



# LITERATURE SURVEY



**TITLE: DESIGN OF A SMART GAS DETECTION SYSTEM IN AREAS OF  
NATURAL GAS STORAGE**

**SOURCE: [HTTPS://IEEEXPLORE.IEEE.ORG/DOCUMENT/8128365](https://ieeexplore.ieee.org/document/8128365)**

**AUTHORS: ANA M.C.ILIE, CARMELA VACCARO**

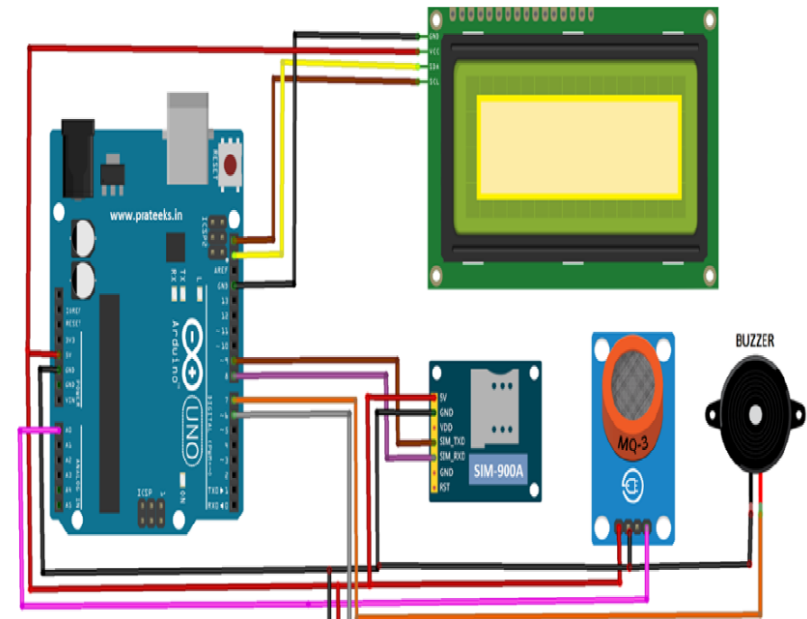
In this paper the mentioned device, the Smart Gas Detection system, can measure the air and water quality, including all the parameters that can have outliers by an eventual gas leak in the aquifer or atmosphere. The air quality parameters measured by low cost sensors, include CH<sub>4</sub> and CO<sub>2</sub> gas, while for water quality parameters measured include temperature, pH and electrical conductivity. The implementation of this is done using Arduino UNO microcontroller, receiving the data from the sensors and transmitting to the database on Raspberry pi 3, remotely accessing all the data.

# GAS LEAKAGE DETECTOR AND MONITORING SYSTEM

**SOURCE:** [https://www.Researchgate.Net/publication/361562550\\_gas\\_leakage\\_detector\\_and\\_monitoring\\_system](https://www.Researchgate.Net/publication/361562550_gas_leakage_detector_and_monitoring_system)

**AUTHORS:**YEKINI N. ASAFE , ADIGUN J. OYERANMI , OLOYEDE A. OLAMIDE, AKINADE O. ABIGAEAL

The mentioned system is based on a microcontroller that employs a gas sensor as well as a GSM module, an LCD display, and a buzzer. The system was designed for gas leakage monitoring and alerts with SMS via an Arduino microcontroller with a buzzer and an MQ2 gas sensor. The circuit contains a Microcontroller MQ2 gas sensor, buzzer, LCD display, and GSM module, when the sensor detects gas leakage it transmit the information to the Microcontroller while the microcontroller makes a decision and then forwarded a warning message to the user as SMS to a mobile phone for decision to be taken accordingly.

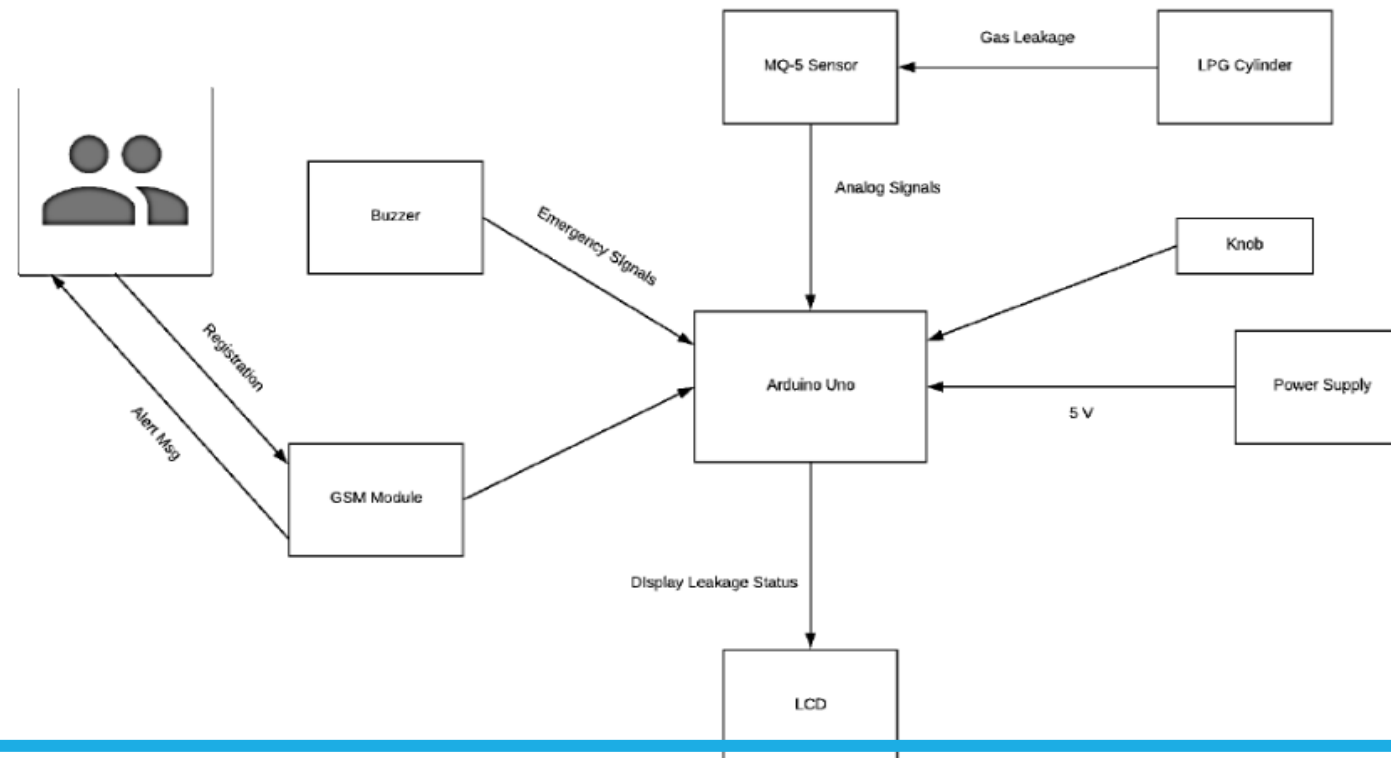


# TITLE: GAS LEAKAGE DETECTION AND ALERT SYSTEM USING IOT

SOURCE:

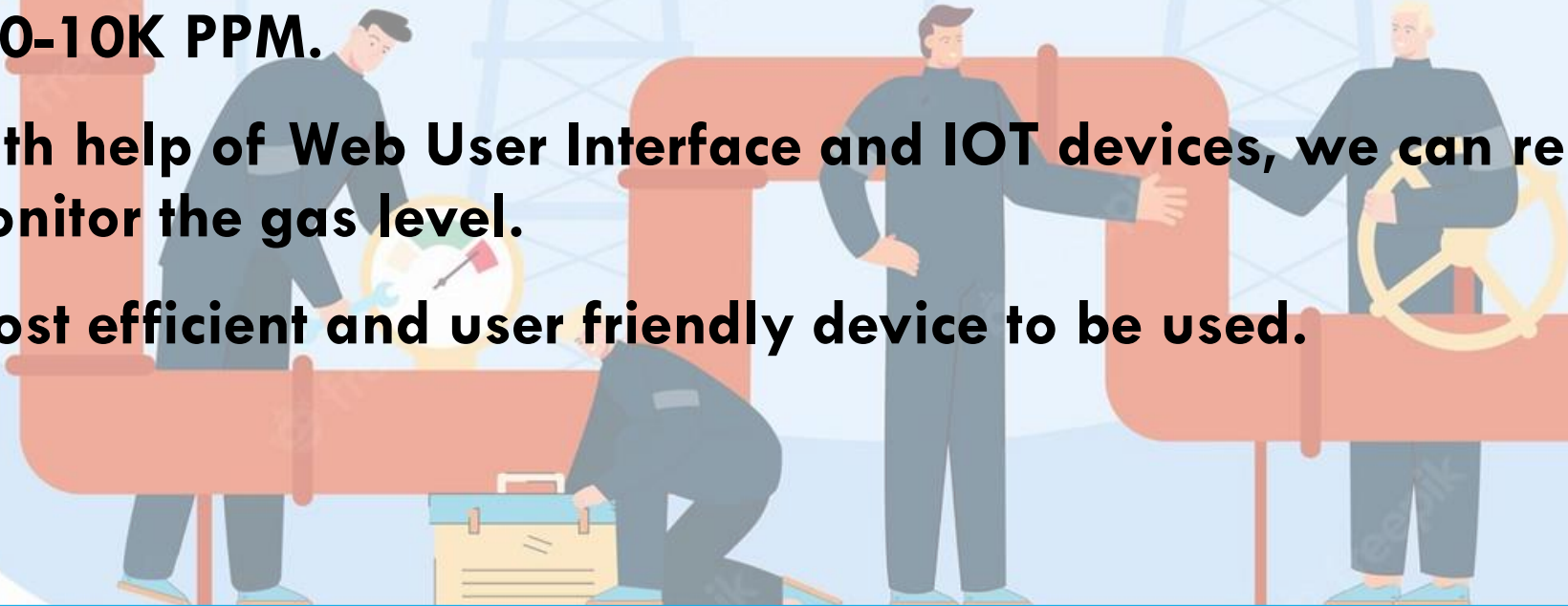
AUTHORS: SAYALI JOSHI, SHITAL MUNJAL, PROF. UMA B. KARANJE

This Paper details the implementation of gas detection and alert system using IOT that can be used for both Domestic and Industrial purpose. The This system uses the GSM technique to send an alert message to the user. It is best suited to detect LPG leakage.



# UNIQUE FEATURES:

- In this project, the physical use of wires and devices to be used is less.
- Coverage area of MQ2 Sensor is more compare to other sensors(i.e) 300-10K PPM.
- With help of Web User Interface and IOT devices, we can remotely monitor the gas level.
- Cost efficient and user friendly device to be used.





**THANK YOU!!**