

ABSTRACT

Air pollution is the inclusion of specific substances that may harm human health. Air pollution caused by human activities undertaken as factory activity or use of a motor vehicle. Motor vehicle emissions have a huge contribution to the increase in the concentration of carbon monoxide (CO) and nitrogen dioxide (NO₂) in the air.

In this final project has been designed and realized a system that is able to monitor the levels of CO and NO₂ in the air. In this system used TGS2600 sensor to detect CO gas and TGS2201 which is able to detect NO₂ gas. Monitoring data transmission utilizing SMS services contained on GSM communication.

This monitoring system consists of sensor node and data center. Sensor node will detect levels of CO and NO₂ then using IComSat SIM900 module, these data will be transmitted to the data center. The highest average for the concentration of CO is 33.019 ppm and the average for the highest levels of NO₂ is 0.882 ppm.

Keyword : Air pollution, Carbon monoxide, Nitrogen dioxide, TGS2600, TGS 2201, GSM Communication