LITERATURE SURVEY

| Project | Hazardous Area Monitoring for Industrial Plant for Industrial Plant powered by IoT |
|--------------|---|
| Team Members | Dharanitharan S (715519106010) - Team Lead Harinandhan R (715519106014) Jaganaath A (715519106016) Mukil S (7155191060128) |
| College | PSG Institute of Technology and Applied Research |

ABSTRACT:

The proper operation of the industrial process depends in large part on the core area of industrial safety. To ensure that the goods are safe and effective, it is critical to evaluate the status of the sector. An IoT-based industrial monitoring system with intelligent sensors is what this study aims to build. There may be a benefit to the industrial industry from this endeavour. Any manufacturing business that incorporates technology will guarantee the public's safety and wellbeing and prevent accidents.

INTRODUCTION:

The Industrial Monitoring System project uses the Internet of Things (IoT) as its foundation . Arduino is utilised to control a variety of sensors (using smoke and temperature sensors), giving the industry total control. This project uses the Internet of Things (IoT) to give users access to data. The Internet of Things (IoT) is a system of interconnected "things" that enables physical objects to exchange data via sensors, electronics, software, and networking. These autonomous systems can function without human interaction. The continuous monitoring sensors alerts the in charge of the area by sending an alert message as well as with a alarm. The sensors continuously monitors the temperature, leakage of gases and humidity and takes necessary measures to ensure the safety of the workers in the industry.

LITERATURE SURVEY:

1. IoT Based Industrial Pollution Monitoring System

Doma Harsha Vardhan Reddy , Arun Gowda K , V Kalyan Kumar , Dr Jeevan K M Journal of Xi'an University of Architecture & Technology , Volume XII, Issue V, 2020

This study proposes a remote embedded enrollment structure for an IoT-based system to monitor pollution levels in mechanical condition or a specific region of interest. The system uses an interface between the transmitter and recipient made of an Arduino Uno and a Blynk server.

2. IoT- Based Air Pollution Monitoring and Forecasting System

Chen Xiaojun published a paper "IoT- Based Air Pollution Monitoring and Forecasting System" in the year 2015

An IoT-based system for tracking and predicting air pollution In their article titled "Urban Air Pollution Monitoring System With Forecasting Models," Khaled Bashir Shaban et al. made a recommendation for a low-cost air pollution monitoring system. The data could be received, stored, and preprocessed by the system. It has the ability to transform the data into insightful knowledge.

3. IoT Based industrial Monitoring system

Hemlata Yadav, Naomi oyiza, sarfaraz hassan, Dr.sumam lata, K. Jaya chitra

This proposes the idea to reduce industrial risks in prominent factories, monitor power plant yield, guarantee security in quickly developing industries, and access nuclear safety levels.

4. Wireless gas sensor network for detection and Monitoring of harmful gases in utility areas and industries

Dr.p.c.jain ,Rajesh Kushwaha

This proposal to control manufacturing processes, or outdoor Monitoring the environment due to WSN's simplicity, wireless connectivity, and low power consumption. The WGSN detects not only the presence of gas but the amount of leakages in the air, and accordingly raises an appropriate audiovisual alarm.

5. FPGA-GSM based Gas Leakage Detection System

Arpitha .T, Divya Kiran, V. S.N. Sitaram Gupta, and Punithavathi Duraiswamy

This proposal based on FPGA – GSM gas leakage detector with a warning call initiating feature to the first response team is presented. The FPGA detects the leakage and initiates a warning call through a GSM module.