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## **Developing Portable Instrument Based on Internet of Things for Air Quality Information System**

This paper describes the proposed system, which is able to monitor, record and give indicator about air quality information especially the CO values in the environment. The system is designed to work real time using web-based and android applications. A portable gas detector was developed using micro controller. In order to detect the CO value, TGS2600 is used; here an additional function is added by using a thermal sensor to detect the temperature in the environment. Furthermore, a Wi-Fi module is attached to the micro controller to send the data and communicate with the web-based server. The advantage of the proposed system is that, the users can monitor, record and get a warning about the CO value portably. Moreover, the user can also setup the threshold level of each parameter. The proposed system was to be tested using by Black-box method to test the functionality. The results showed that the system runs well with 0% error and can show the CO and temperature values in real time.