

Review Form 3

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_129182
Title of the Manuscript:	A review of the application of Bayer red mud in concrete
Type of the Article	Commentary

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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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.	This manuscript addresses the significant environmental and ecological challenge posed by Bayer red mud, a by-product of alumina production. By exploring its potential use in concrete, the research offers a sustainable solution for managing this industrial waste. The findings could help in mitigating pollution and reducing the ecological footprint of the alumina industry. Additionally, this work contributes to the advancement of green construction materials, which is a pressing need in the scientific community aiming for sustainable development.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
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.	The abstract effectively summarizes the study's focus on the application of Bayer red mud in concrete, highlighting its potential as a cementitious material and discussing its influence on concrete's properties. However, it could be improved by briefly mentioning the specific mechanical properties and durability aspects covered in the manuscript.	
Is the manuscript scientifically, correct? Please write here.	The manuscript appears scientifically accurate. The detailed discussion on the formation process, characteristics, and utilization of Bayer red mud is well-supported by literature. The methodologies for enhancing the reactivity of red mud and the assessment of its performance in concrete are thorough and appropriately cited.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and recent, covering relevant studies from 2014 to 2022. No additional references are necessary.	
Is the language/English quality of the article suitable for scholarly communications?	The language is generally clear and suitable for scholarly communication. However, minor grammatical corrections and improvements in sentence structure required.	
Optional/General comments	<p>The introduction could benefit from a more detailed explanation of the environmental impact of red mud disposal. Figures and tables are well-integrated. Consider adding a section on future research directions to provide a broader perspective on potential developments in this field.</p> <p>More mechanical and durability testing can be added</p> <p>Consider adding a section on future research directions to provide a broader perspective on potential developments in this field</p>	

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:

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