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COVER LETTER

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[*11 October 2021*]

Dear,
I/We wish to submit an original research article entitled "[***Effect of Forging Load and Heat Treatment Process on The Corrosion Behavior of A588-1%Ni For Weathering Steel Application***]" for consideration by SINERGI.

I/We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

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

Topic	:	[Mechanical] Developing a metal microstructure using thermomechanical for weathered steel application
Brief Background	:	Development of high strength steel is obtained by thermomechanical and alloying. Hot forging and heat treatment improving the mechanical and related to corrosion properties.
Research Problem	:	Microstructure is key role in the pitting propagation, especially consist of dual phase. The characteristic A588-1%Ni of lateritic steel caused by hot forging and heat treatment for the weathered steel is very concerned, so its can significant and the novelty of this work.
Overview of Method	:	A588-1% is casted from lateritic steel Indonesia. Hot forging (50 and 75-ton load) followed by heat treatment in various quenchant (air, oil, and water) is main focus in the analysis. The data is collected through in metallography, hardness, and polarization Test for confirming the correlation between microstructure and corrosion properties.
Significant finding	:	The greater the forging load, the smaller the grain size formed due to improving a hardness. Forging loads and heat treatment affect the corrosion rate of A588-1%Ni laterite steel. The order of corrosion rate correlates with the resulting microstructure, namely PF (perlite-ferrite) >

		MF (martensite-ferrite) > BF (bainite ferrite) or PF MF > BF

We have no conflicts of interest to disclose.

Thank you for your consideration of this manuscript.

Sincerely,

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[*Miftakhur Rohmah*]

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AUTHORSHIP STATEMENT

I/We wish to submit an original research article entitled "[***Effect of Forging Load and Heat Treatment Process on The Corrosion Behavior of A588-1%Ni For Weathering Steel Application***]" 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 submit 3 (three) potential reviewers (*that have not listed in SINERGI*) to speed up the review process that competent for the topic and has a good reputation in that area.

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