LITERATURE SURVEY

Gas Leakage Monitoring and Alerting System

TEAM LEADER :	NAVISHA V
TEAM MEMBER 1:	NARMATHA A
TEAM MEMBER 2:	MANOJPRABHU G
TEAM MEMBER 3:	RAMACHANDRAN R
TEAM MEMBER 4:	KARTHI KEYAN M

S.No	TITLE	AUTHOR &YEAR	ABOUT THE PAPER	RESULT
1.	Gas Leakage Detection and Smart Alerting System using IOT	Shital Imade, Priyanka Rajmanes, Aishwarya Gavali , Prof. V. N. Nayakwadi-2018	Internet of Things aim towards making life simpler by automating every small task around us. As much is IoT helping in automating tasks, the benefits of IoT can also be extended for enhancing the existing safety standards. Safety, the elementary concern of any project, has not been left untouched by	We have used the IOT technology to make a Gas Leakage Detector for society which having Smart Alerting techniques involving sending text message to the concerned authority and an ability performing data analytics on sensor. This system will be

			IoT. Gas Leakages in open or closed areas can prove to be dangerous and lethal. The traditional Gas Leakage Detector Systems though have great precision, fail to acknowledge a few factors in the field of alerting the people about the leakage.	able to detect the gas in environment using the gas sensors. This will prevent form the major harmful proble
2.	SMS Based Gas Leakage and Fire Detection Alert System to attempt as Firewall against Cybersecurity	Maria Latif, Jazzba Asad, Faiza Nawaz,Noman Mazher	Safety is the foremost aspect in today‟s world. In this world of technology, people need technology to help them in danger conditions. Gas leakage becomes a severe issue that results in many accidents which lead to mortal and monetary harm. It is need of hour to install the gas leakage detection systems on public places. This paper presents a system design that identifies the leakage of gas and warns the user about the situation by sending SMS on user‟s phone with the help of GSM.	Smart kitchen by means of IOT was aimed, created and successfully verified in this paper. Through simulation, we appraised the performance of system. This project is simulated using bluemix software. The outcome of the test demonstrates the ability of system to check the leakage of gas in the kitchen and send SMS alert to user‟s phone when the concentration of gas is above or below the set limit.
3.	Embedded syatem for Hazardous Gas detection and alerting	V.Ramya, B. Palaniappan-2012	Safety plays a major role in today’s world and it is necessary that good safety systems are to be implemented in places of education and work. This work modifies the existing safety model installed in industries and this system also be used in homes and offices. The main objective of the work is designing microcontroller based toxic gas detecting and alerting system.. If these	An embedded system for hazardous gas detection has been implemented The gas sensors and the critical level of the respective gas should be known, and then this system can be implemented for detecting various gases either in domestic area such

			gases exceed the normal level then an alarm is generated immediately and also an alert message (SMS) is sent to the authorized person through the GSM.	as places of educational institutions, residential and industrial areas which avoids endangering of human lives.

4.	Dangerous Gas Detection using an Integrated Circuit and MQ-9	Falohun A.S, Oke A.O.,Abolaji B.M., Oladejo O.E.-2016	Natural gas is an odourless one which consists of compounds made of two elements: carbon and hydrogen called hydrocarbons. Sometimes, due to an accident or if the valve is not properly closed, the gas leaks. This system is aimed at detecting the leakage and sounding an alert so that occupants in the building can maintain optimal ventilation and turn off all electrical appliances or evacuate the vicinity until a redress is made.	The gas detector system implemented met certain favourableconditions such as low cost, vast application, design economy, availability of components (locally sourced) and research materials, efficiency, compatibility, portability and also durability
5.	Design and Simulation of Gas and Fire Detector and Alarm system with Water sprinkle	R.O.Okeke, M.Ehikhamenle-2017	This work is to design and implement a Fire and Gas Detection System with water sprinkler using SMS Feedback. This system makes use of a microcontroller along with sensing circuit which will detect gas leakage and fire and with the help of an alarm system the system gives alert about fire or gas leakage and with the installation of a GSM modem SMS can be sent to notify the user if there is fire or gas leakage and if the fire occurs the water sprinkler sprinkles water on the affected area to reduce the effect of the	A fire and gas hazard control has been designed, implemented and found working. This system has solved the problem caused by gas leakage in our surrounding which lead to fire outbreak that has caused the death of its victims. This system has been designed to carry out the detection and notify the presence of a Liquefied Petroleum Gas (LPG) in our surroundings. It also detect and notify the presence of fire in the

			fire. A Liquid Crystal Display (LCD) displays the status of the system	environment then fight the fire outbreak itself using fire extinguisher and the water sprinkling system. The construction was made such that maintenance and repairs are done easily incase the system breaks down or if a fault occurs.
6.	IOT Based Smart Gas Leakage Detection and Alerting System	Rohan K H-2021	Gas leakage 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. LPG is highly inflammable and results in blasts. Benzene when inhaled in higher concentrations affects the health of workers in industries since it is carcinogenic. Hence, this cost-effective project uses MQ 6 and MQ 135 sensors for detecting the aforementioned gases using Arduino -UNO ,Wifi Module ESP8266 and Thingspeak cloud..	Implementing this system is found out to be more efficient than the previously existing system. And with the introduction of Arduino-UNO the whole project cost was also reduced and human safety level was also increased. Practical applications of the proposed system- Used in industries to detect the leakage of toxic gases. Used in hotels to detect smoking by customers. Used to check the quality/purity of air in offices. Used to check concentration of gases in mines. Used in detecting fire.