Analysis study of the carbon monoxide sensor for vehicle safety system application

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ABSTRACT

Carbon monoxide sensor is used to detect the presence of carbon monoxide. In this study, carbon monoxide detection system was developed for the purpose of vehicle safety system application. Factors that were investigated in the simulation study includes the design of circuit, carbon monoxide detection performance and the output design that will not affect the driver performance. Buzzer and motors were added in the circuit design and the simulations were done using Proteus and Tinkercad software. Both software showed a good performance in the detection of carbon monoxide. In the case of high carbon monoxide environment, buzzer was activated to alert the people inside the car and motor automatically rolled down the windows to let the outside air into the vehicle and reduce the carbon monoxide.

KEYWORDS

Carbon monoxide; Monitoring system; Vehicle assistive technology; Gas detector

ACKNOWLEDGEMENT
Authors would like to thank Ministry of Higher Education Malaysia and Universiti Malaysia Pahang for funding under grant PDU223204 and PGRS220379.