ABSTRACT

Regenerative braking is a mechanism for recovering wasted energy during the braking process. Usually when braking kinetic energy from a moving bicycle rim will be converted to heat due to brake friction. In regenerative braking the kinetic energy is converted into electrical energy with the help of dynamos.

This study aims to determine the amount of current a, voltage, and power generated from regenerative braking of a bicycle by using dynamo. The study was conducted with three behaviors at a slope angle, namely 10,8 °, 14,8 ° and 23,7 °.

The best test results of the logger system is the tilt angle of 23,7 ° with a speed of 24,36 m / s found the value of the resulting voltage, current and power is 4,03 Volts, 0,05 A and 0,18 Watt.

Keywords: Regenerative braking, bicycle, dynamo, logger system.