**ABSTRACT**

Pollution detection and monitoring is very crucial task in today’s world. The level of pollution has increased with times by lot of factors like the increase in population, increased vehicle use, industrialization and urbanization which results in harmful effects on human wellbeing by directly affecting health of population exposed to it. Based on introducing Internet of Things (IOT) into the field of environmental protection, this paper puts forward a kind of real-time air pollution detection and monitoring system. Various sensors are used to calculate the toxicity level of harmful gases present in the air and based on the readings of the sensors the source of the pollutants are identified. The level of pollution will be displayed in the form of graph on webpage so that we can monitor it very easily and can monitor the pollution level from anywhere and if there is any surge in the pollution level, an alert message will be sent to the respected authority. Hence the pollution monitoring and alerting system becomes very easy and efficient.

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**LIST OF ABBREVIATIONS**

**ACRONYMS** **ABBREVIATIONS**

IOT Internet of Things

PPM Parts Per Million

NFC Near-field Communication

ADC Analog-to-Digital Convertor

WSN Wireless Sensor Networks

GSM Global System for Mobile Communication

GPRS General Packet Radio Services

IDE Integrated Development Environment