

Review Form 1.7

Journal Name:	Journal of Materials Science Research and Reviews
Manuscript Number:	Ms_JMSRR_109782
Title of the Manuscript:	Anchorage Bond Strength Characteristics of Lateritic Concrete with Laterite Aggregates and Palm Kernel Fibres
Type of the Article	Original Research Article

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>Why is all properties like bond strength, tensile strength are compared with compressive strength? These are separate mechanical properties of concrete.</p> <p>Abstract is not concise and filled with generalized sentences. Include objective, Methodology, and outcomes of study, significance of study in abstract clearly.</p> <p>Keywords - slump, density, modulus of rupture are not justified in abstract. Rethinking of keywords should be prior.</p> <p>Introduction should have proper references for statements, many statements do not have referred document.</p> <p>The laterite is low in cost and sustainable properties, specify the cost of laterite and give comparison with conventional material used in concrete. Also specify the sustainable properties with literature reference.</p> <p>The title says anchorage of bond strength of laterite concrete with laterite aggregate. The introduction says The laterite concrete is made of soil.</p> <p>RESEARCH gap is not given in introduction.</p> <p>The title of research and objectives of the study do not lie in same line. They should match.</p> <p>How is water cement Ratio is defined 0.45 ? Why is conventional concrete has 0.45 w/c and laterite concrete 0.98 w/c ratio.</p> <p>Have any sample prepared with conventional material for 25 Mpa grade concrete for comparison?</p> <p>Is there any admixture used in mix design?</p> <p>Repetition of figure is not necessary as figure 1 and 2 have same materials.</p> <p>The concentration of NaOH solution should be defined with time of treatment for more clear understanding.</p> <p>How the corrosion from steel bar removed before testing? The corrosion on bar can be notified in figure 2 d</p> <p>Does PKF absorb water, if absorb the water cement Ratio correction is taken under consideration or not ?</p> <p>Why is PKF replaced with cement, it will decrease the strength, ? Why replacement with fine aggregate is not considered?</p>	<p>The properties were compared with compressive strength because invariably, they all depend on it</p> <p>The abstract has been worked on.</p> <p>The words were re looked.</p> <p>The introduction has been worked on with references.</p> <p>Reference for the cost difference of conventional fine aggregate and laterite has been provided in the paper.</p> <p>Corrected</p> <p>Gap now stated in question. The objective is stated to conform to the title.</p> <p>The water cement ratios differ because the high percentage of the fine aggregate below 0.075mm which together with PKF required more water to enhance workability. The mix design was stated in the text</p> <p>No admixture was used.</p> <p>This looked repetition, but the intent here was to identify each of the specific material component in isolation instead of describing them in group picture.</p> <p>4% NaOH solution was used</p> <p>Rebars were cleaned. Corrected.</p> <p>PKF absorbs water. That is why the water cement ratio differs from the conventional mix.</p> <p>It has been corrected. It is improve crack resisting ability of the concrete Noted. Thanks Curing was done in water.</p> <p>The consideration was only for 28 day. The rate is 50mm per minute Just like the compressive strength test, strain measurements were not taken to define the stress - strain relationship curves. Only the maximum stresses and hence strength values were of importance. While fig. 4&5 presented compressive and bond strengths separately, fig. 8 compares the both</p>

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	<p>Dirty car engine oil is not appropriate.</p> <p>Water bath or curing is done in this process?</p> <p>Why is 7 56 days compressive strength not considered for the research?</p> <p>What's the rate of loading for compressive strength test?</p> <p>Add the split tensile strength test and flexural test graphs also.</p> <p>Figure 5 4 and 8 are repeating. Which is not necessary.</p> <p>What's the reason behind increase in bond strength at 10% replacement of PKF in comparison with 5% replacement?</p> <p>The laterite concrete shows 7 mpa compressive strength with decreasing order. How is this statement is justified in conclusion "the study has shown that lateritic concrete possesses good strength properties and similar trend characteristics as conventional concrete and can be used as a viable alternative to conventional concrete in construction projects."</p> <p>As per the graphs of compressive strength and bond strength shows rate of reduction is decreasing but conclusion 2 says opposite of this why ?</p> <p>Conclusion no. 3 should be rewritten.</p> <p>Conclusion 4 the strength of laterite concrete shows similar trend with conventional concrete how ? Have you made conventional concrete also ? Or compared with existing literature.</p> <p>How is laterite concrete is considered for lightweight structure?? Is it lighter in weight than conventional concrete?? While it shows only 7 mpa strength.</p>	<p>compressive and bond strength at a glance without moving to the individual tables. Thanks.</p> <p>The bond difference between 5% & 10% was was the result from laboratory data.</p> <p>Noted and reviewed. Thanks.</p> <p>Please the statement said, rate of reduction in strength increases with increasing fibre. Thanks.</p> <p>Done. Thanks</p> <p>No. compared with existing literature.</p> <p>Noted and corrected. Thanks.</p>
Minor REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?	Language is not appropriate for publication.	Thanks, the language has been looked at.
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	No ethical issue required.