SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

[Affiliated to VTU, Belagavi] Sira Road, NH-4, Maralenahalli, Tumakuru, Karnataka - 572106

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



CERTIFICATE

Certified that the Report of project work entitled "PURIFICATION OF WATER BY USING SOLAR ENERGY" carried out by SANDEEP K N (1SV15EE029), PRAVEEN KUMAR N (1SV17EE007), PREM KUMAR R (1SV17EE008), MEGHANA G S (1SV18EE401) a bonafide students of SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TUMKUR-572106, has successfully carried out the project work in partial fulfillment for the award of Bachelor of Engineering in Electrical And Electronics Engineering of the Visvesvaraya Technological University, Belagaviduring the year 2021-2022. All the corrections/suggestions indicated for internal assessments have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for Bachelor of Engineering Degree.

ONSTAT M

Signature of Guide

Mrs. Shwetha T M

M Tech MISTE

Asst. Professor Dept. of EEE SIET, Tumkur-06 B. H. Romme

Signature of HOD

Prof. GH Ravikumar

M.Tech.MISTE

HOD and Asst. Professor Dept. of EEE

SIET, Tumkur-06

Signature of Principal

Dr. Narendra Viswanath

Ph.D

Principal SIET, Tumkur-06

External Viva

Name of the Examiners:

1. ...G.H. RAVIKOMAR
2. Tanya K-S

Roume 22.7.22

PRINCIPAL SIET, TUMAKURU

Signature with Date:

UNDERTAKING

We, SANDEEP K N (1SV15EE029), PRAVEEN KUMAR N (1SV17EE007), PREM KUMAR R (1SV17EE008), MEGHANA G S (1SV18EE401) Student of 8th semester, Bachelor of Engineering in Electrical & Electronics Engineering, S.I.E.T, Tumkur. here by declare that the Project work titled "PURIFICATION OF WATER BY USING SOLAR ENERGY", embodies report of our Project work carried out by us under the guidance of Mrs. SHWETHA T M Dept. Of EEE, Shridevi Institute of Engineering and Technology, Tumkur, as Partial fulfillment of requirements for the award of B.E. Degree. This Project work has not been submitted for the award of any other degree.

USN

PROJECT ASSOCIATES

SIGNATURE

1SV15EE029 1SV17EE007 1SV17EE008 1SV18EE401 SANDEEP K N PRAVEENKUMAR N PREMKUMAR R MEGHANA G S Sordeep KN Prometof:... Pro-

Place: Tumkur

Date: 22/7/2022

PRINCIPAL SIET., TUMAKURU

ABSTRACT

In this paper, we are making a water purifier which works on solar energy. The basic principle behind this project is reverse osmosis. The solar radiations are collected by solar panel. This energy is then stored in a battery. The battery is connected to the purification unit through a electromagnetic relay. The purification unit consists of high pressure motor, reverse osmosis system and the water tank.

This system has designed a water purification system to augment the village's water distribution system. The system utilizes sediment filtration supplemented with ultraviolet light to effectively filter and sterilize contaminated well water as it is pumped to the village reservoir. The goal of the project was to meet the needs of the village and provide a long term water treatment solution.

The purpose of this report is to present an overview of the entire project including the design solution, project cost, construction, and maintenance information, testing and evaluation results and future field testing plans.

Dombo Servetto PRINCIPAL SIET. TUMAKURU