced with plant fibers from Nero Peltis Accuminate Djik   |
| <b>ST2 - Ceramics and geomaterials processing</b>               |   |
| P10   | <b>EL KHOMSI Anass</b><br>Geopolymers for antennas and absorbing materials application  |
| P11   | <b>N'CHO Wilfried Cyrille</b><br>Influence of different metakaolins mixture on the geopolymers properties   |
| P12   | <b>SONG Serge Jean Benoit</b><br>Characterization of a geopolymer based on calcined shell substituted for oyster shell powder   |
| <b>ST4 - Characterization, Structure Properties correlation</b> |   |
| P13   | <b>NJUHOU Saliou</b><br>Influence de la crystallinité et des fractions argileuses sur le mécanisme de déshydroxylation sous gradient thermique de deux kaolinites faiblement cristallisées  |
| P14   | <b>EPOSSI NTAH - KROLL Zoila Luz</b><br>Mineralogical and petrographic study on archaeological pipes from Ndjaména/Cameroun   |
| P15   | <b>EPOSSI NTAH - KROLL Zoila Luz</b><br>Etude comparative de la céramique du site de Botko (Littoral Cameroun) du 8e au 11e siècle AD : analyses macroscopique et microscopique   |

| ST5 - Low carbon materials, Environmentally Friendly Materials and Sustainability |  |
|---|--|
| P16   | <b>NDISHO TANTONO Solomon</b><br>Alkaline and acid activations of calcined laterites: a comparative study  |
| P17   | <b>SONTIA METEKONG Jordan Valdès</b><br>Mise sur pied d'un processus de stabilisation éco-responsable des chaussées du Cameroun  |
| P18   | <b>RUDMIN Maxim</b><br>Chemical intercalation of zinc into halloysite nanotubes: formulation of nanocomposites for controlled-release fertilisation  |
| P19   | <b>MEITE Namory</b><br>Etude des propriétés physiques et chimiques d'un bioplastique renforcé à la fibre de coco et/ou au métakaolin   |
| P20   | <b>COFFI AYIDE Charles Ahouansou</b><br>Quantification de l'acide oléanolique dans Launaea taraxacifolia et activité larvicide contre les vecteurs du paludisme                                |
| ST6 - Waste valorization and recycling  |  |
| P21   | <b>YETGNI YAMBOU Lopheline</b><br>Potato and orange peels powder to produce geopolymers based on iron rich class c-fly ash: controlled efflorescence and mechanical-microstructural properties |
| P22   | <b>RUDMIN Maxim</b><br>Eco-Friendly Enhancing Agricultural Soil Fertility: An Exploration and Application of Glauconite from the Phosphorite Deposit Waste                                     |
| ST7 - Porous ceramics   |  |
| P23   | <b>MBAFOU FONDJO Gaël Claude</b><br>Egg-derived porous plasma modified clay composite for wastewater remediation   |
| P24   | <b>MOUAFON Mohamed</b><br>Effect of bovine bone on physical properties of porous ceramics intended for water filtration  |
| P25   | <b>AMON Lydie Nina</b><br>Elaboration de filtres céramiques et application en filtration   |
| P26   | <b>KASSOUM Barry</b><br>Effectiveness of composite ceramic filters in arsenic removal from borehole water  |
| P27   | <b>Zahwa I</b><br>Elaboration doped TiO <sub>2</sub> for water photo-decontamination   |
| P28   | <b>PITAP MBOWOU Melanie</b><br>Matériaux poreux à base des scories volcaniques pour le traitement plasma catalytique des eaux résiduaire industrielles   |
| ST8 - Properties of use and Industrial applications                               |  |
| P29   | <b>NJOYA André</b><br>Design, manufacture and evaluation of high-performance wood fuel improved cook stoves from georesources and biosourced materials   |
| ST9 - Modelling and Artificial intelligence for materials science                 |  |
| P30   | <b>NDJEM NDJEM Joseph Le Grand</b><br>Digital simulation of the fatigue behaviour of flexible pavements using the finite element method with Cast3m software                                   |
| P31   | <b>TAYPONDOU Darman Japhet</b><br>Geotechnical soil parameters study and modelling: the case of Mbé (Adamaoua-Cameroun) and Garoua-Boulai (East-Cameroun).                                     |



**English is the language of oral presentation and poster conception.**

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