

**Scientific Journal of Mechanical Engineering Kinematika**

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**Certificate of Reviewing**

Awarded December 2022 to

**Muhammad Agung**

In recognition of the contributions for reviewing an article made to the quality of the journal

Banjarbaru, Januari 3, 2023

Editor in chief



**Abdul Ghofur**





Aqli Mursadin

[SJMEkinematika] Article Review Request

To: Dr. Eng. Ir. H. Muhammad Agung, S.T., M.T.

Inbox - agung@unm.ac.id 26 October 2022 08.23

Dr. Eng. Ir. H. Muhammad Agung, S.T., M.T.:

I believe that you would serve as an excellent reviewer of the manuscript, "THE PERFORMANCE OF SPARK IGNITION GENERATOR-SET ENGINE USING BIOETHANOL SUGARCANE MIXED ," which has been submitted to Scientific Journal of Mechanical Engineering Kinematika. The submission's abstract is inserted below, and I hope that you will consider undertaking this important task for us.

Please log into the journal web site by 2022-11-16 to indicate whether you will undertake the review or not, as well as to access the submission and to record your review and recommendation. The web site is <https://kinematika.ulm.ac.id/index.php/kinematika>

The review itself is due 2022-11-23.

If you do not have your username and password for the journal's web site, you can use this link to reset your password (which will then be emailed to you along with your username). <https://kinematika.ulm.ac.id/index.php/kinematika/login/lostPassword>

Submission URL: <https://kinematika.ulm.ac.id/index.php/kinematika/reviewer/submission?submissionId=233>

Thank you for considering this request.

Aqli Mursadin  
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"THE PERFORMANCE OF SPARK IGNITION GENERATOR-SET ENGINE USING BIOETHANOL SUGARCANE MIXED "

Abstract

Abstract

*The population growth rate in Indonesia is expected to stay high can affect increasing the demand for energy consumption. Thus, it is crucial to understand the relationship between population density and energy consumption in Indonesia. Bioethanol is produced from biobased materials are a good alternative to petroleum-based fuels. It's offer benefits to society and the environment. Indonesia as one of the sugar producing countries, has the advantage of being able to produce bioethanol derived from sugar cane juice. This study was evaluated performance mixed bioethanol and gasoline with a composition of 5% on Premium (Ron 88), Peralite (Ron 90) and Pertamina (Ron 92) using motor generator engine. The results obtained showed that the highest power of bioethanol mixture is obtained by Premium of 240.9 W. The specific fuel consumption was reduced, and it is obtained for Premium of 1.417 kg/Wh and the highest power of bioethanol mixture is obtained for Peralite. The result shown that the highest power is 218.67 W and torque is 0.803 Nm, thermal efficiency is obtained at 38.711% for Peralite. The Pertamina bioethanol mixture has power and torques are 220 W and 0.875 Nm respectively. Moreover, the fuel consumption value obtained is 1.573 kg/Wh, thermal efficiency is by 42,524% for the mixture. The outcome of this study would provide insight into the potential use of bioethanol mixture for generator engine applications and offer pathway for future studies in different ratio of bioethanol to realize the significant benefits of generator engine for internal combustion engines*

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**Aqli Mursadin**

[SJMEkinematika] Article Review Acknowledgement

To: Dr. Eng. Ir. H. Muhammad Agung, S.T., M.T.

Inbox - agung@unm.ac.id 28 December 2022 15:57



**Siri Found a Contact**

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Add



Dr. Eng. Ir. H. Muhammad Agung, S.T., M.T.:

Thank you for completing the review of the submission, "THE PERFORMANCE OF SPARK IGNITION GENERATOR-SET ENGINE USING BIOETHANOL SUGARCANE MIXED ," for Scientific Journal of Mechanical Engineering Kinematika. We appreciate your contribution to the quality of the work that we publish.

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