



Department of Electrical & Electronics Engineering
(Accredited by NBA, New delhi)

E - SHOTS

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*NEWSLETTER includes
Articles on,*

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VISION OF THE DEPARTMENT

“To make the Department of Electrical and Electronics Engineering of this Institution the unique of its kind in the field of Research and Development activities in this part of world”.

MISSION OF THE DEPARTMENT

“To impart highly innovative and technical knowledge in the field of Electrical and Electronics Engineering to the urban and unreachable rural student folks through Total Quality Education”

IMPORTANT FACTS OF SOLAR ENERGY



1. The potential to harness solar power was first discovered by Alexandre Edmond Becquerel in 1839. He figured out the photovoltaic effect, or how to create an electrical current in a conductor that's hit by the sun's rays.
2. The first commercial photovoltaic cell was invented in 1954 by Bell Laboratories.
3. The first solar cells were available for purchase to the public in 1956, but at \$300 per one-watt solar cell, few could afford them.
4. The first solar-powered calculators were invented in 1978.
5. In 2016, one company achieved 22.1% efficiency in converting sunlight to energy with their cadmium telluride panels.
6. Surprisingly, Exxon Mobile was one of the first companies to research ways to lower solar cell cost because the company used solar panels to power warning lights on oil rigs.
7. The cost of solar panels has dropped by 80% since 2008, and it is expected to keep falling.
8. As of 2016, the average cost of solar energy alone was about \$0.12 per kilowatt, which is fairly cheap compared to other energy sources.
9. Solar cells are priced per watt. In 1977, solar cells were unaffordable for most to purchase and install—costing around \$77 per watt.
10. As of 2018, solar capacity in India increased 370% in the last 3 years from around 2.6 GW to more than 12.2 GW.
11. In India, Rajasthan recorded low solar tariff of 2.44 rupees per unit.
12. Most solar panels have a 25-year warranty, and if you rent or lease, most companies provide free maintenance.
13. Solar power plants can last 40 years or 50 years.
14. Many states allow you to sell the excess solar energy you produce, meaning you can not only earn back the cost of your panels but also make a profit on energy in the long run.
15. It takes the average homeowner six to fifteen years to pay off their solar panels; those living in sunnier climates or states with good incentive programs can do it in as little as two years.

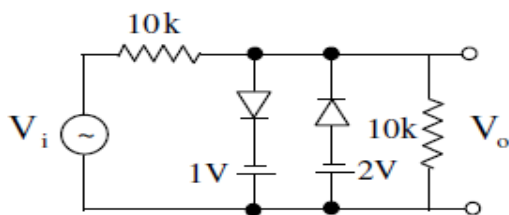
16. In 2016, there was one new solar panel installation every 84 seconds.
17. NASA is presently working on a solar-powered aircraft.
18. China is the world leader in solar energy.
19. China has the most solar power wattage in the world—78,100 gigawatts—followed by Japan, Germany, the United States, and Italy.
20. Every square meter of our planet receives around 1,366 watts of direct solar radiation.

QUOTES

“The one who are crazy enough to think that they can change the world, are the once who do.” - Steve Jobs, CEO, Apple Inc.

GATE CORNER

Assuming the diodes to be ideal in the figure, for the output to be clipped, the input voltage V_i must be outside the range.



- | | |
|--------------------|--------------------|
| (A) $-1V$ to $-2V$ | (B) $-2V$ to $-4V$ |
| (C) $+1V$ to $-2V$ | (D) $+2V$ to $-4V$ |

Answer: (B)

Explanation:

- When both diodes are OFF, $V_o = V_i / 2$ (Not clipped).
- Therefore, for the clipped, V_i must be outside the range $-2V$ to $-4V$.

EVENTS HAPPENED IN THE DEPARTMENT

- ✚ On behalf of EEE Association a programme on **“World Students day”** was organized on 31.01.2018.
- ✚ On behalf of ISTE a contest on **“Multimedia Presentation”** was conducted on 31.01.2018.
- ✚ A Guest lecture on **“SRM and its Applications”** was organized on 19.01.2018, **Mr. K. Soundararajan, CEO/NICHELIFE, Chennai** acted as the recourse person.



- ✚ A One Day **“TECH FEST”** for polytechnic students was held on 21.02.2018.



✚ On behalf of ISTE, a Chart presentation contest titled **“Know your Inventor”** was held on 07.02.2018.

✚ On behalf of Green Energy Club, Idea presentation lecture titled **“Bio-mimicry: Innovation inspired from nature”** was organized on 20.02.2018.

✚ ISTE Student Chapter and EEE Association organized **“National Level Project Contest”** on 20.03.2018



✚ An ISTE approved Guest lecture titled **“Energy Audit”** on 09.03.2018, the resource person for the program was **Er. A. Ramalingam, Assistant Engineer, Training Institute, TNEB, Madurai.**

✚ An ISTE approved Guest lecture titled **“Power System Transients”** was held on 26.03.2018, the resource person for the program was **Dr. S. Nagalakshmi, M.E., Ph.D., Professor & PG Programme Head, Department of EEE, Sethu Institute of Technology.**

✚ A Guest lecture through SKYPE on **“IoT for Renewable Energy”** on 09.03.2018, the resource person for the program was **Mr. Deva P. Seetharaman, CEO/ Dataglen, Bangalore.**

✚ A Guest lecture on **“Shoot your Mental Block”** was organized to our second year students by **Mr. A. Tenzing** on 13.03.2018.

ACHIEVEMENTS BY DEPARTMENT

✚ The Department of Electrical and Electronics Engineering won **Best Department Award** among double intake departments during 20th annual day on 27.01.2018



✚ The Department of Electrical and Electronics Engineering won **Best Stall Award– Content Presentation** during 20th annual day on 27.01.2018.

✚ Department won **Best Cleanliness Award** during 20th annual day on 27.01.2018.

ACHIEVEMENTS BY FACULTY MEMBERS

✚ **Dr. D. Prince Winston, ASP/EEE** is being awarded from **Integrated Intelligent Research (IIR)** as **Young Researcher Power Electronics and Drives** for the year 2017 as a part of Republic Day Achievers Award - 2018 on 18.01.2018.

This award recognizes his outstanding best practices and contribution in the field of Education and Research.

✚ **Mrs. B. Noorul Hamitha, AP/EEE, S. Rajavinita and K. Lavanya of I ME-PSE** has published a paper “Design a Two Stage Grid Connected PV Systems with Constant Power Generation and Input Output Linearizer” **International Journal for Research** in February, 2018.

✚ **Mrs. J. Jeslin Drusila Nesamalar, AP/EEE** has successfully defended her dissertation in **Ph.D. public viva voce examination held at TCE, Madurai** on 21.02.2018 and she has been awarded as doctorate.

✚ **Ms.S. Vimala Devi, AP/EEE** has cleared the CLAD exam held on 16.2.2018 and become certified as **LABVIEW** developer.

✚ **Dr. D. Prince Winston, ASP/EEE** has published a paper “Maximum Power Extraction in Solar Renewable Power System - A Bypass Diode Scanning Approach.” **Journal of Computers & Electrical Engineering - SCI Journal** in February, 2018.

✚ **Mr. Guru Karthik Babu, AP/EEE** has published a paper “Study on characterization and physicochemical properties of new natural fiber from *Phaseolus vulgaris*” **Journal of Natural Fibers - Peer Journal** in Feb, 2018.

✚ **Mrs. B. Noorul Hamitha, AP/EEE and R. Manoj Kumar of IV EEE** published a paper “Power Consumption Alerting

System” **International Journal of Current Engineering and Scientific Research (IJCESR)** in February, 2018.

✚ **Ms. P. M. Devie, AP/EEE and Dr. S. Kalyani Professor & HoD/EEE** have published a paper titled “**Residential load Monitoring and Control using IOT**” in the National Conference on Recent Trends in Electrical, Electronics, Communication and Computing Technologies held at P.S.R. Rengasamy College of Engineering for Women, Sivakasi on 23.02.2018.

✚ **Mrs. B. Noorul Hamitha, AP/EEE** presented a paper on “**Harvesting energy from the vibration of a passing train for railway application**” at “**National Conference on Recent Trends in Engineering & Technology**” on 14.03.2018 at Rathinam Technical Campus, Coimbatore.

✚ **Dr. D. Prince Winston, ASP/EEE** has published a paper “Integrated PV/T solar still- A mini-review” **Journal of Desalination/ Elsevier - SCI Journal** in March, 2018.

✚ **Dr. D. Prince Winston, ASP/EEE** has published a paper “Experimental investigation on hybrid PV/T active solar still with effective heating and cover cooling method” **Journal of Desalination/ Elsevier - SCI Journal** in March, 2018.

GUEST LECTURE DELIVERED/INDUSTRIAL VISITS BY FACULTY MEMBER

✚ **Dr. D. Prince Winston, ASP/EEE** delivered a guest lecture on “**Solar PV Systems: Introduction, Design and Performance**” at Two day workshop on “**Solar System**” on 16.02.2018 at Mepco Schlenk Engineering College, Sivakasi.

✚ **Dr. D. Prince Winston, ASP/EEE** has done Energy Audit at Riya Oil Products Pvt. Ltd., Aruppukottai on 15.02.2018.

✚ **Dr. D. Prince Winston, ASP/EEE** has Visited Sanat Biotech Ltd on 20.02.2018.

STUDENTS' INDUSTRIAL EXPOSURE

✚ **Aswinkumar. M and Kalai Parthiban. R** of IV EEE have undergone internship in **KELTRON**, Trivandrum, Kerala during 08.01.2018 to 13.01.2018.

✚ **Kiran Kumar N, Ajith T M, Keerththika A, Subasri G, and Iswarya Lakshmi K** of IV EEE have undergone internship in **ZF TVS Electronics Pvt. Ltd**, Madurai during 02.01.2018 to 17.01.2018.

✚ **Muthukani P, Jeya Prakash S and Surzith Kumar P** of IV EEE has undergone internship at Able Electronics Limited, Coimbatore during 01.02.2018 to 10.02.2018.

✚ **Dheivanai.M, Kiruthiga.S, Shanthi.M, and Suba Sree.PA** of IV EEE has undergone internship in Industrial Controls & Drives (India Pvt Ltd), Chennai during 12.02.2018 to 24.02.2018.

STUDENTS' ACHIEVEMENTS

✚ **R. Kalaiparthiban** of IV EEE has got selected in **Just dial** recruitment drive with a salary package of 2.4 LPA on 06.01.2018

✚ **P. Karuppasamy and S. Marimuthu** of IV EEE has got selected in **Excess Renew Tech Private Limited** recruitment on 03.01.2018

✚ **B.Vignesh, G. Kannan, S. Venkida Krishnan, M. Chinna Muneeshwaran, A. Ajitkumar, B. Jawahar & M. Mahendran** of IV EEE has got selected in **SS Technovation, Coimbatore**.

✚ Two Students from IV EEE have have got selected in **Innovate Engineering Solutions, Chennai** with a salary package of 96,000 PA.

✚ Two Students from IV EEE have got selected in **Kaavian Systems** drive held on 08.02.2018 with a salary package of 2.4 LPA.

✚ Seven Students from IV EEE have got selected in **Apptivo Software Pvt.Ltd** drive held on 16.02.2018 with a salary package of 1.2 LPA.

✚ Three Students from IV EEE have got selected in **Infosys pooled campus** drive held on 22.02.2018.

- ✚ One Student from IV EEE has got selected in **Calibre Interconnect Solutions** drive held on 08.02.2018 with a salary package of 1.8 LPA.
- ✚ Four Students from IV EEE have got selected in **Windcare India Pvt** with a salary package of 1.2 LPA.
- ✚ Two Students from IV EEE have got selected in **Global Solutions** drive held with a salary package of 4.8 LPA.
- ✚ Two Students from IV EEE have got selected in **Solaritis KPO** drive held with a salary package of 1.4 LPA.
- ✚ **Arun. B of III EEE** have participated in **Hackathon** held at **Anand Institute of Higher Technology, Chennai** and won **Best Innovation Project Award** on 05.01.2018-06.01.2018
- ✚ **Vadivel Arun.K, Johnson Timmy Samuel. R & Balaji.K of III EEE** have won II prize (cash award of Rs.1500/-) in **IEEE project contest** conducted at **Vellamal College of Engineering & Technology, Madurai** which were held on 09.02.2018.
- ✚ **Anantha Balaji of I EEE** got selected for the Smart Fifty Regional Round Innovation Competition to be held at **Bengaluru - Feb 19-20 (South Zone)**. **Name of the Project:** Fuzzy Based Smart AC Controller for Energy Saving.
- ✚ **Z. Zameema Benazir of IV EEE** has cleared the CLAD exam with a score of **90%** held on 16.2.2018 and become certified as **LABVIEW** developer.
- ✚ **12 students from III year EEE** have cleared the CLAD exam held on 16.2.2018 and become certified as **LABVIEW** developers.
- ✚ **A.Sweetlin Jebasingh of I-PG Power System Engineering** has participated in **Indo-Nepal T20 Invitational Cricket Series-2018** from 22nd – 26th Feb, 2018 held at **Rangashala Cricket Ground, Pokhara, Nepal** and also won the series.
- ✚ **B. Arun, M. Ammu Bakya and C. Nagaraj of III EEE** have participated in **LEARNATHON** -National level largest competition.
- ✚ **G. Nandhini of IV EEE** has certified as **Oracle Certified Associate, JAVA SE 8 Programmer** by ORACLE on 28.02.2018.
- ✚ **G. Nandhini and K.R. Nandhiney of IV EEE** have published a paper titled “Residential load Monitoring and Control using IOT” in the National Conference on Recent Trends in Electrical, Electronics, Communication and Computing Technologies held at P.S.R. Rengasamy College of Engineering for Women, Sivaksi on 23-02-2018.
- ✚ **R. Johnson Timmy Samuel, P. V. Aravind Baskar, Gowsalya, Arun. B, M. Ammu Bakya** got prize in **ENVIRO CONCLAVE-Green & Clean India- Best Poster Presentation** on 09.03.2018 in **ORA 2018**.
- ✚ **Arun B –III EEE B** participated in 36 hours nonstop world biggest Guinness

record hackathon conducted by Rajasthan government at Jaipur on 18.03.2018-21.03.2018.

✚ **G. Nandhiney, K.R. Nandhini - IV EEE A** got first prize in Project Presentation contest-National level Technical symposium ZERONE 2K18 on 12.03.2018 & 13.03.2018 at Government College of Engineering, Tirunelveli.

✚ **S. Venkida Krishnan – IV EEE A** won

- **II PRIZE** in Roaster Quiz- National Engineering College (ALTANZIA 2K18)
- **I PRIZE** in Pirates of Altanzia-National Engineering College (ALTANZIA 2k18)
- **II PRIZE** in Fabri Memes- National Engineering College (ALTANZIA 2k18)
- **I Prize** in Circuit Debugging on 13.03.2018-14.03.2018

✚ **R.Raghul of IV EEE A** won

- **II PRIZE** in Roaster Quiz- National Engineering College (ALTANZIA 2K18)
- **I Prize** in Circuit Debugging on 13.03.2018-14.03.2018

✚ **M. Mahendran- IV EEE, Mohamed Kalam –II EEE, Anantha Balaji- I EEE** has won first, thirteenth, tenth position in **Mini Marathon Competition** on 17.03.2018.

✚ **V. Rithi Andal Pooja of II EEE** has secured 432nd rank in IEO Exam.

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