LITERATURE SURVEY ON GAS LEAKAGE MONITORING AND ALERTING SYSTEM

**Project title** : **Gas Leakage Monitoring & Alerting System**

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**Abstract:**

The Internet of things (IoT) is the system of gadgets, vehicles, and home machines that contain hardware, programming, actuators, and network which enables these things to interface, collaborate and trade information. IoT includes broadening Internet network past standard device, for example, work areas, workstations, cell phones and tablets, to any scope of generally stupid or non-web empowered physical device and ordinary articles. Installed with innovation, these gadgets can convey and connect over the Internet, and they can be remotely observed and controlled. The meaning of the Internet of things has advanced because of union of numerous innovations, ongoing examination,AI,ware the sensors, and implanted frame works.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. A gas spill alludes to a hole of petroleum gas or different vaporous item from a pipeline or other regulation into any territory where the gas ought not be available. Since a little hole may steadily develop a hazardous convergence of gas, spills are perilous. Notwithstanding causing flame and blast dangers, holes can slaughter vegetation,including huge trees, and may discharge amazing ozone harming substances to the environment.The gas leakage detection system can constantly monitor the gas leak with the help of the sensors. ZigBee is used to feed real time sensor data over the cloud. The sensor monitors, detects and raises an alarm whenever a gas leak or fire broke out condition is detected.On cloud, analyze and store the data and communicate wirelessly for further analysis is possible. Anyone can access the leakage data from anywhere using any Internet enabled device like PC, tablet or smart phone and analyze.

**Keywords**: IOT, MQ5 sensor, Arduino module, GSM networks,store the data.

**Reference:**

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| Sr. No | Paper Title | Author Name | Publication  Year | Result |
| 1 | Internet of Things (IOT) Based Gas Leakage Monitoring and Alerting System with MQ-2 Sensor | Rohan Chandra Pandey, Manish Verma, Lumesh Kumar Sahu | 2017 | This paper choice of using a real time gas leakage monitoring and Sensing the output levels of gas has been clearly observed by the help of this system. |
| 2 | Gas Leakage Detection and Smart Alerting and Prediction Using IoT | Asmita Varma, Prabhakar S, Kayalvizhi Jayavel | 2017 | The proposed gas leakage detector is promising in the Field of safety. |
| 3 | The proposed gas leakage detector is promising in the Field of safety. | Chaitali Bagwe, Vidya Ghadi, Vinayshri Naik, Neha Kunte | 2018 | The system provides constant monitoring and detection of gas leakage along with storage of data in database for predictions and analysis. The IOT components used helps in making the system much more cost effective in comparison with traditional Gas detector systems. |
| 4 | Internet of Things (IoT) Based Gas Leakage Monitoring and Alerting System with Mq-6 Sensor | Rohan Chandra Pandey, Manish Verma, Lumesh Kumar Sahu, Saurabh Deshmukh | 2018 | A discussion on how the aims and objectives are met is presented. An overall conclusion IOT based toxic gas detector is it has become more efficient, more applicable to today’s applications and smarter. |
| 5 | Gas Leakage Detection and Smart Alerting System Using IoT | Shital Imade, Priyanka Rajmanes, Aishwarya Gavali | 2018 | In this paper we use IOT technology for enhancing the existing safety standards. While making this prototype has been to bring a revolution in the field of safety against the leakage of harmful and toxic gases |