

# LITERATURE SURVEY for gas leakage monitoring and detection system using IOT

TITLE	AUTHORS	METHODOLOGIES USED	MERITS	DEMERITS	PUBLISHED DATE
Design of an auto disconnecting regulator and a safety switch to prevent domestic gas leakages	R. Rajapaksha, P. Perera, P. Nandasena, P. Gunarathna	automatically disconnecting regulator from the cylinder to prevent gas leakage. circuit is embedded with a rechargeable battery	Work even in power outage	Use of additional sensors	2020
Development of ESP32-based Wi-Fi Electronic Nose System for Monitoring LPG Leakage at Gas Cylinder Refurbish Plant	Muhammad Ikmal Mat Ajit, Fathinul Sahir Ahmad Saad,	The system used an alarm and an indication lamp to alert the staff within the plant if gas leakage is detected. Use of water sprinkler system	We can reduce the gas concentration	Complex in Using sensors and module	2018
Microcontroller based low cost gas leakage detector with SMS alert	Arjit Banik, suman ghosh, B. Aich	uses the GSM to alert the person about the gas leakage via SMS by using microcontroller	SMS via mobile phones helps customer's precaution	Only small range can be detected	2018
IOT based industrial plant safety gas leakage detection system	R. kodali, R. Greeshma, Kusuma Priya nimmanapalli	Use of MQ6, MQ4 and MQ135 gas sensors which detect LPG, Methane and Benzene gas leaks	Low cost	Accuracy is low	2018

Development of multipurpose gas leakage and fire detector with alarm system	S.Nivedhitha, A.Padmavathy, U.S.Susaritha	The system wirelessly activates a relay to switch off the mains to prevent fire accidents	does not require human intervention.	Mostly used for fire detection	2013
Detecting LPG leakage and turn off using Arduino connected with PIR sensor	R.Vishnupriya , G.Kowsalya	Arduino connected to gas sensor (MQ-2) and temperature sensor (LM-35) to prevent gas leakage. Usage of PIR sensor for detecting the presence of human in the kitchen.	If no human is detected over a period of time, an alarm is on and automatically the valve of the LPG cylinder goes off.	—	2021