**ABSTRACT**

The Industrial Internet of things or IIoT has gained recognition due to the advancement it has made in communication technology. Industrial IoT is an application of IoT that enables control of industries over the Internet using smart devices and sensors. The two main entity which ensures effectiveness in any field is monitoring and control. Keeping a view on this aspect, we have designed a low-cost, low-power Wi-Fi based industrial monitoring system that controls and monitors the remote manufacturing plants and industries using a web application. In this model an Arduino Mega which is the main micro-controller is connected with a Wi-Fi module for internet connectivity, a barometer sensor for temperature and pressure, a humidity sensor for sensing the humidity and a gas sensor which detects the smoke and harmful gases. These components are utilized to build a monitoring system. Apart from these components several other sensors are used to keep a check on the temperature, gas leakage, pressure, humidity, etc. in the work environment to ensure the workers safety. In case of any incident this monitoring system warns the workers by an alarm and sends information to the registered user via Blynk App. The chief purpose of this research is to sum up the significant role of IoT in monitoring industries.

**ADVANTAGES**

Real-time plant monitoring

- Reduced risks of disasters

- Automated detection

- Excellent customer experience

- Improved asset utilization

- Enhanced revenue

**DISADVANTAGES**

-sometimes it may not work properly and it lead to major cause

-sensors may give wrong values and it will make some confusions