IOT Based Vehicle Emission Monitoring System and Pollution Detection

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Abstract: *Degradation of air quality in cities is the result of a complex interaction between natural and anthropogenic environmental conditions. With the increase in urbanization and industrialization and due to poor control on emissions and little use of catalytic converters, a great amount of particulate and toxic gases are produced. The objective of this paper is to monitor air pollution on roads and track vehicles which cause pollution over a specified limit. Increasing number of automobiles is a serious problem that has been around for a very long time. This paper proposes use of Internet of Things(IoT) to address this problem. Here, combination of Wireless Sensor Network and Electrochemical Toxic Gas Sensors and the use of a Radio Frequency Identification (RFID) tagging system to monitor car pollution records anytime anywhere. An increase in automobile vehicle increase in air pollution since automobiles are the main source of environmental pollution. The smoke emitted from the vehicle consists of gases like nitrogen oxides (NOx), carbon monoxide(CO), and hydrocarbon (HC). approximately one-half of the nitrogen oxide gases, carbon monoxide and one-fourth of hydrocarbon gases in our environment are emitted from automobile vehicles, which leads to global warming. Due to poor vehicle maintenance and ignition defect. the gases emitted from the exhaust may increase. In order to reduce environmental pollution and to increase vehicles life, we can use this system.*

Keywords: Internet of Things, Vehicle Emission Monitoring System

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