

AUTOMATED SYSTEM FOR AIR POLLUTION DETECTION AND CONTROL IN VEHICLES

**A Project report submitted in partial fulfillment of the requirements for the award of
degree of**

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Accredited by NAAC, Approved by A.I.C.T.E, Affiliated to J.N.T.U. KAKINADA)

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BONAFIDE CERTIFICATE

This is to certify that the project entitled “ **AUTOMATED SYSTEM FOR AIR POLLUTION DETECTION AND CONTROL IN VEHICLES**” in partial fulfillment for the degree of Bachelor of Technology in **ELECTRONICS AND COMMUNICATION ENGINEERING** at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bona fide work carried out by Y.JAYA LAKSHIMI (15811A0479), P.PARIMALA (15811A0463), V.S.V.KOUSALYA (15811A0478), R.VENKATESH (16815A0436) under the guidance and supervision during 2015-2019.

PROJECT GUIDE

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ABSTRACT

Every vehicle has its own emission of gases, but the problem occurs when the emission is beyond the standardized values. The primary reason for this breach of emission level being the incomplete combustion of fuel supplied to the engine which is due to the improper maintenance of vehicles. This emission from vehicles cannot be completely avoided, but it definitely can be controlled. The aim of the project is to monitor and control the pollutants in the vehicle by using the pollution control circuit.

This pollution control circuit consists of various sensors like smoke sensor, temperature sensor and GSM, GPS kind of devices, and all of them are integrated and connected to a Controller. It is a real time work where a demo application has been made in which a controller board is made where all these devices get integrated and work accordingly. The vehicle is controlled by this circuit. When a vehicle attains certain threshold pollution level then the engine gets automatically switched off and an SMS is generated and sent to the pre-defined number stored in the memory through the GSM module. The GPS module is used to locate the vehicle position where it is halted. This project is an effective utilization of technology by which we save our environment by controlling the pollution of vehicles.