

***Analysis of Variation of Sengon Activated Carbon on Exhaust Emissions of 4 Stroke Carburetor Motorcycles*** Azamataufiq Budiprasojo,S.T.,M.T  
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***ABSTRACT***

The results of the remaining fuel combustion in motor fuels emit substances such as O<sub>2</sub> (Oxygen), CO (Carbon Monoxide) and HC (Hydrocarbons) which can have a negative impact, both on human health and on the environment. The purpose of this study was to determine the effect of adding an adsorbent made from activated carbon of sengon wood. This study uses variations of physical activation using activation temperatures of 500 °C, 550 °C and 600 °C. This test is carried out on the engine idle state. The results showed that by using an adsorbent the content of O<sub>2</sub> (Oxygen) gas with an activation temperature of 600 °C was lower with an average of 7.9% compared to without using an adsorbent. The results of CO (Carbon Monoxide) levels showed a lower activation temperature of 500 °C obtained with an average of 0.79%. The results of HC (Hydrocarbon) gas content showed a lower activation temperature of 660 °C obtained with an average of 1240 ppm.

***Keywords:*** Adsorbent, Physical Activation, Machine Idle State, Sengon Wood.