

# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(Approved by AICTE, Affiliated to JNTU, Hyderabad)

Volume - 7



"We cannot solve our problems with the same thinking we used when we created them." - Albert Einstein

5th September Is Celebrated As Teacher's Day All Over The India Every Year. It Is The Birth Anniversary Of Dr. Sarvepalli Radhakrishnan

### EDITORIAL DESK

Hello!!! We are happy to welcome you all aboard the fledgling 7th edition for the scintillating year 2017. TECHINNOVATION is the newsletter of the ELECTRONICS & COMMUNICATION **ENGINEERING** which aims to bring forward the buzz from the department in the past few months. The edition demystifies the realms of Electronics & Communication Engineering and also provides insight to the latest technology adopted in the field. Hope our deeds would ignite everyone's life!!!

#### HOD'S DESK

It is a theme of happiness to articulate with all of you Through this 7th newsletter. Within these pages you will Find much news related to Diverse activities from the Whole faculty and students Of ECE department. I am cheerful for the initiatives taken by the faculty to disseminate knowledge by organizing various activities in the department. I hope everyone will find this news letter Exciting and interesting.

## ECE DEPARTMENT

Department of Electronics and Communication Engineering was started since the inception of VIGNAN'S Institute of Management and Technology for Women during 2008 with an initialintake of 60. The strength was enhanced to 120 during 2005. The Department had added Post graduate program in VLSI during the year 2012 and Embedded Systems during 2014 with an intake of 18 each. The Department is headed by well qualified

#### VISION

To transform the students into technologically competent professionals, with abilities to address the societal challenges of the time through innovative technical practices in electronics & ommunication engineering

#### / MISSION

M1: To foster inquisitivedriven advanced knowledge building among students for reinforcing the domain knowledge, develop capabilities, skills and solve complex engineering problems

M2: To prepare industryready graduates for global Electronics as well as communication based engineering companies by conducting training programs, workshops and industry visits.

M3: To build leadership qualities, research aptitude among students for the contribution of economic and technologies in ological development in cutting edge technologies in national and as well as in the global arena.



# FACULTY ACHIEVEMENT IN INTERNATIONAL CONFERENCE

- 1. Dr.P.Sudhakar Rao, A Low Power Low Area Crosstalk Avoidance Logic for 45nm ASIC Applications, 2017.
- 2. Narendra Gali, IOT Application: Implementation of GSM Based Security System using microcontroller Engineering-2017.

#### RESEARCH PUBLICATIONS

- 1. G.RAMA KRISHNA & VIJAYKUMAR, R.URKUDE Title Name: Design and Development of Efficient Energy Consumption Based on Low Power Listening for WSN in Noisy Environments using with AEDP Protocol ISAR International Journal of Electronics and Communication Ethics-Volume 1, Issue 4, July Aug 2017
- 2. HIMA BINDU KATIKALA, DR. USHA RANI.NELAKUDITI, A Low Power High Efficient Radio Frequency Clock Generator for Bio-Implants Proceedings of the 2nd International Conference on Communication and Electronics Systems (ICCES 2017) IEEE XPLORE Compliant Part Number:CFP17AWO-ART, ISBN:978-1-5090-5013-0

## ECLATZ CLUB ACTIVITIES

· POSTER MAKING · PROJECT PRESENTATION

### WORKSHOP & SEMINAR

A Two Day Workshop on "EMBEDDED C PROGRAMMING" On 18-09-2017 & 19-09-2017 Convener; MR.P.HARIKRISHNA

## CULTURAL ACTIVITIES & SPORTS

- · Basket Ball Ground
- · Throwball Ground
- · Ilirowball Ground
- · Cricket Ground
- · Dancing

- · Volley Ball Ground
- · Kabaddi Ground
- · Tennikoit Court
- ·Singing

FACULTY TECHNICAL ARTICLE

**ROAD LIGHT GATEWAY** 

STUDENT TECHNICAL ARTICLE

**SOLAR MOBILE CHARGER** 

CAMPUS PLACEMENTS

providing Placement support to the students in the prestigious organizations, we also facilitate training of our students in the campus by reputed training organizations, project work for the students in the final year, continuous institute-industry interactions, participation in exhibitions, fairs, seminars and conferences, counseling of the students on job opportunities, -

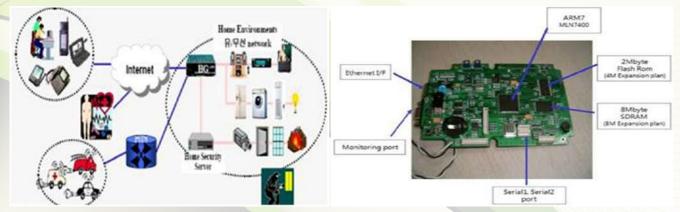
## Faculty Technical Article: Title - Road Light Gateway

#### Introduction

The important study for this convergence system is an intelligent of the integrated devices. In order to implement the road lamp of LED type with sensor by network, we are interconnecting between lamp posts, which can integrate the platform of various LED device, sensor hardware specification and dimmer function [3]In this paper, we use the ad-hoc network technology to integrate the lamp posts.

## **Conclusion and Future Scope**

In this paper, we have developed the gateway that can interconnect between EMS center and the lamp post using the CDMA. The sensor node among road lamp posts can gather the various data like the intensity of illumination of LED, humidity and CO2. The one is transmitted into an EMS center through the gateway. It is necessary for studying the chip to minimize the power and size of gateway. In the future, we must research for the data communication method of Ad-hoc network among the LED lamp posts in order to growth up the real time process and an efficiency of the network.

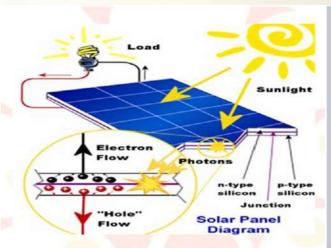


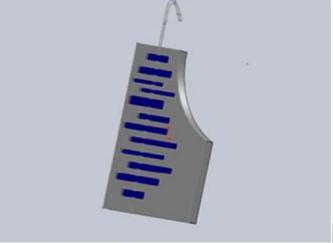
## Student Technical Article: Title - Solar Mobile Charger

Solar cell phone chargers use solar panels to charge cell phone batteries. They are an alternative to conventional electrical cell phone chargers and in some cases can be plugged into an electrical outlet. There are also public solar chargers for mobile phones which can be installed permanently in public places such as streets, park and squares. The model which is according to European Commission proclaimed as the first in the world is the Strawberry Tree, public solar charger invented by Strawberry energy Company. This solar station won the first place at "EU Sustainable energy week (EUSEW) 2011" in the Consuming category.

## Conclusion and Future Scope

To make sure we have plenty of energy in the future, it's up to all of us to use energy wisely. We must all conserve energy and use it efficiently. It's also up to those who will create the new energy technologies of the future. All energy sources have an impact on the environment. Concerns about the greenhouse effect and global warming, air pollution, and energy security have led to increasing interest and more development in renewable energy sources such as solar, wind, geothermal, wave



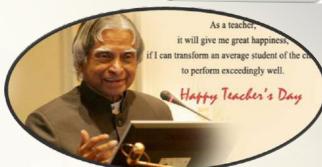


occasion with lots of enthusiasm.

scholar and teacher. In his later life he became the Vice President of Indian Republic and later on the President of Indian Republic. This day reminds us that teachers are like backbone of our society. They play great role in building up character of students and shape their thoughts to become ideal citizens of the nation. The celebrations in the department began with the cake cutting ceremony by, HOD DR.A.NARMADA, ECE Department in the auditorium packed with smiling faces of students and faculty members. The students presented awestruck performances of dancing, singing and ramp walk. The students were blessed by the esteemed presence of Principal, Dr. P.SUDHAKARA RAO who stirred the crowd with their inspiring words.







get elegant solutions to non-existent engineering problems; to add value in our programs. between science and society.

TEACHER'S DAY CELEBRATIONS To identify the great works done by our hardworking Teacher's day was celebrated with huge fervor in the ECE engineers each year 15th September is celebrated as Dept. on 5th of September 2016. It is one day when teachers Engineer's Day marking the birth anniversary of Sir deserve to be given a heartily tribute for their hard efforts of MOKSHAGUNDAM VISVESVARAYYA, recognizing his making nation's future. The department celebrated this contributions in the field of hydro energy in India. There were four technical competitions viz. Poster Making, Project 5th September is celebrated as Teacher's Day all over the Presentation and Circuit Junkies, Electronic Crossword India every year. It is the birth anniversary of DR. organized by the English Faculty ECE Department Faculty for SARVEPALLI RADHAKRISHNAN who was a great the students of ECE Dept. The winners were accolade by

## STUDENT CLUB ACTIVITIES













## CAMPUS PLACEMENTS

VMTW provides full placement support to its students in all in its students. The underlying objective of VMTW for engineering education is to create and transfer knowledge for the welfare of the society. Over the last Eight years VMTW has emerged as one of the most favored destination for hiring fresh Talent from the Campus. Its endeavors to provide Industry compliant talent and emphasis on Quality, Discipline, Self-Learning, Ethics and Values have delivered rich dividends. Our Placement model is a four stage process involving the Pre ENGINEER'S DAY CELEBRATION Placement activities, Career Guidance, Executing Placement Engineer's day on 15th September 2016 "Engineering is the and Post Placement reviews. In addition to providing art of directing the great sources of power in nature for the Placement support to the students in the prestigious use and convenience of man" The department organizations, we also facilitate training of our students in the enthusiastically celebrated Engineer's day on 15th campus by reputed training organizations, project work for September 2016 with active participation from students of the students in the final year, continuous institute-industry all years of B.Tech. Engineering is not merely knowing and interactions, participation in exhibitions, fairs, seminars and being knowledgeable; engineering is not merely analysis; conferences, counseling of the students on job opportunities, engineering is not merely the possession of the capacity to facilitating industry visits and Inviting distinguished speakers

engineering is practicing the art of the organized forcing of Our students today are occupying converted positions in technological change. Engineers operate at the interface Multinationals, Corporates, PSUs and other organizations with excellent compensation packages.

## **CULTURAL EVENTS & TECHNICAL EVENTS ON**













## **CULTURAL EVENTS AND SPORTS**

## INTER COLLEGE EVENTS (OUT SIDE STATE)

OUT SIDE STATE - 26th & 28th

|                 |                                    |           | PAPER<br>PRESENTATI<br>ON  | 6  | 2 |
|-----------------|------------------------------------|-----------|----------------------------|----|---|
| VFSTR<br>GUNTUR | SRUJANA<br>NKURA<br>26-07-17<br>TO | TECHNICAL | POSTER<br>PRESENTATI<br>ON | 2  | 2 |
|                 |                                    |           | TECHNICAL QUIZ             | 8  | o |
|                 |                                    | CULTURAL  | SINGING                    | 6  | 2 |
|                 |                                    |           | DANCING                    | 2  | 1 |
|                 | 28-07-17                           |           | CHESS                      | 7  | 1 |
|                 |                                    | SPORTS    | THROW BALL                 | 12 | 6 |
|                 |                                    |           | CARROMS                    | 2  | 1 |

We reap what we sow. We are the makers of our own fate. None else has the blame, none has the praise.

Swami Vivekananda



## WORKSHOP AND SEMINAR on 18th & 19th Sept 2017

#### EMBEDDED AND C PROGRAMMING:

Embedded C is one of the most popular and most commonly used Programming Languages in the development of Embedded Systems. So, in this article, we will see some of the Basics of Embedded C Program and the Programming Structure of Embedded C.

Embedded C is perhaps the most popular languages among Embedded Programmers for programming Embedded Systems. There are many popular programming languages like Assembly, BASIC, C++ etc. that are often used for developing Embedded Systems but Embedded C remains popular due to its efficiency, less development time and portability

An Embedded System can be best described as a system which has both the hardware and software and is designed to do a specific task. A good example for an Embedded System, which many households have, is a Washing Machine.

#### **Programming Embedded Systems:**

As mentioned earlier, Embedded Systems consists of both Hardware and Software. If we consider a simple Embedded System, the main Hardware Module is the Processor. The Processor is the heart of the Embedded System and it can be anything like a Microprocessor, Microcontroller, DSP, CPLD (Complex Programmable Logic Device) and FPGA (Field Programmable Gated Array).

All these devices have one thing in common: they are programmable i.e. we can write a program (which is the software part of the Embedded System) to define