**ABSTRACT**

**Title of the Project :** Digitalized Certificate Generation of Emission Test

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**Abstract :**

Nowadays,the most common problem faced is that there is a huge increase in pollution.This is because of an increased diesel engine population has created pressures on controlling diesel PM and NOx emissions. Emission standards implemented in 2005-2010 time frame additionally require the use of exhaust after treatment methods on new diesel engines.This is where pollutants such as NOx,CO and PM are created which leads to incomplete oxidation of fuel combustion.To avoid such toxic pollutants,our idea is to develop a system called **“Digitalized Certificate Generation Of Emission Test”**,which will be useful to monitor the emission of the vehicle. Firstly, air pollution sensors are used. This sensor will detect gases such as ammonia, sulphur, benzene vapor and other harmful smoke. Sensor ADC count below 200 is taken as normal where as above this value is taken as abnormal. Then, micro-controller such as AVR will be used to process the readings from those sensors and Wi-Fi gateways are used for pushing those data to the mango dB database using application program interface.Secondly,a web application will be developed to monitor the abnormal emission of the vehicle and a mobile application will be developed using react native to get abnormal emitting vehicle information.Finally, **a certificate** will be automatically generated and send **through mail**.Thus,this project will be useful to identify the pollution emitting vehicle easily and can control the air pollution.