

Vehicle Smoke-Ink Converter- An Alternative Ink Source

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ABSTRACT

Global warming is a global concern that the entire planet is currently facing due to the emission of greenhouse gases by different vehicles particularly in land transportation as the major contributor. This research provides an alternative source of ink that is made-up of the smoke debris produced by vehicles and it also covers the type of the medium which is the smoke-ink converter device where the specimen can be collected and processed. This study discussed about the efficiency of the device to test its effectivity in collecting the specimen of the study. The acceptability of the ink was also proven to be an alternative to those commercial types. Experimental type of research was the design used in the study to test the effects and relationship between the variables, scales are also provided to express the results quantitatively through mathematical calculation using specific formulas. This study was conducted in San Juan, La Union wherein the experimentation is done through testing of the device and ink, also other specimen was also used in making the final output. Highest efficiency level on the scale was given to the device since the color of the ink evidently changes per load of fuel showing that it can collect the amount of debris at its maximum performance. The acceptability of ink was tested through its different properties such as viscosity, drying time, color, and eligibility and there was only specific amount of loaded fuel that would be used as an alternative ink. The device and the ink correlates because the acceptability of the main product is dependent on the efficiency of the device in which it was graded as excellent by the researchers. The smoke-ink converter is functional and effective when it comes on processing the specimens, it is also proved that the ink can be established as an alternative product since it contains the characteristics or properties that are relatively close to those commercial ink in the market.

keywords: global warming, emission, greenhouse gases, smoke debris, alternative ink, smoke-ink converter, commercial ink