

## **Literature Survey**

**TITLE: Gas leakage monitoring and alerting system**

**ABSTRACT:**

The Internet of Things (IoT) is a system of gadgets, vehicles, and home machines that includes hardware, programming, actuators, and networks that allow these things to communicate, collaborate, and share information with each other. The importance of the Internet of Things has evolved through numerous innovations, ongoing research, the convergence of AI, commodity sensors, and embedded frameworks. Traditional areas such as installed frameworks, remote sensor systems, and computerization of control frameworks (home meters and building mechanization) are all helping drive the Internet of Things. The presence of dangerous gas leaks in homes and workplaces also leads to storage gas tanks with ideal performance characteristics. Gas leaks in industrial areas cause many health problems. In order to prevent such disasters, it is necessary to regularly monitor and control the atmosphere in the workplace and maintain a clean air environment. The alarm unit is used to vibrate the alarm which is a buzzer. A buzzer acoustically signals the presence of volume. Sensors have the advantage of combining response time and sensitivity. When the sensor detects a gas leak at work or home, the sensor output goes into an active LOW state.

### **PAPER 1**

**TITLE:** Internet of Things (IOT) Based Gas Leakage Monitoring and Alerting System with MQ-2 Sensor

**YEAR:** 2017

**AUTHOR:** Rohan Chandra Pandey , Manish Verma , Lumesh Kumar Sahu

The most objective of this work is planning microcontroller based harmful gas recognizing and cautioning framework. The perilous gasses like LPG and propane were detected and shown and inform each and each moment within the LCD show. In the event that these gasses surpass the normal level at that point an caution is created quickly additionally an caution message (E-mail) is sent to the authorized individual through the Web and utilized ARM improvement board. The advantage of this mechanized discovery and alarming framework over the manual strategy is that it offers speedy reaction time and exact discovery of an crisis and in turn driving quicker dissemination of the basic circumstance. A common

web page was extraordinarily built to inform or email the dependable specialist consequently so decreases the push of steady observing. The choice of employing a genuine time gas spillage checking and detecting the yield levels of gas has been clearly watched by the assistance of this system.

## **PAPER 2**

**TITLE:** Gas Leakage Detection System (GLDS)

**YEAR:**2013

**AUTHOR:** Daudi S. Simbeye

This paper mainly focuses on the detection of gas leakage and providing security when the user is around or away from home. The system is Short Message Service (SMS) based and uses wireless technology for providing security against gas leakage to users hence cost effective and more adaptable. The system comprises of sensors for detecting gas leak interfaced to microcontroller that will give an alert to user whenever there is a gas leakage, display warning information by using Liquid Crystal Display (LCD), sending SMS to the user for notification wherever he/she might be and turning off electric power with the help of magnetic relay. This will enable the user to take precaution of explosion disaster which may result on Liquefied Petroleum Gas (LPG) cookers like loss of properties, injury or even death. GLDS provides ideal solution to gas leakage problems faced by home owners in daily life.

## **PAPER 3**

**TITLE:** Gas Leakage Detection and Alert System using IoT

**YEAR:**2019

**AUTHOR:** Sayali Joshi, Shital Munjal

In this paper Internet of things has advanced because of union of numerous innovations, ongoing examination, AI, ware sensors, and implanted frameworks Conventional fields of installed frameworks, remote sensor systems, control frameworks computerization(counting home and building mechanization), and others all add to empowering the Internet of things.The advantage of this simple gas leak detector is its simplicity and its ability to warn about the leakage of the LPG gas . This system uses GSM technique to send alert message to respective person if no one is there in the house and then gas leaks occurs, GSMmodule is there to send

immediate messages to the respective person regarding the gas leak . The main advantage of this system is that it off the regulator knob of the cylinder automatically when gas leakage detected.

## **PAPER 4**

**TITLE:** LPG GAS LEAKAGE DETECTION USING IOT

**YEAR:** 2020

**AUTHOR:** Dr. Chetana Tukkoji, Dr. Chetana Tukkoji

To alert on Liquefied rock oil Gas( LPG) leakage and precluding any unwanted incident, we need to apply some cautions to discover the discharge. It can be developed associate degree Arduino predicated LPG gas sensor alarm, if gas leakage happens. The LPG sensor MQ6 is associate degree correct LPG sensing device that acquires the signal intensity. Gas escape could affect in severe accidents which ends in material losses and mortal injuries. Gas escape happens primarily because of poor conservation of outfit and insufficient mindfulness of the individualities. therefore LPG escape discovery are useful to stop accidents and to avoid wasting mortal lives. This paper conferred LPG escape discovery and alert system. This fashion triggers buzzer and displays the inflexibility of the escape to alert individualities once LPG escape is detected. This fashion is incredibly straightforward nonetheless dependable.