Vision

- To promote excellence in Telecommunication & Information Technology education and prepare our students to face fast growing challenges of the competitive world

Missions

- M1- To provide excellent education by balancing both theoretical and practical aspects of Telecommunication Engineering.
- M2- Department is dedicated to equip students with strong foundation to enable them for continuing education.
- M3- To promote Professional skills, Ethical and Spiritual values resulting in service to the community

Program Educational Objectives:

- To provide socially responsible, environment friendly solutions to Electronics & Telecommunication engineering related broad based problems adapting professional ethics.
- Adapt state-of-the-art Electronics and Telecommunication engineering broad-based technologies to work in multi-disciplinary work environments. .
- Solve broad-based problems individually and as a team member communicating effectively in the world of work.

Programme Specific Outcomes(PSOs)

After completion of diploma in Electronics &Telecommunication Engineering student will be able to:

- Electronics and Telecommunication Systems: Maintain various types of Electronics and Telecommunication systems.
- EDA Tools Usage: Use EDA tools to develop simple Electronics and Telecommunication engineering related circuits.

Departmental Strengths

8 well Qualified & Experienced Faculties

Departmental areas of Specialization

Satellite Communication

Microwave & Radar Communication

Mobile & Wireless Communication

Mechatronics

Embedded System

VLSI with VHDL

Scholarships

1)V.E.S.student Welfare Fund
2)Bhartiya Sindhu Sabha
3)Parpatibai Edanmal Daswani Charitable Trust
4)Suman Ramesh Tulsiani Charitable Trust

MOU's
1)E 14 Technology
2)Anup Engg & Aluminium Engineering
3)Clear Point Instrumentation Pvt. Ltd.
4)National Engineering Corporation
5)MCED (Maharashtra Center for Entrepreneurship Development)

Students Forum

Summer 18 Result

Third Year EJ

Sangle Ashish 84.63%

Bansode Praful 82.74%

Sharma Saloni 82.23%

With Result of 81.82%

Third Yr.ET

Tanmay Shindolkar 84.53%

Mithun Shenoy 84.24%

Komal Bacche 81.29%

Our Prize Winners

1)Praful Bansode, Ashish Sangale STATE LEVEL TECHNICAL QUIZ M.H. SABOO SIDDIK POLYTECHNIC,BYCULLA,FIRST PRIZE

2)Mithun T Shenoy, Sushant Poojari, STATE LEVEL TPP, PILLAI HOC POLYTECHNIC, FIRST PRIZE

3)Saurabh Bhebe,Preeti Sahu,Ashish Sangle,Hemant Gadhave, VIVEK TECHNOTRONIX 2018-19, VESP, SECOND PRIZE

4)Wakade Siddhesh, Shah Dhairya, Naidu Priyanka,
Naidu Priyanka, Choudhary Shraddha, VIVEK TECHNOTRONIX 2018-19

Activities for the Students

Gurupoornima

Technical Presentation Competition

Industrial Visits

Expert Lectures

ISTE Activities

ISA Activities

Sphurti

Surabhi

Anvesh

Career Guidance

Internship

Workshops

Soft Skill Development
VESLARC

Now Ahead

- ***Achievements(Assets) of Department***
- ***Sparkling in multiple Arenas***
- ***Technical Creativity (Projects)of students***
- ***Knowledge gain by Industry Experts(Expert Lecture)***
- ***Hands on Experience(Internship)***

Achievements Of Department

Electronics & Tele-Communication Department has witnessed the Inauguration of SATCOM SKILL CENTRE project .

To improve the institute Industry Interaction and provide more hands on skills to the students, V.E.S. Polytechnic, in collaboration with Institute of Satellite Telecom Pvt. Ltd, Pune, has set up Sat-Com Skill Centre at our Institute.

Dr. Vinod M. Mohitkar , Director, Maharashtra State Board of Technical Education (MSBTE) was Chief Guest for the inauguration of the Center on 23rd March, 2019.
Students from various diploma and engineering colleges can undergo **one day industrial visit, Internship/Inplant training programs.**

Following Facilities are available in the centre:

- Direct to Home (DTH) Network
- V-Sat Antenna Network.
- Video Conferencing Network.
- 4.7 Mtr. Earth Station Antenna
- Telecom Antenna Networks
- VLSI/SMT/CAS/DAS Software,
- Counseling and Awareness of Global Sat-Com Opportunities
- Business Center for DTH/Broadcast. Telecom/CRM/TAT/Software.
- E-Education Through Satellite
- OTT/LPTV/Optical Fiber Network.
- Design & Development FTA Set Top Box

Dr. Vinod M. Mohitkar , Director, Maharashtra State Board of Technical Education (MSBTE) addressing at the inauguration of the Center.

➢ *Sparkling in multiple Arenas*

Navin Walmiki From Third Year EJ receiving Sarvshreshta Award

College General Secretary (GS) for Anvesh 2018-19	Choreographer	Sports GS
		
Mithun Shenoy	Omkar Dambale	Komal Bacche

➢ *Knowledge gain by Industry Experts*

Expert Lectures

1)" Latest Tech. Used In Comp Networking Industry And Futur Tech." By *Mr.Abhishek Surve*, Technical Relationship Manager at Juniper Networks Sunnyvale ,California

2) "The Shrink And The Nut"By *Mr.Atul Khatri,Dr.Anjali Chhabria* , Rotary Club Of Airport

3) "Accelerate And Nurture Your Success Design Your Well Being Through Actualization"
By *Sudhakar Upadhyay* ,Asst. Manager, At Accelerate Nurture Success Services Pvt. Ltd.

Technical Creativity (Projects) of students

at VIVEK-TECHNOTRONICS

Can you believe?

Our young engineers has pioneered around 29 projects starting from FM Transmitter to Robot or from Automation to security system.

ELECTRONICS & TELE-COMMUNICATION ENGG(EJ)

The Project on topic "RF controlled spy Robot with night vision camera" has got 2nd Prize in VivekTechnotronix.

The Project on topic "Automatic rain sensing car wiper using Arduino" has won 3rd prize in VivekTechnotronix.

Workshop :

1)PCB Artwork And Layout Desigining At V,E,S.Polytechnic

2) Nasa Space Apps Challenge Hackathon At L.T.College Of Engineering,Koparkhairane


SPACE APPS
Organized By
SUMVN GS
www.spaceappindia.org

Not only technical activities,but the department is ahead on sports activities also

The Runner Up of Sphurti Trophy ET Department.

The Winner of Sphury Trophy EJ Department

- **Hands On Experience- Internship**

To meet the Industrial requirements, Internship has been introduced by MSBTE for 6 weeks after completion of 4th semester. The students were offered Internships in following industries.

- VITAL ELECTRONICS,MAHAPE
- SRISHTI WIRELESS SOLUTIONS
- KUVAM PROTO SOLUTIONS PVT LTD

- MTNL,POWAI
- UPASANA ENTERPRISES
- NEC,MAHAPE
- MILESTAR
- ANUP ALUMINUM AND ENGINEERING
- CLEAR POINT INSTRUMENTATION
- VEEKY ENTERPRISES
- ADITYA ELECTRONICS
- MYKO ELECTRONICS
- SAM ENTERPRISE

Permanent, wireless self-charging system using NIR band

As wearable devices are emerging, there are numerous studies on wireless charging systems. Here, a KAIST research team has developed a permanent, wireless self-charging platform for low-power wearable electronics by converting near-infrared (NIR) band irradiation to electrical energy. This novel technology can be applied to flexible, wearable charging systems without needing any attachments.

Colloidal-quantum-dots (CQDs) are promising materials for manufacturing semiconductors; in particular, PbS-based CQDs have facile optical tunability from the visible to infrared wavelength region. Hence, they can be applied to various devices, such as lighting, photovoltaics (PVs), and photodetectors.

Continuous research on CQD-based optoelectronic devices has increased their power conversion efficiency (PCE) to 12 percent; however, applicable fields have not yet been found for them. Meanwhile, wearable electronic devices commonly face the problem of inconvenient charging systems because users have to constantly charge batteries attached to an energy source.

A joint team led by Professor Jung-Yong Lee from the Graduate School of Energy, Environment, Water and Sustainability and Jang Wok Choi from Seoul National University decided to apply CQD PVs, which have high quantum efficiency in NIR band to self-charging systems on wearable devices.

They employed a stable and efficient NIR energy conversion strategy. The system was comprised of a PbS CQD-based PV module, a flexible interdigitated lithium-ion battery, and various types of NIR-transparent films.

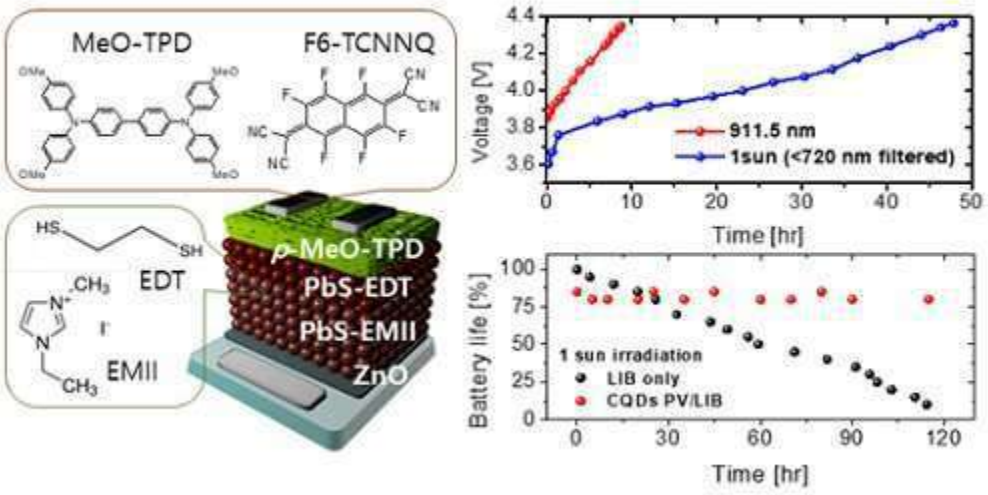

Figure 2. Illustration of the CQD PVs structure and performance of the wireless self-charging platform. Credit: The Korea Advanced Institute of Science and Technology (KAIST)

The team removed the existing battery from the already commercialized wearable healthcare bracelet and replaced it with the proposed self-charging system. They confirmed that the system can be applied to a low power wearable device via the NIR band.

There have been numerous platforms using solar irradiation, but the newly developed platform has more advantages because it allows conventional devices to be much more comfortable to wear and charged easily in everyday life using various irradiation sources for constant charging.

With this aspect, the proposed platform facilitates more flexible designs, which are the important component for actual commercialization. It also secures higher photostability and efficient than existing structures.

Professor Lee said, "By using the NIR band, we proposed a new approach to solve charging system issues of wearable devices. I believe that this platform will be a novel platform for energy conversion and that its application can be further extended to various fields, including mobiles, IoTs, and drones."

Aniket Khade

Third Yr.EJ

Hover 2 – The 4K Drone that Flies Itself

Drones have helped us capture important moments of our lives with greater flexibility than a hand-held digital camera or camcorder. Hover 2 is designed to do that and a lot more, without much human intervention. The drone comes with an AI onboard which not only guides it while flying but also helps capture 4K videos from the best possible angles. The AI is capable of detecting obstacles and dodging them in real time, allowing you to focus on enjoying nature while Hover 2 takes care of the rest. Moreover, it comes in a lightweight and foldable design, and advanced subject mapping that ensures a cinematic quality while the inbuilt gimbal ensures a great amount of stability. All of these features ensure that Hover 2 enjoys a comfortable position in our list of some of the coolest and most awesome inventions of contemporary times.

Aastha patil
Third Year EJ

Transparent Smartphones

The chip, known as (TRRAM) or transparent resistive random access memory, is similar to existing chips known as (CMOS) or metal-oxide semiconductor memory, which we use in new electronics.

The difference is that TRRAM is completely clear and transparent. What is the benefit of having transparency?

"It is a new milestone of transparent electronic systems," says Jung Won Seo. "By integrating TRRAM with other transparent electronic components, we can create a total see-through embedded electronic systems."

The technology could enable the windows or mirrors in your home to be used as computer monitors and television screens.

This technology is expected to be available within 3 to 4 years.

The concept of a transparent mobile phone is nothing new. We've seen it in countless sci-fi movies and TV shows. However, Polytron has now created a working prototype of a transparent mobile phone.

Polytron, a Taiwan based company has created a phone that is fully transparent and only the circuit board, memory card and camera unit is visible. It is a touchscreen phone that has a fully functional SIM tray, SD card slot, microphone and camera. However, the phone does not yet have an operating system.

The technology being used in the phone is called Polyvision Privacy Glass. It allows a device to turn transparent when an electric current is passed through it. They've also used microscopic wires that have been fed directly into the glass that make it barely visible to the naked eye. We've seen similar examples in the glass strip on the Sony XPERIA Z, XPERIA P and XPERIA U.

Harsh Deshmukh

Second Year EJ

◆विश्व मोबाईलचे◆

धावपळ जगण्याची,
अपडेट असते रोजची!
बात न्यारी या मोबाईलची,
सेट करतो वेळ उठण्याची!

पाटी पेन्सिल ची,
होती ती गोष्टच न्यारी!
टच पॅड ला नाही,
चव ती सारी!

पोरग पाळण्यातून उठलं की,
मोबाईल मध्ये गुंततय!
आईबापांच्या लाडापोटी,
ते शुभमकरोती मात्र विसरतय!

अंगणातल्या ठिपक्यांच्या रांगोळीच,
हरवलंय आत्ता नाव!
अंथरुणातूंच ठिपक्यांना जोडून,
उघडतात मोबाईल च गाव!

बारा एके बारा, बारा दुणे चोवीस,

अन बारा त्रिककाही येईना!
तरी पोरग म्हणतंय,
मला 36 MP काही पुरणा!

अनलिमिटेडचा खेळ सगळा,
घरी कॉल करायला वेळ नाही मजला!
पब्जी अन लुडो मध्ये,
आमचा जमाव मात्र सजला!

नेटवर्क शोधता शोधता,
नंबर change होत राहिले!
जिओ डिजिटल लाईफ मध्ये,
आपलेच आपल्या पासून दुरावले!

आधी आठवणीनं ओलावा,
आला कि डोळ्यात पाणी यायचं!
आत्ता miss you च्या नावे,
याच्या स्टोरीत त्याने मेंशन व्हायचं!

मोबाईल आहे वाईट कि चांगला,
ठरवावं तरी आत कस!
वर्तमान आत्ता सगळंच गंडलय,
भाविष्य पाहवं तरी कुठं अन कस!
✍(दिव्या दाभाडे)

ELECTRONICS AND COMMUNICATION ENGINEERING
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ELECTRONICS & TELE-COMMUNICATION ENGINEERING
2018 - 19

"We want the education by which the character is formed,strength of mind is increased,the intellect is expanded & by which one can stand on our own feet."
Swami Vivekanand

Editorial Team
Mrs.Sheetal Kokate
Aadya Tanksali EJ Third Year

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