

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_129347
Title of the Manuscript:	Development of Models for the Prediction of Mechanical Properties of Concrete using Bida Natural Stones as Coarse Aggregate
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	The focus on Bida natural stones as an alternative to costly crushed granite highlights the potential for reducing construction costs in Nigeria. This research is regionally relevant and practically impactful.	
Is the title of the article suitable? (If not please suggest an alternative title)	<p>The current title, "Development of Models for the Prediction of Mechanical Properties of Concrete using Bida Natural Stones as Coarse Aggregate," is descriptive and conveys the key focus of the study. However, it is a bit lengthy and could be more concise. Here are some alternative titles that retain the core essence while improving clarity and impact:</p> <p>Suggested Alternatives:</p> <ol style="list-style-type: none"> "Predicting Concrete Properties Using Bida Natural Stones as Coarse Aggregate" (Concise and focuses on the predictive aspect of the study.) "Modeling Mechanical Properties of Concrete with Bida Natural Stones as Aggregates" (Highlights both modeling and the material used.) "Optimization of Concrete Properties Using Bida Natural Stones as Coarse Aggregates" (Emphasizes the optimization aspect through RSM.) "Mechanical Properties of Concrete Made with Bida Natural Stones: A Predictive Approach" (Balances technical depth and accessibility.) "Statistical Models for Concrete Properties Using Bida Natural Stones in Mix Design" (Focuses on the statistical modeling and material innovation.) <p>Each of these alternatives aligns with the article's content and enhances its appeal.</p>	

Review Form 3

<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract is detailed but overly technical. Simplifying it for broader readability could improve accessibility. A brief mention of the practical implications (e.g., cost reduction and environmental benefits) would enhance its appeal.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>While the manuscript is scientifically correct, a few areas could benefit from improvement:</p> <ul style="list-style-type: none">• Including more recent references to complement older studies.• Adding a detailed discussion comparing findings with existing literature.• Expanding on the implications of the study in real-world applications.	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The introduction could include more recent references to show contemporary relevance. The problem statement and research gap could be made more explicit to better justify the study's necessity.</p>	

Review Form 3

<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language of the article is generally clear and formal, but there are areas where the quality of English can be improved to meet the standards of scholarly communication. Below are observations and recommendations for improving the article's language:</p> <ol style="list-style-type: none"> 1. Sentence Structure: <ul style="list-style-type: none"> ○ Many sentences are overly long and complex, which can reduce readability. ○ Example: <i>"Concrete is regarded as the world's most utilized synthetic construction material, being second only to water."</i> This can be simplified: <i>"Concrete is one of the world's most widely used construction materials, second only to water."</i> 2. Grammar and Word Choice: <ul style="list-style-type: none"> ○ There are minor grammatical errors and awkward word choices. <ul style="list-style-type: none"> ▪ Example: <i>"Aggregates provide about 75 per cent of the body of concrete and therefore, its properties affect the properties of the concrete."</i> Suggested revision: <i>"Aggregates make up approximately 75% of concrete and significantly influence its properties."</i> 3. Consistency in Terminology: <ul style="list-style-type: none"> ○ Capitalization is inconsistent (e.g., "flexural Strength" vs. "Flexural strength"). ○ Use consistent terms (e.g., "mechanical properties" vs. "properties of concrete"). 4. Repetitiveness: <ul style="list-style-type: none"> ○ Some sentences and phrases are redundant. <ul style="list-style-type: none"> ▪ Example: <i>"The concrete with mix constituent mentioned above can be used for structural application such as reinforced concrete slabs, beams, columns and foundations."</i> Suggested revision: <i>"The concrete mix described in this study is suitable for structural applications, including slabs, beams, columns, and foundations."</i> 5. Abstract Readability: <ul style="list-style-type: none"> ○ The abstract is dense with technical details, which might overwhelm some readers. <ul style="list-style-type: none"> ▪ Suggested revision: Add concise sentences summarizing the findings and practical implications for better accessibility. 6. Use of Passive Voice: <ul style="list-style-type: none"> ○ The manuscript overuses the passive voice, which can make the text less engaging. Example: <i>"The sample was thoroughly mixed manually until the required homogeneity was achieved."</i> Suggested revision: <i>"The sample was manually mixed until achieving the required homogeneity."</i> 7. Clarity of Results and Discussion: <ul style="list-style-type: none"> ○ Some sentences in the Results section lack clarity due to jargon-heavy phrasing. Rephrasing with simpler language can help improve understanding for a broader audience. <p>Overall Assessment: While the manuscript's language is formal and suitable for technical audiences, it can be improved in terms of readability, grammar, and consistency. These adjustments will ensure the article meets the high standards expected in scholarly publications.</p>	
<p>Optional/General comments</p>		

Review Form 3

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Abdelaziz Yousuf Mohamed
Department, University & Country	Yildiz Technical University, Turkiye