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## Physics of clayey soils to explain their geophagic, traditional pottery making and paints applications

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**Abstract content** (Max 300 words) **Formatting & Special chars**

Clayey soils are traditionally used in construction of houses and shelters in African rural areas. In the Eastern Cape province of South Africa for instance, huts and shelters are colourfully painted (a part from industrially made and commercial paints) using traditional paints made of river bed clays and indigenous plants from the Southern African flora. These paints are also used on traditional clay pots employed in many diverse cultural applications as funerals, birth and traditional wedding rites, etc... Clayey soils are also commonly eaten by pregnant women and by youth from both genders. The present paper will present the established correlation between physical properties (particle size distribution, physical aggregate and morphology, texture, color, plasticity, etc...), mineralogical composition, mineral-chemistry of clayey soils, CEC, adsorption ability, surface adhesion property etc... and their specific applications (pottery, paints or geophagia) for clayey soils collected from Tzaneen, cameroon, Venda, Qwaqwa (Free State) Bughtersdorp (Tzaneen) and Sedibeng (Tzaneen).

**Apply to be considered for a student award (Yes / No)?**

No

**Level for award (Hons, MSc, PhD, N/A)?**

N/A

**Main supervisor (name and email) and his / her institution**

Prof. Antoine F. Mulaba-Bafubandi; amulaba@uj.ac.za; University of Johannesburg

**Would you like to submit a short paper for the Conference Proceedings (Yes / No)?**

Yes

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Yes

**Primary author:** Prof. ANTOINE F., Mulaba-Bafubiandi (University of Johannesburg)

**Co-author:** Mrs MEGNE-TIEGUM-, Adeline (University of Johannesburg)

**Presenter:** Mrs MEGNE-TIEGUM-, Adeline (University of Johannesburg)

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