



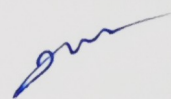
3.3.1 Number of research papers published per teacher in the Journals notified on UGC CARE list during the year 2019

Sr. No.	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Calendar Year of publication	ISSN number
1.	Internet Of Things (IOT) Based Underground Cable Fault Detector Using ATmegaMicrocontroller	Prof. NehaChourasia	ETC	International Journal of Science and Engineering Development Research (IJSER), ISSN No: 2455-2631, Volume 4, Issue 3, March 2019.	March 2019.	ISSN No: 2455-2631
2.	Internet Of Things (IOT) Based Underground Cable Fault Detector Using ATmegaMicrocontroller	Prof. NehaChourasia	ETC	International Journal of Science and Engineering Development Research (IJSER), ISSN No: 2455-2631, Volume 4, Issue 3, March 2019.	March 2019.	ISSN No: 2455-2631
3.	Review on Design and Development of a smart baby monitoring system	prof. Deepak Deshpande	ETC	International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No: 2349-5162,	March 2019.	2349-5162
4.	Accident Prevention Alert and theft detection using GSM and GPS	prof. Deepak Deshpande	ETC	International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No: 2349-5162,	March 2019.	2349-5162

5.	A Review on Internet Of Things (IOT) Based Underground Cable Fault Detection	Prof. NehaChourasia	ETC	International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN No: 2349-5162,	2019	ISSN No: 2349-5162,
6.	A Review on smart AC using Peltier Module	Prof. NehaChourasia	ETC	iosrjen	2019	2278-8719
7.	Review on IOT Based smart Agriculture system	Prof. KajalDhawale	ETC	International Journal for Research in Applied Science and Engineering Technology	2019	Online ISSN: 2395-602X
8.	A Survey on Risk Assessment of Diabetic Retinopathy using Data Mining Techniques	Prof.KalpanaMalpe	CSE	IJSRSET	2019	2394-4099
9.	A Review on Prediction of Diabetic Retinopathy using Data mining Algorithms	Prof.KalpanaMalpe	CSE	IJSRCAEIT	2019	2456-3307
10.	Web based Geographic Information System Development Using Django Framework	Prof. Shweta B. Ramteke	CSE	IJSREM	2019	2582-3930
11.	A Review on Machin learning Techniques to predict Diseases	Prof VijayaKamble	CSE	IJSRSET	2019	2394-4099
12.	Performance analysis of biofuel- ethanol blends in diesel engine and its validation with computational fluid dynamics	Prof VijayaKamble	CSE	IJCITB,2020	2019	ISSN 2278-7593
13.	Automated Billing Trolley System Using Raspberry Pi and GSM Device	prof. Deepak Deshpande	ETC	JETIR	2019	2349-5162

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14	"Ways to Improve Work Environment."	Dr .Jonathan Joseph	MBA	International Journal of Science and Research Methodology ISSN 2454- 2008, Volume.: 12,issue2	2019	ISSN 2454- 2008, Volume.: 12,
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Internet of Things (IOT) Based Underground Cable Fault Detector using ATmega Microcontroller

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¹Assistant Professor, ^{2,3,4,5}Students

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Abstract: A fault is an unexpected change of the system functionality, which causes deviation of a plant behavior from that which is specified it. The problem of detect the location of fault in transmission line has become complex and expensive which depended on The current mechanism used to detect the fault in power transmission lines approximated by the calculation of the impedance obtained from voltage and current data. The works of this is to find solution of how detected and located of fault in the transmission line Diagnosing fault source is difficult and entire cable should be taken out from the ground to check and fix faults. The project work is intended to detect the location of fault in underground cable lines from the base station in km using a micro-controller 8051. To locate a fault in the cable, the cable must be tested for faults. This prototype uses the simple concept of Ohms law. The current would vary depending upon the length of fault of the cable. In the urban areas, the electrical cables run in underground instead of overhead lines. Whenever the fault occurs in the underground cable it is difficult to detect the exact location of the fault for process of repairing that particular cable. The proposed system finds the exact location of the fault. The prototype is modeled with a set of resistors representing cable length in km and fault creation is made by a set of switches at every known distance to cross check the accuracy of the same. In case of fault, the voltage across series resistors changes accordingly, which is then fed to an ADC to develop precise digital data to a programmed 8051 IC that further displays fault location in distance. The fault occurring distance, phase, and time is displayed on a 16X2 LCD interfaced with the micro-controller. IOT is used to display the information over Internet using the Wi-Fi module ESP8266. A web page is created using HTML coding and the information about occurrence of fault is displayed in a web page. At the end of research we have acquired results that it can be determined where the error with high accuracy.

Index Terms: Underground Cable, Fault Location, Location Methods, Micro-controller, web page, IOT.

I. INTRODUCTION

In an electric power system, a fault is detected by any abnormal electric current follow. For example, a short circuit is a fault in which current bypasses the normal load. An open-circuit fault occurs if a circuit is interrupted by some failure. In three-phase systems, a fault may involve one or more phases and ground, or may occur only between phases. In a "ground fault" or "earth fault", charge flows into the earth. The prospective short circuit current of a fault can be calculated for power systems. In power systems, protective devices detect fault conditions and operate circuit breakers and other devices to limit the loss of service due to a failure. In a poly phase system, a fault may affect all phases equally which is also called symmetrical fault. If only some phases are affected, the resulting asymmetrical fault becomes more complicated to analyze because the simplifying assumption of equal current magnitude in all phases is no longer applicable. The analysis of this type of fault is often simplified by using methods such as symmetrical components.

A symmetric or balanced fault affects each of the three phases equally. In transmission line faults, roughly 5% are symmetric this is in contrast to an asymmetrical fault, where the three phases are not affected equally. An asymmetric or unbalanced fault does not affect each of the three phases equally Power transmission and distribution lines are the vital links that achieve the essential continuity of service of electrical power to the end users. Transmission lines connect the generating stations and load centers. Faults are caused either by insulation failures and conducting path failures. Most of the faults on transmission and distribution lines are caused by over voltage due to lighting and switching surges or by external conducting objects falling on over head lines. Birds, tree branches may also cause faults on over head lines. Other causes of faults on over head lines are direct lightning strokes, aircraft, snakes, ice and snow loading, storms, earthquakes, creepers etc. In the case of cables, transformers, generators the causes may be failure of solid insulation due to aging, heat, moisture or over voltage, accidental contact with earth.

II. TYPES OF FAULTS IN CABLE

1.1.1. Open Circuit Fault:

When there is a break in the conductor of the cable, it is called open circuit fault of the cable. The open circuit fault can be checked by meager. For this purpose, the three conductors of the 3-core cable at the far end are shorted and earthed. Then resistance between each conductor and earth is measured by a meager. The meager will indicate zero resistance in the circuit of the conductor that is not broken. However, if the conductor is broken, the meager will indicate infinite resistance in its circuit.

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A Review on Internet Of Things(IOT) Based Underground Cable Fault Detection

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1. Series faults
2. Shunt faults

A fault if unclear has the following effects on a power system.

- Heavy short circuit current may cause damage to equipment or any other element of the power system due to over heating or flash over and high mechanical forces set up due to heavy current.
- There may be reduction in the supply voltage of the healthy feeders, resulting in the loss of industrial loads. Short circuits may cause the unbalancing of the supply voltages and currents, there by heating rotating machines.
- There may be a loss of system stability. The faults may cause an interruption of supply to consume

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In recognition of the publication of the paper entitled

Review on Design and Development of a Smart Baby Monitoring System

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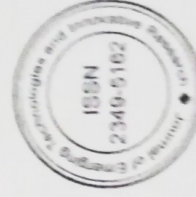
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A Review on Smart Ac Using Peltier Module

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Abstract: The presently in use air conditioning system produces cooling impact by refrigerants like Freon, Ammonia etc...using these refrigerants will get maximum output however, one among the main disadvantages is harmful gas emission and global warming, this problem can be overcome by using thermoelectric module air conditioner and their by protecting the environment. If, standard vapour compression type of air conditioner presently employed in vehicle is replaced with this one with an arrangement for its placement. It would reduce the overall weight of vehicle and increase fuel economy. It will have a smart functioning like when we want to control it we just need to give voice command to our android phone like "ok Google turn on my AC ".same likewise for turned it off". It is IOT based and we can control it using remote control too. Thermoelectric cooling system have benefits over standard devices like, compact in size, light weight, high reliability, no mechanical moving element and no operating fluid.

Keywords: Peltier module, thermoelectric air-conditioner, Vehicle, Global-warming, IOT based.

I. Introduction

Air conditioning is one of the major consumers of electrical energy which causes energy shortage. It is also one of the main causes of global warming. We know how beneficiary air conditioner is. It increases the efficiency of human being, provide us with cool air and comfortless. Besides all these air conditioners have some disadvantages. Humans may suffer from headaches, nasal issues etc. In extreme cases pneumonia and asthma attacks can also develop. These air conditioners don't affect only humans but also, they indeed contribute to greenhouse effect. So, the best way to get rid of this is by making use of natural resource rather than using electrical energy. So, the best alternate is thermal energy which uses Peltier effect which has the ability of cooling the specific area. This model does not need any compressor, primer moving parts etc. The main objective of this project is to deliver a low-cost air-conditioning system which works on Peltier module that can be used at remote areas where people cannot afford high cost air conditioning system.

II. Literature survey

[1] Allwin Jose, Alan D'souza, Sarvesh Dandekar, Jitesh Karamchandani, Pavan Kulkarni, "Air Conditioner victimization Peltier Module", 2015 International Conference on Technologies for property Development (ICTSD-2015), Feb. 04 – 06, 2015, Mumbai, Asian country 978-1-4799-8187-8/15/\$31.00 ©2015 IEEE

In this paper author gives a picture of a conceptual design of an air conditioner using Peltier modules to achieve desired amount of cooling. The appearance of this thermo electrical variety of air conditioning resembles a standard window air conditioning. This brings the simplicity in construction. The air conditioning is meant to require up the cooling load in volume of house as in typical vehicles like cars. If typical vapour compression style of air con presently utilised in vehicles is replaced with this one with an appointment for its placement, it would reduce the total weight of vehicle and increase fuel economy.

[2] Pavan Attavane, Arjun G B, Rajath Radhakrishna, Santhosh Rao, "Jadav Solar powered portable food warmer and cooler based on peltier effect" 2nd IEEE International Conference On Recent Trends in Electronics Information & Communication Technology (RTEICT), May 19-20, 2017, India 978-1-5090-3704-9/17/\$31.00 © 2017 IEEE1975

In this paper, we aim at presenting a preponderant, propitious and a simple solution for performing both cooling (Refrigeration) and heating effects in a more efficient manner by the utilization of solar energy. The Peltier module is more efficient, static and easy to handle. It is reliable and eco- friendly. A prototype has



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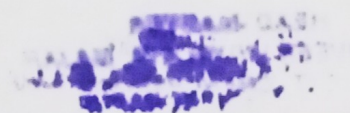
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10-Feb-2019

CERTIFICATE OF PUBLICATION

This is to certify that **Kajal Sanjay Kothare, Prof. Kalpana Malpe** have published a research paper entitled '*A Review on Prediction of Diabetic Retinopathy Using Data Mining Algorithms*' in the International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), Volume 5, Issue 1, January-February 2019.

This Paper can be downloaded from the following IJSRCSEIT website link

<http://ijsrcseit.com/CSEIT195179>

IJSRCSEIT Team wishes all the best for bright future



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International Journal of Scientific Research in Computer Science, Engineering and Information Technology

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CERTIFICATE OF PUBLICATION

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