LITERATURE SURVEY

Gas Leakage Detection Based on Arduino And Alarm Sound, Rhonnel S. Paculanan, Israel Carino, International Journal of Innovative Technology and Exploring Engineering (IJITEE) Vol 8, April 2019.

LPG leakages are a mutual hindrance in household and manufacturing nowadays. It is very life threatening if you will not distinguish and modified right away. The idea behind our project is to give a solution by power cut the gas provision as soon as a gas leakage is perceived apart from activating the sounding alarm. In addition to this, the authorized person will receive a message informing him about the leakage.

Sanjoy Das, Sahana S, Soujanya K Swathi M C, "Gas leakage detection and prevention using IoT": International Journal of Scientific Research % Engineering Trends. Vol 6, Issue 3, May-June 2020, ISSN (online): 2395-566X.

This paper fundamentally manages the advancement of a straightforward gas spill locator at the underlying stage and after that changing this basic gadget into a most progressive gas identifier framework later on. Gas sensors have been specifically utilized which has high affectability for propane (C3H8) and butane (C4H10). Gas leakage system consists of GSM (Worldwide System for versatile communication) module, which sends SMS as soon as gas leakage is detected. Keywords: Arduino, MQ-6 Gas Sensor, LCD, LPG, Stepper.

Dr. Chetana Tukkoji, Mr. Sanjeev Kumar, “Review paper on- LPG Gas leakage detection using IOT”: IJEAST – International Journal of Engineering Applied Science & Technology, Vol 4, Issue 12, April 2020 IJEAST (online): 603-609.

This paper provides a brand new approach to discover LPG discharge supported microcontroller based Arduino. To alert on Liquefied rock oil Gas (LPG) leakage and preventing any unwanted incident, we need to apply some cautions to discover the discharge. It can be developed associate degree Arduino based LPG gas detector alarm, if gas leakage happens. The LPG detector MQ 6 is associate degree correct LPG sensing device that acquires the signal intensity. Associate degree economical Arduino based signal process mechanism is followed that effectively quantizes the non-inheritable electrical signal. The intensity of the LPG leakage is classed into 3 categories, such as LOW, MEDIUM and HIGH based on square measure. This paper conjointly shows the ratio and temperature over the alphanumeric display. The importance and connection of the paper is very beneficiary for man as a result of it's a vital caution for our domestic life.

B. F. Alshammari, M. T. Chughtai, “IoT Gas leakage detector and warning generator”. Engineering and Technology and Applied Science Research Volume 10, Issue August 2020, pp no. 6142-6146.

This paper presents an industrial monitoring system design using the Internet of Things (IoT). The gas sensor (MQ-5) captured information is posted into a data cloud. The sensor detects the leakage of gas under most atmospheric conditions. All the components are controlled by an Arduino (UNO-1)

that acts as a central processor unit in the setup t. As soon as a gas leakage is detected by the sensor, the alarm is raised in the form of a buzzer. This alarm is supported by an LCD to display the location of leakage.

Gas Leakage Detection and Prevention System, Shreyas Thorat, Neha Tonape, International Journal of Trendy Research, Vol 4, Issue 7, Dec 2020, ISSN NO: 2582-0958.

The objective of this project is to present the design of a automatic alarming system, which can detect and prevent liquefied petroleum gas leakage in various premises. This system alerts the user by sending him a phone call and alerting the neighbors by buzzer alarm after the gas leaks above setpoint1.The servo motor is used to close the gas pipe valves. This device ensures safety and prevents suffocation and explosion due to gas leakage. This project is implemented using Arduino uno and simulated using Arduino ide and proteus software.

Rohan KH1, Navanika Reddy, Pranamya Maddy, Sachit Girish, Dr. Badari Nath K-"IOT based gas leakage detection and Alerting system": JRP Publications,Vol. 1(1), pp no. 002-006, February 2021.

Gas leakages are causing massive explosions in places throughout the world. The conventionally available gas leakage detectors only have the provision to alarm the user who is physically present at the spot . Hence, to overcome this limitation, this project implements a model which sends an email to the user in case there is a leakage. This model detects the leakage of Liquid Petroleum Gas & Benzene. The prototype of this model generates an email to the concerned person using IFTTT web service. An LED is also used as a visual alarm at the site of leakage.

INSIGHT AND PERSPECTIVE OF OUR TEAM:

Gas leakage is a major problem in the industrial sector, residential premises, etc. Nowadays, home security has become a major issue because of increasing gas leakage. One of the preventive methods to stop accidents associated with the gas leakage is to install a gas leakage detection kit at vulnerable places. The aim of this project is to propose and discuss a design of a gas leakage detection system that can automatically detect, it aims in alerting the nearby hospitals and has ability to send message to the emergency service like ambulance. The system is based on a sensor that easily detects a gas leakage, Arduino ,buzzer, lcd display and iot based alerting system.