PROJECT REPORT ON

APPLICATION OF COLD PLASMA IN WATER PURIFICATION SYSTEM

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

BY

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BONAFIDE CERTIFICATE

This is to certify that the Project entitled **"APPLICATION OF COLD PLASMA IN WATER PURIFICATION SYSTEM"** is a bonafide record of the work done by **ANUSHA JYOTHI (SNC19EE001), DEVI KEERTHANA T P (SNC19EE002)** of Eighth Semester **Electrical and Electronics Engineering** towards the partial fulfilment for the award of the degree of **Bachelor of Technology** by KTU Technological University.

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We express my heartfelt gratitude to our Project coordinator**, Mr. Manu C** Assistant Professor EEE, and, guided by **Ms. Archana C P** Sree Narayana Guru College of Engineering and Technology Payyanur for their valuable suggestion and guidance.

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ABSTRACT

Water is vital resource for life. Drinking safe water is important aspect for a healthy life. In modern world water pollution is one of the major causes for various types of water-borne diseases, 40% of the deaths worldwide are caused by water pollution. The clean and safe drinking water is getting depleted every second hence water purification is todays need. World bank estimates that 21% of communicable diseases in India are related to unsafe water, contamination has been a long-standing problem in our country. The older methods are unable to monitor the water quality in real time and notify the user about the contamination. So, it is necessary to develop a real time water quality monitoring and notification system. Smart solutions for water quality monitoring are gaining importance with advancement in communication technology. Water quality depends on pH, turbidity, temperature along with some other factors are significant, and will be monitored by the system using sensors, through wifi system the sensor output data is sent to concern authority for further steps to improve water quality. The proposed system is portable, automatic water quality monitoring and notification system saves time and human resources. The notification will be sent to authorized person when sensors will detect bad water quality. It is low-cost system for real time water quality monitoring.

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PROJECT REPORT

ON

STREET LIGHT MONITORING AND ACCIDENT DETECTION USING IoT

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

BY

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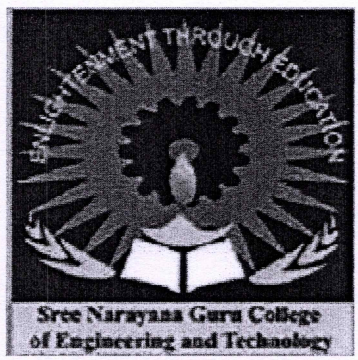

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This is to certify that the report entitled **"STREET LIGHT MONITORING AND ACCIDENT DETECTION USING IoT"** is a bonafide record of the project submitted by **VAISHNAV.T.V (SNC19EE003)** and **VISHAL.K (SNC19EE004)** in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Electrical and Electronics Engineering of the APJ ABDUL KALAM TECHNOLOGICAL University.

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Place: Payyanur

Date: JUNE 2023

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ABSTRACT

Automatic Street Light Control System is a simple yet powerful concept, which uses transistor as a switch. By using this system manual works are 100% removed. It automatically switches ON lights when the sunlight goes below the visible region of our eyes. This is done by a sensor called Light Dependant Resistor (LDR) which senses the light actually like our eyes. It automatically switches OFF lights whenever the sunlight comes, visible to our eyes. In this project, no need of manual operation like ON time and OFF time setting. An efficient vehicle tracking system is designed and implemented for tracking the movement of any equipped vehicle from any location at any time. The proposed system made good use of a popular technology that combines a Smartphone application with Node MCU. This will be easy to make and inexpensive compared to others. This project will help the accident detection and rescue operations quick and effective with the help of proper emergency communication systems.

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ABBREVIATIONS

IoT	Internet of Things
LDR	Light Dependent Resistor
IR	Infra Red
GPS	Global Positioning System
MCU	Micro-Controller Unit
LED	Light Emitting Diode
AC	Alternating Current
DC	Direct Current
GND	Ground
VCC	Voltage Common Collector
UART	Universal Asynchronous Reciever-Transmitter
PWM	Pulse Width Modulator
ADC	Analog to Digital Converter
GPIO	General Purpose Input/Output

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