

## 1.A Study On Computer Based Monitoring System For Hazardous Area Safety Measurement Using Virtual Instrumentation

Sureshkumar A, S Muruganand, S Siddharthy, Manikandan N. "A Study On Computer Based

Monitoring System For Hazardous Area Safety Measurement Using Virtual Instrumentation." International

Conference on Inter Disciplinary Research in Engineering and Technology (2015): 187-191. Print.

This paper is about smart area monitoring system they used Zigbee technology for determining the real time data from the field

they mainly target the industries which focus on chemical industries and the plants. The safety monitoring system to accurately

detect temperature, radiation, flammable and poisonous gas and fire and smoke on real-time which was detected by the sensor node. All in-field

sensory data are wirelessly transmitted into a sink node, which then sends them to the base station for data

storing and analyzing using zigbee communication protocol. Sensor node is developed based on the MSP430FG4618/F2013 module

an IEEE 802.15.4/Zigbee wireless microcontroller.

we extract their some concepts we mainly focused on the industries boilers which are making the huge disasters over the year in industries

and also we used LORA technology instead of Zigbee technology and we use different sensor nodes to detect the field value.

## 2.STUDY ON IOT BASED INDUSTRIAL MONITORING SYSTEM

Hemlata Yadav, Naomi Oyiza, Sarfarz Hassan, Dr. Suman Lata, K. Jaya Chitra created a project based on

IOT based Industrial Monitoring System.

Published on: 04/April-2022

The system helps to recover the industries from hazardous area to avoid the unfortunate accident. In this project they use Arduino,

WIFI Module(ESP8266), Smoke sensor(MQ-2), Temperature and Humidity sensor, LCD Display, Watt LED, Blynk for monitoring the industry

from the hazardous area. The application was used in this project to improve industry control and monitoring. Smoke and gas sensors

can be connected to the system to improve the safety to the industry. The data can be used to minimise the industrial factories in high

risk damage. The LCD display shows the level of temperature and humidity and hazardous area identities. In this project the real-time monitoring

systems based physical models are required. This system connect all the data in the open source app Blynk. This app will send notification

to the end user give the exact status of the required area. That will helps to the user to rectify the unfortunate accident in their

industries. so these are the concept used in this IOT based Industrial Monitoring System.

### 3.A hazardeous area personal Monitoring System for Operators in Gas Depots and Storage Tanks:

Elia Landi,Lorenzo parri,Ada Fort,Marco Mugaini,Valerio Vignoli,Dinesh Tamang,Marco Tani published On 2008.

This article describe the smart monitoring system for detecting the hazardeous gas and reduced oxygen concentraion.Now a days hazardeous

environment is a critical issuse.In this project we use main board,catalytic sensor,electrochemical senso,radio Module(1Tx every 120s).

These are the device we used to detect the hazardeous gases.This device is a wearable sensing node,it can aiming to reduce the explosion

and fires.The sensor nodes can genarate alarm in the time of explosion.The sensor nodes can transmit the measured data with Lora transmitter.In this electrochemical sensor can reduced power consumption.The sensor node can transmit the data to be stored in the cloud

which can be accessed using the application programming interface. we used IBM cloud instead of cloud which is much more effective and

stores the data and transmit to the users who are all working under that Environment and also to the maintananace team.