

# **HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IoT**

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## **ABSTRACT**

Internet of Things (IoT) 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. The reach of IoT based systems in industrial areas is still limited, but it has huge potential.

In some industrial plants, there are some areas which are to be monitored time to time. Sometimes the conditions may become critical which may lead to Accidents.

Industrial accidents are as old as industry itself and so are preventive measures. The Standards for Explosive Areas or Atmospheres have also has evolved diversely worldwide, based on the local needs of the industries for the overall safe operation of the plants. Explosion and an fire are two of the major constituents of these mishaps.

To monitor the conditions we can integrate the smart devices in the areas 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 which will be 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 cloud.