HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IOT

ABSTRACT

The main aim of this project is to avoid the accident and death in the gas Leakage explosion in industries. Domestically we use natural gas and it is very useful for burning purposes. If this gas is leaked in Industry or factories and not sensed in time, it may lead to fatal disaster, and many cause human and material loss. To monitor the condition we can integrate the smart device in the area which are needed to be monitored every device will be acting as a beacon and it is connected to temperature sensors. We can broadcast the temperature data along with the location of that particular area through beacons. The persons who generally monitor these places will be given a wearable device acting as a beacon scanner. Whenever the person enters the desired area then he can view the required parameters and can be alerted, these are sent to the cloud

INTRODUCTION

The Internet of things represents a general concept for the ability of network devices to sense and collect data from the world around us, and then share that data across the internet where it can be processed and utilized for various practical purposes in different aspects of life. In this project, we create an IoT-based hazards monitoring system specifically suited to the requirements of mining, refining, and manufacturing industries. The system actively records, processes and analyzes the temperature of the surroundings, which is a prime safety parameter in areas where molten metal is processed, manufacturing is done or welds are made. if a parameter is violated, the system sends an immediate notification to a set of a preset list of users on their smartphone and continues logging and monitoring data for further analysis to suggest improvements in the safety regulation of the industry

LITERATURE SURVEY

TITLE	AUTHOR	MTHODOLOGY	EQIUPMENTS c
IoT Based industrial Monitoring system	Hemlata Yadav, Naomi oyiza, sarfaraz hassan, Dr.sumam lata,K. Jaya chitra	This proposal to minimize industrial dangers in high-profile factories, track yield in power plants assure safety in fast-paced industries, and access the nuclear safety levels	Arduino mega, WIFI module, Smoke sensor, temperature and humidity sensor
Microcontroller Based Low Cost Gas Leakage Detector with SMS Alert	Mr. Arijit Banik, Mr. Bodhayan Aich, Mr. Suman Ghosh	This proposal to Set up an SMS based Alert Mechanism and send 3 SMS (3 alert messages) to 2 specified mobile numbers (input inside the Arduino Program).	Microcontroller, temperature sensor and gas sensor
Gas leakage source Localization and Boundary Estimation using Mobile Wireless Sensor Network	Subhash Kumar,Sameer choukey	This proposal to avert its consequences and allow the mine management to take preventive measures at the earliest, the localization and boundary detection of gas leakage source.	Bluetooth beckons. Gas sensor

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 audio-visual alarm**	**Zigbee, wireless sensor network**
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	FPGA and a GSM module, , MQ-6 sensor, (UART)