

ABSTRACT

Lately the number of motor vehicles spelled out a lot, smoke generated pollute the streets. One vehicle exhaust gas in the form of CO gas that is colorless, odorless, tasteless, and not easily soluble in water. The CO gas substances interfere with the binding of oxygen in the blood. In the case of contaminated blood carbon monoxide levels of 70% to 80% can cause death. Thus the necessary tools to determine levels of CO gas in the streets

In this final project, made air quality monitoring system with Sugeno Fuzzy logic method. This monitoring tool using MQ-7 sensor that detects carbon monoxide gas and dust GP2Y1010AU0F sensor detects dust contained in the air. The value will be processed by the microcontroller on arduino uno and will be displayed on the LCD 2x16.

The results of the implementation of Sugeno Fuzzy logic contained in this thesis showed the value of accuracy of 42.86% from the initial estimate of the author. For further development of this thesis will be very useful for monitoring air quality in the city streets of Bandung.

Keywords: MQ-7 Sensor, Dust Sensor GP2Y1010AU0F, Arduino Uno, LCD, Sugeno Fuzzy Logic