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“CLEANER PRODUCTION FOR ACHIEVING SUSTAINABLE DEVELOPMENT GOALS”

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## Fuzzy Logic Controller of Voltage for a Permanent Magnet Wind Generator

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### Abstract

In this article, a fuzzy logic controller of voltage is designed to perform the battery charge control, increasing the useful life of the battery, ensuring that the voltage of the three-phase permanent magnet wind generator (PMWG)-rectifier system is improved. The use of clean energies has become more common in our environment due to the low contamination that these systems present, such as wind generation systems. The design and simulation of a controller is done through the fuzzy tool box of the Matlab, a controller in fuzzy logic for a permanent magnets wind generator. With the simulation we can observe the behavior of the controller at different disturbance signals.

*Keywords: Clean energy, fuzzy logic, PM wind generator, wind energy.*

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