



## VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(Approved by AICTE, Affiliated to JNTU, Hyderabad)  
KONDAPUR VILLAGE, GHATKESAR MANDAL, RANGA REDDY DISTRICT - 501 301.

Volume - 8

### NEWS LETTER

# TECHINNOVATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**"Your test equipment is lying to you and it is your job to figure out how." – Charles Rush**

**Annual Day, Prajwalan -2k18, On 2<sup>nd</sup> February 2018. The Evening Turned Out Extravagant**

## EDITORIAL DESK

Hello!!! We are happy to welcome you all aboard the fledgling 8th edition for the scintillating year 2018. 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 8th 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 initial

intake 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

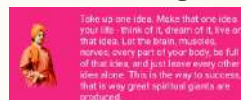
To transform the students into technologically competent professionals, with abilities to address the societal challenges of the time through innovative technical practices in electronics & communication engineering

## MISSION

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

M2: To prepare industry-ready 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 technological development in cutting edge technologies in national and as well as in the global arena.



## TECHNICAL EVENTS ON PRAJWALAN

- Project Expo
- Paper Presentation
- Poster Presentation
- Tech Quiz

attracting the participation of more than 1000 participants from all over the country

## PARENTS, FACULTY INTERACTION PROGRAMME

The faculty members from ECE Department invited parents of students enrolled in B.Tech to the camps. The purpose of this meeting was to make the parents understand the academic progress of their children in a better manner. The Overwhelming smiles of the parents were a mark of confidence instilled by them in the courses taught by the institute. The faculty keenly took a note of the concerns expressed by both parents and students. These interactions proved to be a successful communication bridge

## CAREER GUIDANCE

### FOR THE NSS VOLUNTEERS ON

Skill development (first aid, disaster management, public speaking, leadership motivation, HIV/AIDS awareness etc.

## PLACEMENT CELL

The Placement Cell facilitates such experiences during their academic pursuit, through.

- Trainings
- Industrial visits
- Guest Lectures
- Career COUNSELLING sessions
- Summer Internships / Live Projects
- Other Corporate Forums
- Business Thought Leadership Sessions
- Infrastructure for placement drives

## RESEARCH PUBLICATIONS

Title Name : Dual band double cross monopole antenna with defected ground structure International Journal of Engineering & Technology.

## BEST STUDENT AWARD FOR THE OVERALL PERFORMANCE

### NAME OF THE STUDENT **Ms. VINDHYA**

Best outgoing student based on the overall performance of the student considering the percentage of attendance, percentage of marks, participation in co-curricular and extra-curricular activities.

## CULTURAL ACTIVITIES & SPORTS

"An Epitome Of Art And Skill" Is A Hospitality Event Held Every Year Where All The Students Are Invited To Participate.

- CHESS ▪ SINGING ▪ DANCING ▪ CAROMS





Prajwalan-a National Level Technical, Cultural & Sports Meet Attracting The Participation Of More Than 1000 Participates From All Over The Country

Feb 3rd 2017: VIGNAN INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN, Approved by AICTE, Affiliated to JNTU Hyderabad KONDAPUR VILLAGE GHATKESAR MANDAL RANGAREDDY DISTRICT, HYDERABAD, celebrated its Annual Day, PRAJWALAN -2K18, on 2<sup>nd</sup> February 2018. The Evening turned out extravagant as it was graced by the HON'BLE Chief Guest, P. MAHENDER REDDY, MLA, MR. GANESH SOMISETTI AUTOCAD, HVAC, CATIA and other talents. GANESH is based out of Hyderabad & has studied ME-Mechanical Engineering, State of TELANGANA.

The HON'BLE Chief Guest was warmly received by the Management of VMTW, the Founder & HON'BLE Chairman, DR.L.RATHAIH, Chairman VIGNAN Group

Mr. B.SHRAVAN, C.E.O VIGNAN Group, HON'BLE Principal, Dr. P.SUDHAKARA RAO, Principal Heads of all the Departments of VMTW, Faculty and Student Coordinators.

The HON'BLE Chief Guest, P. MAHENDER REDDY, enthralled the audience with his mesmerizing speech. He congratulated the management and students of VMTW for the achievements they have had this year, witnessed in the college premises..He also encouraged the students to get their projects practically implemented mentioned the importance of getting into Government examinations .He shared his experiences His words and gestures were truly Light upon Light of the Evening. He was felicitated by the Mr. B.SHRAVAN, C.E.O VIGNAN Group which was the best captured moment of the

Prize giving ceremony happens to be the most awaited event of the Annual Day .The trophies and cash prizes were given to the students for their best performance in sports and Technical Cultural events exhibited.. The entire gathering also witnessed a western dance, enthusing every Heart and soul. A dance performance depicting various festivals added charm to That spectacular evening.

The Annual Day PRAJWALAN -2K18 got concluded with the vote of thanks, given by HOD MRS.A.NARMADA of ECE Department, leaving behind the promise of a handful of brighter hues the next year too.





## Training Programs Conducted for III & IV year students: Training activities for Academic Year 2017-18

| Nature of Event conducted | Dates on which the event was held | Topic   | Participated Students | Faculty of training/Partner |
|---------------------------|-----------------------------------|---|-----------------------|-----------------------------|
| Revision                  | 2-Nov-17                          | Technical   | III & IV Years        | MR. SATYAVANI M V V,FACE    |
| ASSESSMENT Test           | 29-Dec-17                         | Aptitude  | III & IV Years        | FACE                        |
| Resume Building           | 25-Jan-18                         | Resume Building Skills & Resume Building Practice | III & IV Years        | MS.POOJA ARGEKAR,FACE       |
| Vocabulary                | 1-Feb-18                          | Voices and Speech                                 | III & IV Years        | MS.VELPURI MADAM CURY       |
| Brush up Sessions         | 15-Feb-18                         | Technical   | III & IV Years        | MR. SATYAVANI M V V,FACE    |
|                           | 23-Feb-18                         | Aptitude  | III & IV Years        | MR. SATYAVANI M V V,FACE    |
| Career Awareness Program  | 26-Feb-18                         | Abroad Counseling                                 | III & IV Years        | YGK Academy                 |



## WORKSHOP & SEMINAR

"A two days workshop on Design characteristics of "Latest Microprocessors" was conducted on 17th & 18th 2018. About 40 students attended the workshop

Semiconductors (founded in 1957) invented the first Integrated Circuit in 1959 that marked the [microprocessor](#). In 1968, Gordan Moore, Robert Noyce and Andrew Grove resigned from the Fair child semiconductors and started their own company: Integrated Electronics (Intel). In 1971, the first microprocessor Intel 4004 was invented. A microprocessor is also known as a central processing unit in which numbers of peripherals' are fabricated on a single chip. It has ALU (arithmetic and logic unit), a control unit, registers, bus systems and a clock to perform computational tasks. Microprocessor is a single IC package in which a number of useful functions are integrated and fabricated on a single silicon semiconductor chip. Its architecture consists of a central processing unit, [memory modules](#), a system bus and an input/output unit. The Central processing unit consists of one or more arithmetic logic unit (ALU), registers, and control unit. Based on the registers also the generations of microprocessor can be classified. A microprocessor consists of general purpose and special type of registers to execute instructions and to store the address or data while running the program. The ALU computes all arithmetic as well as [logic operations](#) on data and specifies the size of microprocessor like

## COUNSELING FOR HIGHER STUDIES

(GATE/GRE, GMAT, etc.): Other Trainings to students aspiring for Higher Education, such as, M.TECH in India or other countries are facilitated exclusively. Training for Graduate Record Examination (GRE) is facilitated, within the campus after the working hours. Modalities are being worked out for facilitating the trainings for students interested in taking Graduate Aptitude Test Entrance (GATE) and Common Admission Test (CAT).

## NSS REGULAR ACTIVITIES

Under the National Service Scheme our students regularly organize Blood donation camps, Medical camps, Tree Plantation and community awareness programs in rural areas around. NSS Volunteers have participated in many social activities in villages around the college.

## MEDICAL HEALTH CHECKUP

A medical team from KIMS Hospital visited VIGNAN INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN for conducting medical camp .DR ADITYA MBBS along with his team conducted tests of sugar and BP along with consultation. The NSS volunteers of VMTW campus are very energetic and dynamic and demonstrated their social responsibility. The event was completed successfully .All the faculties involved also shown their active participation. The college faculty supported the activity without which this may not have been so successful. The purpose of this activity is to provide basic medical check-up about the health. The college management supported the activity.

## THE NSS VOLUNTEERS ON

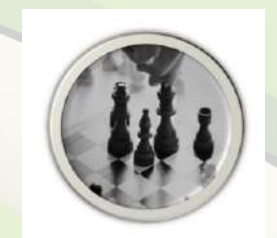
Special Camps provide a unique opportunity to the student youth for group living leadership, close, interaction with the community, mutual understanding, tolerance, cohesion, etc. To make constructive use of student's leisure time for community work, camps are organized during the vacations. During the Special Camps, students are expected to stay the communities where they are holding the camp. These camps are generally of 7 days duration.

- Environment
- Disaster Management
- Rural Developments
- Water Management
- Cleanliness
- Education
- Health
- Focus on swachh bharath

## REPUBLIC DAY

The Republic Day was marked by the unfurling of the national flag by the PRINCIPAL. In his speech The PRINCIPAL mentioned the significance of the day to students and staff. Students, faculty and staff gathered on the occasion and celebrated the day with gusto and a determination to take VMTW to newer heights





## CULTURAL EVENTS AND SPORTS

### INTER COLLEGE EVENTS (WITH IN STATE & OUT SIDE STATE)

#### INTER COLLEGE EVENTS (WITH IN STATE)

|   |                      |           |                     |   |   |
|---|----------------------|-----------|---------------------|---|---|
| VNR VJIE                                  | CONVERGENCE 2K18     | TECHNICAL | PAPER PRESENTATION  | 2 | 0 |
|   | 05-02-18 TO 07-02-18 |           | POSTER PRESENTATION | 6 | 2 |
| VIVEKANANDA INSTITUTE OF HUMAN EXCELLENCE | Youth Convention     | Cultural  | Youth convention    | 2 | 0 |
| BACHPAN PRAYAS                            | Walk For Cause       | CULTURAL  | Walk For Cause      | 2 | 0 |

#### INTER COLLEGE EVENTS (OUT SIDE STATE)

|               |   |           |                     |   |   |
|---------------|---|-----------|---------------------|---|---|
| VFSTR, GUNTUR | VIGNAN MAHASTAV<br>05-01-2018 TO 06-01-2018 | TECHNICAL | PAPER PRESENTATION  | 7 | 4 |
|               |   |           | POSTER PRESENTATION | 2 | 2 |
|               |   |           | PROJECT EXPC        | 6 | 0 |
|               |   | CULTURAL  | SINGING             | 5 | 1 |
|               |   |           | CARROMS             | 2 | 1 |
|               |   | SPORTS    | CHESS               | 1 | 1 |

## CULTURAL EVENTS & TECHNICAL EVENTS ON PRAJWALAN

| S.No. | Technical Events    | No.Of Students Participated | Cultural Events                              |
|-------|---------------------|-----------------------------|--|
| 1.    | Project Expo        | 20                          | Skit, Singing, Dance, Fashion Walk, Dubsmash |
| 2.    | Paper Presentation  | 30                          | Master Chef, Carving                         |
| 3.    | Poster Presentation | 30                          | Rangoli, Treasure Hunt                       |
| 4.    | Tech Quiz           | 30                          | Photography, Short Film                      |
|       |                     |                             | General Quiz, Face Painting                  |
|       |                     |                             | Selfi Contest, Ad Mania                      |

### TECHNICAL ARTICLE BY MR.NAGARAJU

## Hybrid Scooter

### INTRODUCTION

Around 93% of today's automobiles run on petroleum based product, which are estimated to be depleted by 2050. Moreover, current automobiles utilize only 25% of the energy released from petroleum and rest is wasted into the atmosphere. For preservation of gasoline for future and increasing the efficiency of vehicle an electric vehicle can be a major breakthrough. An electric vehicle is pollution free and is efficient at low speed conditions mainly in high traffic areas. But battery charging is time consuming. Gasoline engine proves its efficiency at higher speeds in high ways and waste a lot of energy in urban areas. A hybrid vehicle solves these problems by combining the advantages of both the systems and uses both the

### CONCLUSIONS

HEV is a vehicle that uses two sources of power-gasoline and battery. For low power application battery drive is used whereas for high power application where power requirement is very high gasoline engine is used. Gasoline drive is most efficient at high speed drive. Thus HEV's both mode of operation occurs at their maximum efficiency. But in gasoline engine low speed operation is not efficient. Its high speed mode is only efficient. Therefore, it gives twice the mileage given by a normal vehicle. As this hybrid vehicle emits 50% less emission than normal vehicle it plays an important role for reducing pollution to certain extent without compromising with

### STUDENT ARTICLE by Ms.

## 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.

### 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.