

COVER LETTER

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[20 May 2024]

Dear,

I/We wish to submit an original research article entitled “[**Evaluation of the Performance of Corroded Concrete with Bottom Ash and Bacteria using Resistivity and Impact Echo Technique**]” for consideration by SINERGI.

We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We promise not to withdraw this article after it has been processed by the Editorial Team. If there is a withdrawal, we are willing to pay a penalty of USD 150 (IDR 2000K) to the SINERGI Editorial Team.

In this paper, I/we report on / show that:

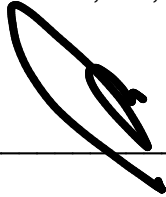
Field	:	Civil Engineering
Topic	:	Concrete Materials and NDT
Brief Background	:	Concrete is a cause of global warming. Environmentally friendly reinforced concrete (RC) is one of the alternatives to this problem, using waste derived from industrial residual materials such as bottom ash (BA).
Research Problem	:	It has been realized that the damage due to corrosion is crucial, so repair is needed. The addition of Bacillus subtilis bacteria in this study is expected to increase the self-repair performance of corroded RC with BA and analyze by NDT methods.
Overview of Method	:	This research uses concrete mixtures with 10%, 20%, and 30% of BA variations as replacements of sand. The RC specimens with BA and bacteria are accelerated corrosion for 48, 96, and 168 hours to determine the strength and durability. The corroded RC specimens were tested for compressive strength, flexural strength, corrosion process, NDT methods, and SEM analysis.
Significant finding	:	The IE and resistivity results show that the addition of BA and bacteria on concrete specimens has a lower risk of corrosion compared to normal concrete.

We have no conflicts of interest to disclose.

Thank you for your consideration of this manuscript.

Sincerely,

[*Ir. Ahmad Zaki, ST, M.Sc, Ph.D*]



AUTHORSHIP STATEMENT

I/We wish to submit an original research article entitled “[*Evaluation of the Performance of Corroded Concrete with Bottom Ash and Bacteria using Resistivity and Impact Echo Technique*]” for consideration by SINERGI.

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript.

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POTENTIAL REVIEWERS

Please send 3 (three) prospective reviewers (who are not yet registered in SINERGI) to speed up the review process who are competent for the topic and have a good reputation in the field. Please ensure that **they are willing to review** this paper.

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