

## REVIEWER'S REPORT

Manuscript No.:IJAR-55499

**Title:**Characterization and potential use of Dingui clay material as partial substitute for clinker in the manufacture of construction cement

### Recommendation:

Accept as it is .....

**Accept after minor revision yes**

Accept after major revision .....

Do not accept (*Reasons below*).....

Rating	Excel.	Good	Fair	Poor
Originality	yes			
Techn. Quality		yes		
Clarity		yes		
Significance		yes		

Reviewer Name: Dr. Himanshu Gaur

### *Detailed Reviewer's Report*

The manuscript titled “Characterization and Potential Use of Dingui Clay Material as Partial Substitute for Clinker in the Manufacture of Construction Cement” presents a well-structured and scientifically sound investigation addressing an important environmental challenge in the cement industry by exploring the valorization of local clay resources to reduce clinker content and CO<sub>2</sub> emissions; the study demonstrates strong experimental rigor through comprehensive physicochemical, mineralogical, and mechanical characterization using standardized methods, and the results convincingly show that calcined Dingui clay exhibits significant pozzolanic activity and enables the production of blended cements meeting EN 197-1 and NCGO 0004-1 standards, with up to 30% clinker substitution and comparable mechanical performance; the discussion is relevant and clearly links material properties to performance outcomes and sustainability benefits, though the manuscript would benefit from minor language editing, improved clarity and consistency in figures and tables, and slight condensation of lengthy methodological descriptions; overall, the research offers valuable scientific, environmental, and economic contributions and is recommended for acceptance with minor revisions.