



# 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



## Conference Board

- **Supervisors:** DR. Fabrice ROSSIGNOL, Prof. Claire PEYRATOUT, Prof. Uphie F. CHINJE, DR Joseph Victor HELL, DR Boubakar LIKIBY, Prof. NGAMENI Emmanuel, Prof. Charles NKOUMBOU, Prof. NJOYA OUDOU
- Chair: Prof. Emeritus Daniel NJOPWOUO
- Co-Chair: Dr. Gisèle LECOMTE-NANA
- General Secretary: Prof. Dayirou NJOYA,
- Deputy Secretaries: Dr. Zenabou NDAYOU NGOULOURE, Dr. MOUAFON Mohamed
- Treasurer: DR. Elie KAMSEU
- Vice-Treasurers: Dr. Nicolas TESSIER-DOYEN, Dr. Rodrigue Cyriaque KAZE
- Statutory Auditors: Dr. Youssef EL HAFIANE, Dr. Benoit NAIT-ALI, DR Arlin Bruno TCHAMBA
- Honorary President of the Scientific Committee: Prof. Anne LERICHE, Hauts-de-France Polytechnic University, CERAMATHS, France

## Organizing Committee

Philippe THOMAS (Laboratory IRCER, University of Limoges)	Jean-Claude TCHOUANKEU (University of Yaounde 1)	Boubakar LIKIBY (MIPROMALO)
Claire PEYRATOUT (Laboratory IRCER, University of Limoges)	Julius NDI NSAMI (University of Yaounde 1)	NDIGUI BILONG (MIPROMALO)
Fabrice ROSSIGNOL (Laboratory IRCER, University of Limoges)	Paul Désiré NJIGUI (University of Yaounde 1)	Elie KAMSEU (MIPROMALO)
Hélène MEMY (Laboratory IRCER, University of Limoges)	Dayirou NJOYA (University of Yaounde 1)	Arlin Bruno TCHAMBA (MIPROMALO)
Philippe BLANCHART (Laboratory IRCER, University of Limoges)	Charles Peguy NANSEU NJIKI (University of Yaounde 1)	Juvenal Giogetti DEUTOU NEMALEU (MIPROMALO)
Gisèle Laure LECOMTE-NANA (Laboratory IRCER, University of Limoges)	Mamba MPELE (University of Yaounde 1)	HAWA MOHAMED (MIPROMALO)
Nicolas TESSIER-DOYEN (Laboratory IRCER, University of Limoges)	Chantale NJIOMOU DJANGANG (University of Yaounde 1)	Jean Claude SOFACK (MIPROMALO)
Rosellyne DERAMNE SEREWANE (University of Bangui, CAR)	Mohamed MOUAFON (University of Yaounde 1)	Jean Noel DJOBO YANKWA (MIPROMALO)
	Rodrigue KAZE (University of N'Gaoundéré)	Rufin Théophile TENE FONGANG (MIPROMALO)
		Zénabou NDAYOU MOUANSIE (MIPROMALO)
		Liliane Vanessa KAMGA SAMEN (MIPROMALO)
		Soualiou NJIBOUOMBOUO (MIPROMALO)
		Soumaya BACHIROU (MIPROMALO)

## Scientific Committee

### Honorary Chair of the Scientific Committee

Prof. Anne LERICHE, Hauts-de-France Polytechnic University, CERAMATHS, France

#### **University of Limoges, IRCER UMR CNRS 7315, France**

Dr. Fabrice ROSSIGNOL  
Prof. Agnès SMITH  
Dr. Pierre-Marie GEFROY  
Prof. Claire PEYRATOUT  
Prof. Philippe BLANCHART  
Prof. Sylvie ROSSIGNOL  
Dr. Gisèle LECOMTE-NANA  
Dr. Nicolas TESSIER-DOYEN  
Dr. Benoit NAIT-ALI  
Dr. Youssef EL HAFIANE  
Dr. Ameni GHARZOUNI

#### **University of Limoges, E2LIM UR 24133, France**

Prof. Emmanuel JOUSSEIN  
Dr. Valentin ROBIN

#### **University of Yaounde I, Cameroon**

Prof. Florence Uphie CHINJE  
Prof. Paul-Désiré NDJIGUI  
Prof. Charles NKOUMBOU  
Prof. Antoine ELIMBI  
Prof. Jean Marie NDJAKA  
Prof. Charles Peguy NANSEU NJIKI  
Prof. Justin NENWA  
Prof. Jules Remy NDAM NGOUPAYOU  
Prof. Dayirou NJOYA  
Prof. Chantale NJIOMOU DJANGANG  
Prof. Jean Aimé MBEY  
Prof. Alphonse EMADACK  
Prof. Georges KAMGANG YOUNBI  
Prof. Alexis NGEUTEU  
Prof. Richard TCHAKOUNTE  
Prof. Hervé TCHAKOUTE KOUAMO  
Prof. Serges Hubert ZEBAZE TOGOUET  
Prof. Daouda KOUOTOU  
Dr. Zoila Luz EPOSSI NTAH épouse KROLL  
Dr. Lauraine TIOGNING K Epouse DJIOGUE

#### **MIPROMALO, Yaoundé Cameroon**

Dr. NDIGUI BILLONG  
Dr. Elie KAMSEU  
Dr. Arlin Bruno TCHAMBA  
Dr. Juvenal Giogetti DEUTOU NEMALEU  
Dr. Jean Calvin BIDOUNG  
Dr. Théophile MBAKOP TCHAKOUTEU  
Dr. CHE RANDY NANGAH  
Dr. Rachel NKWAJU YANOU

#### **IMERYS, Performance Minerals EMEA**

Dr. Murielle PERRONNET  
**University of Caen Normandie, France**

Prof. David HOUIVET

#### **Missouri University of Science and Technology, USA**

Prof. William G. FAHRENHOLTZ

#### **University of Bangui, Central Africa Republic**

Prof. Bruno Serge GONIDANGA  
Dr. David Christian VONTO

#### **University of Ziguinchor, Senegal**

Prof. Diouma KOBOR

#### **University of Modena, Italy**

Prof. Cristina LEONELLI

#### **University of Cocody, Ivory Coast**

Prof. Leon Koffi KONAN  
Prof. Hervé GOURE DOUBI

#### **University of Ndjamena, Chad**

Prof. Jean Claude DOUMGANG  
Prof. Richard TOIDITAN

#### **University of Pala, Chad**

Dr. Philippe DOUWE

#### **University of Lome, Togo**

Prof. Ayi Djiffa HOUNSI  
Prof. Gado TCHANGBEDJI

#### **University of Mons, Belgium**

Prof. Maurice François GONON

#### **BCRC Mons, Belgium**

Dr. Sandra ABDELOUAB

#### **University Joseph KI-ZERBO, Burkina Faso**

Prof. Lamine ZERBO  
Prof. Mohamed SEYNOU  
Prof. Brahim SORGHO

#### **University Nazi Boni, Burkina Faso**

Prof. Moussa GOMINA  
Prof. Younoussa MILLOGO

#### **University of Douala, Cameroon**

Prof. Marie C. NTAMACK-NIDA  
Prof. Jacques ETAME  
Prof. Gilbert François NGON NGON  
Prof. Anne-Marie ETO'O  
Prof. Charles KEDE

**University of Dschang, Cameroon**

Prof. Armand Sylvain Ludovic WOUATONG  
Prof. Ignas TONLE KENFACK  
Dr. André NJOYA

**Ecole Normale Supérieure de Libreville, Gabon**

Prof. François EBA  
Prof. Jean Aubin ONDO  
Prof. Jean Eudes BOULINGUI  
Dr. Estimé Ismael MBAGOU MVE-ZUE

**University of N'Gaoundéré, Cameroon**

Prof. Florence Uphie CHINJE  
Prof. Rigobert TCHAMENI  
Prof. Jean-Pierre NGUETNKAM  
Dr. Jean-Bosco JOUDA  
Dr. Richard MACHE

**University of Buea, Cameroon**

Dr. Félicité MAJOU MO  
Dr. Inès NGASSAM-OUM

**University of Bamako, Mali**

Prof. Mama PLEA

**Indiana University of Pennsylvania, USA**

Prof. Sanda Andrada MĂICĂNEANU

**North West University, USA**

Prof. Ange-Thérèse AKONO

**University Gamal Abdel Nasser, Guinea  
Conakry**

Dr. Mamadou Yaya BALDE

## 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>  <b>Prof. Emeritus BLANCHART Philippe</b>  <i>Decarbonation of the ceramic industry</i>		
10.50	<b>Coffee break</b>		

	<b>ROOM 1 (Salle Multimédia)</b>	<b>ROOM 2 (Amphi S01)</b>	<b>ROOM 3 (Salle R105)</b>
	<b>Session ST3a</b> <b>Sintering and consolidation mechanisms</b>	<b>Session ST1a</b> <b>Geomaterials prospections and characterization</b>	<b>Session ST4a</b> <b>Characterization, Structure Properties correlation</b>
11:10	<b>SEREWANE DERAMNE Rosellyne</b> Valorization of clays of Central African Republic: optimization of formulations regarding the properties of use and the sintering behavior	<b>- Keynote (01) NKOUMBOU Charles</b> Clay materials for ceramics in Cameroon: the state-of-the-art	<b>- Keynote (02) / YONGUE Rose</b> Latérites et sols latéritiques : géoressources de la zone intertropicale
11:40	<b>GUILLEMIN Fleur</b> Investigation of the influence of iron concentration onto the sintering behavior of phyllosilicate	<b>KANKAO OUMLA Oumar</b> Physicochemical, mineralogical and ceramic properties of clay materials from the eastern part of the Douala sub-basin, Cameroon	<b>TATANG Herve Barye</b> Complexes d'intercalation de quelques kaolinites désordonnées et d'urée
12:00	<b>NTCHAYI TANKEU Solange</b> Effect of bauxite content and temperature on the properties of anode baking furnace refractories	<b>NGONO MBENTI EMVANA Michèle Stella</b> 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 Thiery Blondel</b> Évaluation géotechnique des graveleux latéritiques de Baleng (Ouest-Cameroun) comme couche de chaussées routières
12:20	<b>TCHAKOUNTE MBAKOP Theophile</b> Enhancing the crystallization phenomena and strength of porcelain stoneware: the role of CaO	<b>MOMDJO TOKO Verdiane</b> Potentialités des formations superficielles de Maroua (extrême-nord Cameroun) pour la production des matériaux de construction	<b>SONTIA METEKONG Jordan Valdès</b> Microstructure and mechanical properties of laterite-based geopolymers and OPC concretes: Influence of the type of aggregates
12:40	<b>SAWADOGO Youssouf</b> Study of behavior in the chemicals attack of a porcelain formulated from local raw materials from Burkina Faso	<b>MAKHALY Ba</b> Geotechnical properties of sand-asphalt for use in road base layer instead of conventional materials	<b>ZOUNRANA Jean Baptiste</b> Caractérisation des phosphates du gisement de Kodjari au Burkina Faso pour une utilisation en agriculture
13:00	<b>Lunch</b>		

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

14.00	<p align="center"><b>Plenary lecture</b> <b>Prof. William G. FAHRENHOLTZ</b> <b>Ultra-High Temperature Ceramics for Energy applications</b></p>		
	<b>Session ST3b</b>	<b>Session ST1b</b>	<b>Session ST4b</b>
	<b>Sintering and consolidation mechanisms</b>	<b>Geomaterials prospections and characterization</b>	<b>Characterization, Structure Properties correlation</b>
14.45	<p><b>- Keynote (03) / BI IRIÉ GOURE Hervé</b> Influence des tourteaux de karité sur les propriétés mécanique, hydrique et thermique de blocs de terre argileuse stabilisés avec 5% de ciment</p>	<p><b>- Keynote (04) BOULINGUI Jean-Eudes</b> Contribution aux Enseignements des Géomatériaux dans les Sciences de la Terre : Cas des Argiles de Libreville au Gabon</p>	<p><b>FOMEKONG Roussin Lontio</b> Heterostructuring in modern ceramic materials: A good strategy for improving their energy conversion properties.</p>
15:15	<p><b>NJINDAM Oumar Ramadan</b> Porcelain stoneware tiles based on clays mixture and waste glass powder: Effect of soaking time</p>	<p><b>- Keynote (05) EPOSSI NTAH Zoila Luz</b> Étude archéométrique des céramiques issues des sites archéologiques du Cameroun : technologie et provenance</p>	<p><b>RIYAP Hamed Ismaïlla</b> Compressive Strengths and Microstructural Properties of Geopolymeric Materials Arising from the Addition of Semi-Crystalline Alumina to Silica-rich Aluminosilicate Sources</p>
15:35	<p><b>KIEUFACK Gervaise</b> Effects of feldspar addition on ceramic properties of alluvial clays from Bamendou-Balessing (West Cameroon)</p>	<p><b>EBONGUE Milong</b> Stabilité thermique des polymères inorganiques phosphates obtenus à base de scories volcaniques</p>	<p><b>MOUNTAPMBEME KOUOTOU Patrick</b> 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</p>
15:55	<p><b>MOUDIO NJAWA A. M.</b> 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</p>	<p><b>NANA Achile Romeo</b> Design and characterization of Cameroonian pegmatite-calcined clay binary mortars via geopolymerization</p>	<p><b>SAÏDJO</b> Modélisation du comportement non linéaire des fibres végétales par le spectre de relaxation</p>
16.15	<b>Afternoon refreshments</b>		
16.35		<p><b>TAMBA FOKO Calos</b> 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</p>	<p><b>KOUADIO Lucas Moses</b> Characterization of Clay Materials from Ivory Coast for Their Use as Adsorbents for Wastewater Treatment</p>
16:55		<p><b>KESSOUM ADAMOUE Jean Marc</b> Mineralogical, geochemical, and geotechnical features of lateritic soils from termite mounds in two contrasting savannah areas (Central Cameroon) as raw materials for brick making.</p>	<p><b>SEUMOU EVA L.</b> Pore Analysis and the Behavior of the Unreacted Metakaolin Particles in the Networks of Geopolymer Cements Using metakaolins from kaolinitic and Halloysitic Clays</p>
17.35	<b>Poster Session 1</b> <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	<b>Plenary lecture</b> <b>Prof. BAUDIN Carmen</b> <i>Tricalcium phosphate-diopside ceramics for bone regeneration</i>		
	<b>ST2a</b> <b>Ceramics and geomaterials processing</b>	<b>Session ST6a</b> <b>Waste valorization and recycling</b>	<b>Session ST5a</b> <b>Low carbon materials, Environmentally Friendly Materials and Sustainability</b>
8 :40	<b>- Keynote (06) HOUIVET David</b> Powder mixing and grinding processes with controlled viscosity	<b>- Keynote (07) KENNE DEDZO Gustave</b> Clay minerals modification and environmental applications	<b>- Keynote (08) / BILLONG Ndigui</b> 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> Mineralogical and physico-chemical characterizations of clay from Allou Kagne (Senegal)	<b>TCHUISSEU MINKLA Nathalie Laure</b> 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> Investigation of the calcined halloysite content on reactivity and rheological behavior of Limestone Calcined Clay Cement (LC3)
9:30	<b>MILLOGO Younoussa</b> Raw earth bricks amended with cement and kenaf fibres: microstructure and physico-mechanical properties	<b>MOUMOUNI WAGE Abdoul Razak</b> Traitement des lixiviats par les graines de Moringa oleifera: cas de la décharge de Koubia (Niamey-Niger)	<b>ABIR Fatima-Zahra</b> Effect of the addition of iron oxide on the formation and microstructure of ye'elimité
9 :50	<b>BOURRET Julie</b> Efficient fragmentation of mineral raw materials - impact of experimental parameters	<b>TCHAKOUTE KOUAMO Herve</b> Preparation of low-cost nano and microcomposites from chicken eggshell, nano-silica and rice husk ash and their utilizations as additives for producing geopolymer materials	<b>NOUEMSI SOUBGUI Epiphanie</b> 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> Effect of an organic compared with a mineral fluxing agent on the characteristics of kaolinite clay-based stoneware ceramics	<b>NDONGO EBONGUE Louise</b> 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> Formulation of a geopolymer grout from Callovo-Oxfordian argillite for radioactive waste disposal
10 :30	<b>SAWADOGO Moustapha</b> Valorisation de trois matières premières dans la formulation de matériaux réfractaires		<b>BILLONG Ndigui</b> Low-carbon materials, the case of compressed earth blocks stabilized with optimized lime-calcined clay cement (OLC2)
10:50	<b>Coffee break</b>		
	<b>Session ST2b</b> <b>Ceramics and geomaterials processing</b> <b>Session chairs: HOUIVET David</b>	<b>Session ST6b</b> <b>Waste valorization and recycling</b> <b>Session chairs :</b>	<b>Session ST5b</b> <b>Low carbon materials, Environmentally Friendly Materials and Sustainability</b> <b>Session chairs: BILLONG Ndigui</b>
11 :10	<b>- Keynote (09) / PAGNOUX Cécile</b> Formulation of mixed emulsion/suspension systems for the preparation of ceramics with architected porosity	<b>MALBILA Etienne</b> Analyse multicritère des composants des pavés écologiques à base de déchets plastiques et de verre, et de renforts granulaires	<b>- Keynote (10) / JOUDA Jean Bosco</b> Opportunities for metabolomics-based molecular networking synthesis of metal nanoparticles from medicinal plants and microorganisms
11 :40	<b>BOUTIANALA Michèle</b> 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> Utilisation des déchets d'équipements électriques et électroniques dans la confection des mortiers : Le cas des verres	<b>TCHANGA Baudouin</b> Physical properties and microstructures of poly(phospho-siloxo) and poly(sialate-siloxo) networks from two metakaolins)
12:00	<b>ZERBO Lamine</b> Preparation and characterization of foamed concrete using a foaming agent and local mineral resources from Burkina Faso	<b>GARBA LABO Mahaman Nazirou</b> Caractérisation de cendre de biomasse agricole : perspective de valorisation des ressources locales dans les matériaux de construction	<b>RUDMIN Maxim</b> Synthesis, characterization, and agricultural application of glauconite-ammonium dihydrogen phosphate nanocomposites: advancing environmentally friendly fertilizers
12 :20	<b>KENNE TAZUNE Francklin</b> Investigation of the properties of metakaolin-based geopolymer materials using ferrisilicates as additives synthesized in sodium hydroxide solution or distilled water	<b>NYONDA YANZE Annick</b> Development of calcium sulfoaluminate cement from rich-alumina bauxite and marble wastes: physico-chemical and microstructural characterization	<b>TCHIO Julson aymard</b> Design and characterization of iron-calcium-aluminium-silicate-hydrate at low-temperature as a binder for precursor stabilization
12:40	<b>Lunch</b>		

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

	<b>Session ST7a</b> <b>Porous ceramics</b> <b>Session chairs:</b>	<b>Session ST6c</b> <b>Waste valorization and recycling</b> <b>&amp; ST8a</b> <b>Properties of use and Industrial applications</b>	<b>Session ST2c</b> <b>Ceramics and geomaterials processing</b>
14:00	<b>- Keynote (11) / LETAH NZOUEBET Wilfried A.</b> Waste materials for the removal of emerging contaminants in wastewater: a viable alternative for developing countries	<b>Keynote (12) / NJOYA André</b> Clay minerals: from the earth to the table	<b>DIEUHOUE Cedric M.</b> 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> 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> Characterization of cimentitious 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> Trona as local source of alkali in the production of ecological binder
14:50	<b>KOUOTOU MFOMBOUM Yacouba</b> 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> 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> Effects of curing cycles on developing strength and microstructure of goethite-rich aluminosilicate (corroded laterite) based geopolymer composites
15:10	<b>NJUHOUE Saliou</b> 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> 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> Effects of iron minerals on the compressive strengths and microstructural properties of metakaolin-based geopolymer materials
15:30	<b>OUEDRAOGO LAREBA Adélaïde</b> Caractérisation de quelques propriétés thermo-physiques et mécaniques du béton moussé au Burkina Faso		
15:50	<b>Afternoon refreshments</b>		
	<b>Session ST7b</b> <b>Porous ceramics</b> <b>Session chairs: LETAH NZOUEBET Wilfried A.</b>	<b>Session ST8b</b> <b>Properties of use and Industrial applications</b> <b>Session chairs: NJOYA André</b>	<b>Session ST2d</b> <b>Ceramics and geomaterials processing</b> <b>Session chairs:</b>
16:10	<b>LEKUNA DUNA Linda</b> Performances of laterite-based geopolymer matrix filters on the Bacteriological filtration of contaminated groundwater and microstructure	<b>ABO Tatiane Marina</b> Géopolymère et composites avec les fibres de bananier	<b>THIEBLESSON Lydie Marcelle</b> Thermal behavior and fire resistance of material based on paper granule, starch and clay mortar
16:30	<b>MOUNTOUMNIOU Olivier</b> Ceramic membranes based on kaolinite, bentonite clays and limestone for bacteria removal	<b>SALL Mamoudou</b> Characterization of fine sewage sludge ash (FSSA) and coal fly ash (CFA) for Reuse as construction material	<b>GANON François</b> Formulation d'un éco-ciment (ciment pouzzolanique) à base d'une argile locale
16:50	<b>DJOMOU DJONGA Paul</b> 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> Historizing the transformation of solid plastic waste into bricks: evidence from field studies in Cameroon	
17:10	<b>Poster Session 2</b> <b>Industrial stands</b>		
18:00	<b>General Assembly of the CACerS</b> <b>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	<b>Plenary lecture</b> <b>Prof. NANA ENGO</b> <b>Artificial Intelligence: state of the art, applications, and Impact</b>		
	<b>Session ST9a</b> <b>Modelling and Artificial intelligence for materials science</b>	<b>Session ST9b</b> <b>Modelling and Artificial intelligence for materials science</b>	<b>Session ST8c</b> <b>Properties of use and Industrial applications</b>
9:40	- <b>Keynote (13) / TSOPZE Norbert</b> Artificial intelligence methods and applications	- <b>Keynote (14) IMAD Abdellatif</b>	<b>KANKAO OUMLA Oumar</b> Mineralogical, geochemical and adsorptive properties of clay materials from Japoma and its surroundings, Douala Cameroon
10:10	<b>EL KHESSAIMI Yassine</b> New insights into the application of machine learning in predicting properties of calcined clay cements	<b>MOUNTAPBEME Ibrahim Cherif</b> Elaboration and characterization of kaolinitic clays and cassava peel-based ceramic membranes using simplex centroid design	<b>NGU YERIMA Elton</b> A State-of-the-Art Review on the Evolution of Geopolymer Application in Water and Wastewater Treatment
10:30	<b>TAGNE FONKOU Ervert</b> Applicabilité des réseaux de neurones pour la prédiction de la résistance mécanique du béton haute pression base sur les facteurs optimaux	<b>TCHENEHON MOTCHEYO Herman</b> Automatic selection of attributes based on porosity-hygroscopy correlations of geopolymer matrix	
10:50	Coffee break		
	<b>Session ST9c</b> <b>Modelling and Artificial intelligence for materials science</b>	<b>Session ST9d</b> <b>Modelling and Artificial intelligence for materials science</b>	<b>Session ST8d</b> <b>Properties of use and Industrial applications</b>
11:10	- <b>Keynote (15) / David Hughes</b> Circular approaches for waste based geopolymer feedstocks	<b>KAMENI Jaurès S. H</b> Optimization of information retrieval systems for learning contexts	<b>OWONO FOU DA Achilles François</b> 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	<b>ANANJOU TSAFACK Ornéla Stéla</b> Ensemble learning for predicting the compressive strength of high-performance concretes	<b>TCHIMOË KEMLE Symphorien</b> Evaluation of the physico-chemical properties of a ferrous geopolymer using molecular dynamics: amorphous silicate construction and analysis	<b>TSOPBOU NGUEAGNI Patrick</b> Preparation of Simple and Cation-Doped Bovine-Derived Hydroxyapatite Thin-Films by Radio-Frequency Magnetron Sputtering for Antimicrobial Applications
12:00	<b>DJADJEU MENKAM Rosta franck</b> Optimization of concrete performance using the particle packing concept based on the modified empirical mathematical model of Andreasen and Andersen	<b>KEMDJIO LATIEU Steve Lionet</b> Interprétation digitale des séquences de substitution de l'Aluminium par le Fer dans la formation des latérites : dynamique moléculaire de leur activation alcaline	<b>DIBANDJO NDANKOU Charnella Stevine</b> Development of activated carbon-chitosan beads: effective removal of Congo red in aqueous solution
12:20	<b>NFONGOHI Thiophine Fenjeh</b> Optimization of geopolymer concrete produced from laterite and pozzolan using the simplex centroid mixture design method	<b>MBIBU S.</b> Contributions to the diagnosis of engine failures by vibration analysis using artificial intelligence	<b>Yao Yao Jules</b> Georesources et développement durable en Afrique d'hier à aujourd'hui : cette combinaison est-elle possible ?
12.40	Lunch		
14:00	- <b>Keynote (16) / ROSSIGNOL Fabrice</b> Future prospects in advanced ceramics manufacturing		
14:30	<b>Debate / Round table on the topic</b> <b>"Artificial intelligence, Modelling and Circular Economy in material science in Africa".</b> <b>Moderator: ROSSIGNOL Fabrice</b>		
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> 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> 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> Les Ressources Minérales à Talc de la Dola au Gabon
P4	<b>HELLA KOMI Edoudji</b> Etude sur la stabilisation des sols avec la chaux : application aux sols sédimentaires
P5	<b>NOKO MPAH Bris Martial</b> 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> 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> 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> Characterization of a geopolymer based on calcined laterite substituted for oyster shell powder
P9	<b>NGWEM BAYILA Blaise</b> Characterization of a metakaolin-based geopolymer mortar and marble reinforced with plant fibers from <i>Nero Peltis Accuminata</i> Djik
<b>ST2 - Ceramics and geomaterials processing</b>	
P10	<b>EL KHOMSI Anass</b> Geopolymers for antennas and absorbing materials application
P11	<b>N'CHO Wilfried Cyrille</b> Influence of different metakaolins mixture on the geopolymers properties
P12	<b>SONG Serge Jean Benoit</b> 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> Influence de la crystallinite 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> Mineralogical and petrographic study on archaeological pipes from Nditam/Cameroon
P15	<b>EPOSSI NTAH - KROLL Zoila Luz</b> Etude comparative de la céramique du site de <i>Botko</i> (Littoral Cameroun) du 08e au 11e siècle AD : analyses macroscopique et microscopique

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



**IMPORTANT**

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

**Organized by**



**With the sponsorship of**

